Idaho-Maryland Mine Project

SCH# 2020070378

Final Environmental Impact Report

Volume I of IX
(Chapter 1 – Chapter 2)

Prepared for
County of Nevada

December 2022

Prepared by

RANEY PLANNING & MANAGEMENT, INC.
20 years
1501 Sports Drive, Suite A, Sacramento, CA 95834

Idaho-Maryland Mine Project
Final Environmental Impact Report

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Lead Agency

County of Nevada
Community Development Agency
Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-8617

Matt Kelley
Senior Planner
(530) 265-1222

Prepared By

Raney Planning and Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834
(916) 372-6100

Contact:
Nick Pappani
Vice President

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1. Introduction and List of Commenters

1. INTRODUCTION AND LIST OF COMMENTERS

1.1 INTRODUCTION

This Final Environmental Impact Report (EIR) contains agency and public comments received during the public review period of the Idaho-Maryland Mine Project (proposed project) Draft EIR (DEIR). This document has been prepared by Nevada County, as Lead Agency, in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, Section 15132. The Introduction and List of Commenters chapter of the Final EIR discusses the background of the DEIR and purpose of the Final EIR, identifies the comment letters received on the DEIR, and provides an overview of the organization of the Final EIR.

1.2 BACKGROUND

The DEIR identifies the proposed project's potential environmental impacts and the mitigation measures that would be required to be implemented. The following environmental analysis chapters are contained in the DEIR:

- Aesthetics;
- Agriculture and Forestry Resources;
- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Cultural and Tribal Cultural Resources;
- Geology, Soils, and Mineral Resources;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Population and Housing;
- Noise and Vibration;
- Public Services and Utilities;
- Transportation; and
- Wildfire.

In accordance with CEQA, the DEIR was sent to the State Clearinghouse (SCH# 2020070378) for distribution to State agencies. The public review period began on January 4, 2022 for a 60-day public review period, which was extended to April 4, 2022 for a total public review period of 91 days. In addition, the DEIR and Notice of Availability (NOA) for the DEIR were published on the Nevada County Community Development Agency website. Printed copies of the DEIR were made available for public review at the Nevada County Planning Department (950 Maidu Avenue, Suite 170, Nevada City, CA), as well as the following library locations: Madelyn Helling Library (980 Helling Way, Nevada City, CA); Grass Valley Library – Royce Branch (207 Mill Street, Grass Valley, CA); Penn Valley Library (11252 Pleasant Valley Road, Penn Valley, CA); and Truckee Library (10031 Levon Avenue, Truckee, CA). A Special Public Meeting before the Nevada County Planning Commission was held on March 24, 2022 to solicit public comments regarding the DEIR.

1.3 PURPOSE OF THE FINAL EIR

Under CEQA Guidelines Section 15132, the Final EIR shall consist of:

1. The DEIR or a revision of the DEIR.
2. Comments and recommendations received on the DEIR.
3. A list of persons, organizations, and public agencies commenting on the DEIR.
4. The responses to significant environmental points raised in the review process.
5. Any other information added by the Lead Agency.

As required by CEQA Guidelines, Section 15090(a)(1)-(3), a Lead Agency must make the following three determinations in certifying a Final EIR:

1. The Final EIR has been completed in compliance with CEQA.
2. The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
3. The Final EIR reflects the Lead Agency's independent judgment and analysis.

Under CEQA Guidelines Section 15091, a public agency shall not approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings (Findings of Fact) for each of those significant effects. Findings of Fact must be accompanied by a brief explanation of the rationale for each finding supported by substantial evidence in the record. The Findings of Fact are included in a separate document that will be considered for adoption by the County's decision-makers.

Pursuant to CEQA Guidelines, Section 15093(b), when a Lead Agency approves a project that would result in significant and unavoidable impacts, the agency must state in writing the reasons supporting the action (Statement of Overriding Considerations). The Statement of Overriding Considerations shall be supported by substantial evidence, and is subject to adoption by the County's decision-makers along with the Findings of Fact. The Idaho-Maryland Mine Project would result in significant and unavoidable impacts related to the following: substantially degrade the existing visual character or quality of the site and its surroundings (Impact 4.1-2); long-term changes in visual character (Impact 4.1-4); generation of a substantial temporary increase in ambient noise levels in the project vicinity (Impact 4.10-1); and conflicts with a program, plan, ordinance, or policy addressing study intersections (Impacts 4.12-1, 4.12-8, and 4.12-10). Thus, a Statement of Overriding Considerations must be adopted if the project is approved.

1.4 CRITERIA FOR RECIRCULATION

Pursuant to CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. Pursuant to 15088.5(a), "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

The following discussion will evaluate the four above criteria and demonstrate that the changes to the DEIR text presented in Chapter 3 of this Final EIR do not require recirculation of the DEIR.

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

Pursuant to CEQA Guidelines Section 15088.5(b), recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. Chapter 3, Revisions to the Draft EIR Text, of this Final EIR includes several minor changes to the DEIR text as a result of public comment that serve the purpose of clarifying or amplifying the discussion in the EIR without identifying new significant impacts. The majority of modifications consist of small, targeted revisions, consisting of minor additions or deletions. A few modifications involve larger additions of text, but the relevant criterion is not the extent of the modification, but rather whether the added text identifies a new significant impact. For example, this Final EIR includes a new discussion of California spotted owl in Chapter 4.4, Biological Resources, of the DEIR, based on public comment and release of additional layers in California Department of Fish and Wildlife's BIOS database that confirmed previous spotted owl occurrences on the Brunswick Site. BIOS identifies four previous sightings of California spotted owl on the Brunswick Site, with a nest record from 2011 and non-nesting owl sightings in 2012, 2016, and 2018.

As discussed in Master Response 37 – Birds and Raptors, of this Final EIR, two California spotted owl surveys were conducted on the Brunswick Site in August 2022 pursuant to USFS protocol and no California spotted owl were detected. Further, Impact 4.4-2 of the DEIR already identifies that the Project could result in a significant impact to nesting raptors and other migratory bird species, and thus, includes Mitigation Measure 4.4-2(g) requiring a pre-construction survey for nesting raptors and migratory bird species prior to surface disturbance and avoidance and minimization measures in the event a species is identified. California spotted owl is considered a raptor, and while it was not specifically discussed in the DEIR, it is within the category of raptors for which the DEIR already identified a significant impact and required mitigation (MM 4.4-2(g)) protective of raptors. Nevertheless, for clarity, Mitigation Measure 4.4-2(g) has been revised to reference the California spotted owl by name and provide additional details regarding applicable survey methodology. The mitigation measure is not considerably different and the applicant has agreed to the revised mitigation measure (See #3 below). The above-described revisions to the EIR discussion and MM 4.4-2(g) do not result in a new significant environmental impact.

In response to public comment, this Final EIR also includes discussion in Chapter 4.4, Biological Resources, of riparian bird species. As discussed in Master Response 37, these riparian bird species were not detected on-site during field surveys and the DEIR already identifies that the Project could have a significant impact to nesting raptors and other migratory bird species, within which the riparian species would be included. DEIR Mitigation Measure 4.4-2(g) requires a pre-construction survey for nesting bird species prior to surface disturbance and avoidance and minimization measures in the event a species is identified. Therefore, the potential impact to these species has been analyzed and addressed in the DEIR. Nevertheless, for clarity, this Final EIR includes revisions to Chapter 4.4, Biological Resources, to include discussion of these riparian bird species and targeted revisions have been made to Mitigation Measure 4.4-2(g) to reference these species. These revisions to the EIR discussion and MM 4.4-2(g) do not result in a new significant environmental impact.

In response to public comment, it was also determined that the truck traffic percentages along study roadways needed to be updated in the transportation analysis. These corrections were made to the transportation analysis, an updated version of which is included as Appendix N to this Final EIR; and Chapter 4.12, Transportation, of the DEIR has been revised accordingly in this Final EIR. For example, Tables 4.12-2, 4.12-10, 4.12-11, 4.12-18, and 4.12-19 of the DEIR, reporting study intersection levels of service (LOS), and Tables 4.12-14, 4.12-15, 4.12-22, and 4.12-23 reporting study intersection queues, were updated in strike-through and underline format. However, as demonstrated in this Final EIR, in no case do the revisions trigger a new significant impact at study intersections, when comparing the updated values to the thresholds of significance used in the DEIR. Thus, these corrections do not warrant recirculation of the EIR.

As also shown above, the DEIR incorrectly used the Home-Based VTM per Worker, presented in Table A-3 of the SB743 Report,[1] as the threshold of significance for the project. The Total VMT per Service Population presented in Table A-4 should have been used as the threshold of significance in accordance with the Nevada County Traffic Impact Analysis Guidelines (June 2020). The northern portion of the Brunswick Site is partially in the Grass Valley sub-area and the southern portion is in the Unincorporated Western Nevada County subarea. The use of Total VMT per Service Population for Unincorporated Western Nevada County of 18.1 is the most conservative approach and the threshold of significance is 14.3% below the subarea mean with a value of 15.5 VMT per Service Population. As shown in updated Table 4.12-16, the proposed project is modeled to generate a daily rate per service population (employee) of 14.4 VMT, which is more than 14.3 percent below the unincorporated area metric of 18.1 VMT per worker (i.e., 15.5). Sections 4.12.2 and 4.12.4 of the DEIR have been updated to reflect these changes, as shown in Response to Comment Agcy 8-29. The above-noted errors, which are corrected in this Final EIR, did not affect the DEIR's conclusion related to the project's VMT impact in any way, which remains less than significant, as stated in the DEIR. As such, the above-described corrections to the EIR discussion did not result in a new significant environmental impact.

As discussed above, the remaining revisions to the DEIR, as presented in Chapter 3 of this Final EIR, are small, targeted revisions that serve to clarify or amplify the existing adequate DEIR. Many of these minor modifications pertain to mitigation language – see criterion #3 below. Please also refer to Chapter 3 for a review of those changes.

[1] The *Nevada County Transportation Commission Senate Bill 743 Final Vehicle Miles Traveled Implementation Report* (SB743 Report), 2020.

In summary, recirculation of the EIR is not required pursuant to criterion 1 of 15088.5, because no new significant environmental impact will result from the Project or its mitigation measures.

2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

This criterion pertains to whether the Final EIR provides significant new information showing that a substantial increase in the severity of an environmental impact already identified in the DEIR would occur unless mitigation measures are adopted that reduce the impact to a level of insignificance. Nothing in the responses to comments, nor in the changes to the DEIR text shown in Chapter 3 of this Final EIR, results in a substantial increase in the severity of a significant environmental impact identified in the DEIR. Recirculation of the EIR is not required under this criterion.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

As shown in Chapter 3 of this Final EIR, as a result of public comment, several minor modifications are made to mitigation measures included in the DEIR. Under *Laurel Heights Improvement Ass'n v Regents of Univ. of Cal.* (1993) 6 C4th 1112 (*Laurel Heights II*) and 15088.5(a)(3), when information added to the Final EIR consists of a suggested new project alternative or mitigation measure, recirculation is only required if the new alternative or mitigation measure meets all of the following criteria:[2]

- It is feasible;
- It is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR;
- It would clearly lessen the project's significant environmental impacts; and
- It is not adopted.

Recirculation is only required if *each* of the above tests is met.

In all cases where this Final EIR makes modifications to mitigation measures included in the DEIR, the updated mitigation measures are feasible and the applicant has agreed to implement the updated mitigation measures. No new mitigation measures are identified in this Final EIR, only revised mitigation measures that are not considerably different from the mitigation measure language already included in the DEIR. Thus, this criterion is not triggered by the minor modifications to mitigation measures and recirculation of the EIR is not required.

With respect to the portion of the comment pertaining to alternatives, several commenters suggested one or more additional alternatives for the County to consider. As discussed in this Final EIR, Section 6 of the DEIR considered project alternatives. As summarized in DEIR

[2] Stephen L. Kostka and Michael H. Zischke. *Practice Under the California Environmental Quality Act, Second Edition, March 2022 Update, Volume 2*. March 2022, pg. 16-21.

Section 6.2, and provided in CEQA Guidelines Section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis since they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the public and decisionmakers. This Final EIR demonstrates how the alternatives proposed by the commenters are either not considerably different from others previously analyzed in that they are not anticipated to eliminate any of the significant impacts of the Project, and/or they are not feasible. Thus, this criterion is not triggered and recirculation of the EIR is not required.

4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

According to Kostka and Zischke, this test for recirculation is based on the type of wholesale omission of information found in *Mountain Lion Coalition v. Fish & Game Comm'n*, in which the Draft EIR omitted any analysis of cumulative impacts, and a detailed analysis was first provided in the final EIR.[3] The record clearly demonstrates that no such wholesale omissions have occurred with the Idaho-Maryland Mine DEIR.

1.5 LIST OF COMMENTERS

Nevada County received 12 comment letters from agencies, 32 letters from groups, and 2,821 individual comment letters during the public comment period on the DEIR for the proposed project. In addition, verbal comments were received at the Special Public Meeting, and six comment letters were received after the close of the public comment period. For efficiency and clarity, the comment letters have been organized into 10 distinct categories: Agency Letters; Group Letters; Form Letter A; Form Letter B; Form Letter C; Form Letter D; Support Cards; Individual Letters; Late Letters; and DEIR Meeting. Many of the comment letters received contained template language, and, thus, were categorized into groups of "Form Letters". Form Letters A and B contain a space for commenters to include their individualized comments; however, Form Letters C and D and the Support Cards contain the template language only. This Final EIR includes all comment letters received, including duplicate letters authored by the same individual(s), but sent to multiple recipients. Some agencies, groups, and/or individuals submitted multiple letters, and, as a result, their name appears multiple times in the tables below. The comment letters were authored by the following:

Agencies

Letter Number	Author(s)		Agency
	First Name	Last Name	
Agency 1	Daniel	Lubin	California Department of Parks and Recreation
Agency 2	Kevin	Yount	California Department of Transportation

[3] Stephen L. Kostka and Michael H. Zischke, *Practice Under the California Environmental Quality Act,* pg. 16-22.

Agency 3	Shaundra	Cashdollar	California Department of Fish and Wildlife
Agency 4	Greg	Hendricks	Central Valley Regional Water Quality Control Board
Agency 5	Jeff	Huggins	Central Valley Regional Water Quality Control Board
Agency 6	G.	Steffenson	Department of California Highway Patrol
Agency 7	Stacy	Weckesser	Department of Toxic Substances Control
Agency 8	Thomas	Last	Grass Valley Community Development Department
Agency 9	Bernard	Zimmerman	Nevada County Historical Landmarks Commission
Agency 10	Armon	Close	Nevada Irrigation District
Agency 11	Gretchen	Bennitt	Northern Sierra Air Quality Management District
Agency 12	Sam	Longmire	Northern Sierra Air Quality Management District

Groups

Letter Number	Author(s)		Group
	First Name	Last Name	
Group 1	Kristine	ZuaZua	Alliance For Workforce Development, Inc.
Group 2	Erin	Tarr	Bear Yuba Land Trust
Group 3	Mary	Hunter	BriarPatch Food Co-Op
Group 4	Joe	Ramey	Business Owners (multiple signatures)
Group 5	Jeanne	Wilson	California Native Plant Society - Redbud Chapter
Group 6	Ralph	Silberstein	Community Environmental Advocates Foundation
Group 7	Ralph	Silberstein	Community Environmental Advocates Foundation
Group 8	Ralph	Silberstein	Community Environmental Advocates Foundation
Group 9	David	Chambers	Center for Science in Public Participation
Group 10	Fred	Bell	First Church of Christ Scientist, Grass Valley
Group 11	Edward	Sylvester	Friends of Banner Mountain
Group 12	Edward	Sylvester	Friends of Banner Mountain
Group 13	Allison	Nelson	Gold Country Avian Studies
Group 14	Shelly	Covert	Nevada City Rancheria Nisenan Tribe
Group 15	Kathleen	Hinman	Nevada County Association of Realtors
Group 16	David	Whitehead	Nevada County Chapter of Citizens' Climate Lobby/Education (CCL)
Group 17	Donald	Rivenes	Nevada County Climate Action Now
Group 18	Eric	Robins	Nevada County Democratic Central Committee
Group 19	Miriam	Limov	Nevada County Food Policy Council Community Alliance with Family Farmers
Group 20	Jillian	Blanchard	Rudder Law Group, LLP
Group 21	Ellison	Folk	Shute Mihaly Law Firm/Community Environmental Advocates Foundation
Group 22	Donald	Rivenes	Sierra Foothills Audubon Society
Group 23	Barbara	Rivenes	Sierra Nevada Group of the Sierra Club
Group 24	Jeff	Lauder	Sierra Streams Institute
Group 25	Keiko	Mertz	South Yuba River Citizens League
Group 26	Carrie	Monohan	The Sierra Fund
Group 27	Unknown		The Wells Coalition
Group 28	Unknown		Wells Coalition
Group 29	Jonathan	Keehn	Wolf Creek Community Alliance
Group 30	Jonathan	Keehn	Wolf Creek Community Alliance
Group 31	Jonathan	Keehn	Wolf Creek Community Alliance
Group 32	Jonathan	Keehn	Wolf Creek Community Alliance

Form Letter A

Letter Number	Author(s)	
	First Name	Last Name
Form Letter A 1	Anastasia	Osling
Form Letter A 2	Anastasia	Osling
Form Letter A 3	Barbara	Brown
Form Letter A 4	Carleton	Forsman
Form Letter A 5	Carmen	Riley
Form Letter A 6	Carmen	Riley
Form Letter A 7	Carol	Hyndman
Form Letter A 8	Carol	Hyndman
Form Letter A 9	Carol	Kuczora
Form Letter A 10	Carol	Kuczora
Form Letter A 11	Carolyn	Battaini
Form Letter A 12	Cheryl	Morris
Form Letter A 13	Cheryl	Morris
Form Letter A 14	Constance	Wright
Form Letter A 15	Constance	Wright
Form Letter A 16	Gwen	Eymann
Form Letter A 17	Gwen	Eymann
Form Letter A 18	Janet	Dunstan
Form Letter A 19	Jennifer	Dewey
Form Letter A 20	Jennifer	Dewey
Form Letter A 21	Jesse	Wilson
Form Letter A 22	Joel	Houtman
Form Letter A 23	Joel	Houtman
Form Letter A 24	Mary	Pickett
Form Letter A 25	Melissa	Ridsway
Form Letter A 26	Melissa	Ridsway
Form Letter A 27	Paul	Elins
Form Letter A 28	Ruth	Edwards
Form Letter A 29	Ruth	Edwards
Form Letter A 30	Steven	Battaini
Form Letter A 31	Steven	Temple
Form Letter A 32	Steven	Temple
Form Letter A 33	Susan	Merrill
Form Letter A 34	Susan	Merrill
Form Letter A 35	Teresa	Freeman
Form Letter A 36	Theresa	Houtman
Form Letter A 37	Walter	Holtan
Form Letter A 38	Walter	Holtan
Form Letter A 39	William	Bault
Form Letter A 40	William	Bault

Form Letter B

Letter Number	Author(s)	
	First Name	Last Name
Form Letter B 1	Aaron	Corbiece
Form Letter B 2	Alan	James
Form Letter B 3	Alan	James

Form Letter B 4	Albert	Hernandez
Form Letter B 5	Alison	Osborn
Form Letter B 6	Alison	Osborn
Form Letter B 7	Amanda	Gahong
Form Letter B 8	Amanda	Gahong
Form Letter B 9	Amanda	Kenney
Form Letter B 10	Amanda	Kenney
Form Letter B 11	Amy	Edwards
Form Letter B 12	Amy	Edwards
Form Letter B 13	Amy	Patterson
Form Letter B 14	Amy	Patterson
Form Letter B 15	Andrea	Stout
Form Letter B 16	Andrea	Stout
Form Letter B 17	Anita	Wald-Tuttle
Form Letter B 18	Anita	Wald-Tuttle
Form Letter B 19	Ann	Emerson
Form Letter B 20	Anna	Frizzell
Form Letter B 21	Anna	Frizzell
Form Letter B 22	Anne	Adden
Form Letter B 23	Anne	Padget
Form Letter B 24	Annie	Speegle
Form Letter B 25	Annie	Speegle
Form Letter B 26	Ari	Hope
Form Letter B 27	Aselin	Neal
Form Letter B 28	Ashley	Berry
Form Letter B 29	Ashley	Berry
Form Letter B 30	Barbara	Brown
Form Letter B 31	Barry	Wasserman
Form Letter B 32	Barry	Wasserman
Form Letter B 33	Bettejean	Spatafore
Form Letter B 34	Bill	Lawrence
Form Letter B 35	Brittany	Roussel
Form Letter B 36	Brock	Grininger
Form Letter B 37	Bruce	McVicker
Form Letter B 38	C. Greg	Chapman
Form Letter B 39	C. Greg	Chapman
Form Letter B 40	Carleton	Forsman
Form Letter B 41	Carleton	Forsman
Form Letter B 42	Carleton	Forsman
Form Letter B 43	Carol	Zappelli
Form Letter B 44	Carol	Zappelli
Form Letter B 45	Carole	McCammon
Form Letter B 46	Carole	McCammon
Form Letter B 47	Carolee	Weisberg
Form Letter B 48	Caroline	McKnight
Form Letter B 49	Carrie	Zoll
Form Letter B 50	Charles	Chisholm
Form Letter B 51	Charles	Chisholm
Form Letter B 52	Charles	Lindquist
Form Letter B 53	Charles	Lindquist
Form Letter B 54	Charles	Schmidt
Form Letter B 55	Chris	Schneider

Form Letter B 56	Chris	Schneider
Form Letter B 57	Christie	Harris
Form Letter B 58	Christie	Harris
Form Letter B 59	Christina	Sabin
Form Letter B 60	Christina	Sabin
Form Letter B 61	Christine	Feodorov
Form Letter B 62	Cindy	Foxfoot
Form Letter B 63	Cindy	Foxfoot
Form Letter B 64	Courtney	Andes-McCullough
Form Letter B 65	Courtney	Andes-McCullough
Form Letter B 66	Craig	Weaver
Form Letter B 67	Cynthia	Bailey
Form Letter B 68	Cynthia	Koch
Form Letter B 69	David	Lindsey
Form Letter B 70	Deanna	Bloom
Form Letter B 71	Deanna	Bloom
Form Letter B 72	Deanna	Ronningen
Form Letter B 73	Deborah	Bridges
Form Letter B 74	Deborah	Bridges
Form Letter B 75	Denis	Hill
Form Letter B 76	Denise	Martin
Form Letter B 77	Denise	Martin
Form Letter B 78	Dennis	Geare
Form Letter B 79	Dominica	Mottarella
Form Letter B 80	Donna	Burke
Form Letter B 81	Donna	Burke
Form Letter B 82	Dorothy	Stone
Form Letter B 83	Dorothy	Stone
Form Letter B 84	Douglas	Nore
Form Letter B 85	Eileen	Blodgett
Form Letter B 86	Eileen	Blodgett
Form Letter B 87	Eileen	Hale
Form Letter B 88	Elizabeth	McGuire
Form Letter B 89	Elizabeth	McGuire
Form Letter B 90	Francesca	Erickson
Form Letter B 91	Francesca	Erickson
Form Letter B 92	Francis	Murphy
Form Letter B 93	Fred Vickie	Slikker Tobey
Form Letter B 94	Gabrielle	Neal
Form Letter B 95	Gary	Kisor
Form Letter B 96	Gary	Kisor
Form Letter B 97	Gayle	Costanza
Form Letter B 98	Geoff	Erwin
Form Letter B 99	Geoff	Pollard
Form Letter B 100	George	Dunstan
Form Letter B 101	George	Dunstan
Form Letter B 102	Gillian	Blair
Form Letter B 103	Gillian	Blair
Form Letter B 104	Gordon Marika	Keller Keller

Form Letter B 105	Gordon Marika	Keller Keller
Form Letter B 106	Gregory	Clary
Form Letter B 107	Gwendolyn	Fissel
Form Letter B 108	Hazel	Yates
Form Letter B 109	Hazel	Yates
Form Letter B 110	Henry	Goodman
Form Letter B 111	Henry	Goodman
Form Letter B 112	Henry	Goodman
Form Letter B 113	Iliana	Abrell
Form Letter B 114	Iliana	Abrell
Form Letter B 115	Ingegerd	Hjord
Form Letter B 116	Ingegerd	Hjord
Form Letter B 117	J. Anne	Lyon
Form Letter B 118	J.E.	Wilkinson
Form Letter B 119	Jacque	Bromm
Form Letter B 120	Jacque	Bromm
Form Letter B 121	James	Knott
Form Letter B 122	James	Knott
Form Letter B 123	Janet	Acklam
Form Letter B 124	Janet	Acklam
Form Letter B 125	Janet	Acklam
Form Letter B 126	Janet	Acklam
Form Letter B 127	Janet	Acklam
Form Letter B 128	Janet	Acklam
Form Letter B 129	Janet	Clogett
Form Letter B 130	Janet	Moore
Form Letter B 131	Janet	Weaver
Form Letter B 132	Janice	LuBenbill
Form Letter B 133	Janice	LuBenbill
Form Letter B 134	Janis	Clayett
Form Letter B 135	Jean	Velikonia
Form Letter B 136	Jeanne	Palmer
Form Letter B 137	Jeanne	Palmer
Form Letter B 138	Jeffery	Adams
Form Letter B 139	Jennifer	Martineau
Form Letter B 140	Jennifer	McCarthy
Form Letter B 141	Jennifer	McCarthy
Form Letter B 142	Jesmine	Reymond
Form Letter B 143	Jesmine	Reymond
Form Letter B 144	Jesper	
Form Letter B 145	Jesse	Grimes
Form Letter B 146	Jesse	Wilson
Form Letter B 147	Jessica	Kilroy
Form Letter B 148	Jessica	Kilroy
Form Letter B 149	Joan	Alderdice
Form Letter B 150	Joan	Stedden
Form Letter B 151	Joan	Stedden
Form Letter B 152	Joanne	Norton
Form Letter B 153	Joanne	Norton
Form Letter B 154	John	Burnside
Form Letter B 155	John	Burnside

Form Letter B 156	John	McKnight
Form Letter B 157	Joseph	Bonomolo
Form Letter B 158	Judie	Tartaglia
Form Letter B 159	Judie	Tartaglia
Form Letter B 160	Judy	McVicker
Form Letter B 161	Jules	Tortolani
Form Letter B 162	Karen	Donaldson
Form Letter B 163	Karen	Donaldson
Form Letter B 164	Karuna	Holm
Form Letter B 165	Karuna	Holm
Form Letter B 166	Kate	Dwyer
Form Letter B 167	Kate	Dwyer
Form Letter B 168	Kathleen	Boyer
Form Letter B 169	Kathleen	Lombardi
Form Letter B 170	Kathleen	Lombardi
Form Letter B 171	Kathryn	Gerwig
Form Letter B 172	Kathryn	Gerwig
Form Letter B 173	Kathryn	Kemp
Form Letter B 174	Kathy	Askins
Form Letter B 175	Kathy	Doty
Form Letter B 176	Kathy	Triolo
Form Letter B 177	Keith	Johnson
Form Letter B 178	Keith	Porter
Form Letter B 179	Keith	Ronningen
Form Letter B 180	Kent	Rose
Form Letter B 181	Kevel	Gutman
Form Letter B 182	Kevel	Gutman
Form Letter B 183	Kim	Miller
Form Letter B 184	Laura	Gaglass
Form Letter B 185	Laura	Harter
Form Letter B 186	Laura	Harter
Form Letter B 187	Laura	Montgomery
Form Letter B 188	Laura	Montgomery
Form Letter B 189	Leila	Barber
Form Letter B 190	Leila	Barber
Form Letter B 191	Leila	Barber
Form Letter B 192	Lennie	Blum
Form Letter B 193	Lennie	Blum
Form Letter B 194	Leslie	Kerns
Form Letter B 195	Linda	Ewald
Form Letter B 196	Linda	Ewald
Form Letter B 197	Lindsay	Dunckel
Form Letter B 198	Lisa	Haden
Form Letter B 199	Lisa	Haden
Form Letter B 200	Logan	McKnight
Form Letter B 201	Logan	McKnight
Form Letter B 202	Lori	Jung
Form Letter B 203	Louie	Croce
Form Letter B 204	Louie	Croce
Form Letter B 205	Louie	Croce
Form Letter B 206	Lynda	Guthrie
Form Letter B 207	Lynda	Guthrie

Form Letter B 208	Lynette	Smith-James
Form Letter B 209	Lynette	Smith-James
Form Letter B 210	M.T.	Albano
Form Letter B 211	M.T.	Albano
Form Letter B 212	Madeleine	Dowd
Form Letter B 213	Madeleine	Dowd
Form Letter B 214	Madeleine	Kemp
Form Letter B 215	Marianne	Roche
Form Letter B 216	Mark	Gierok
Form Letter B 217	Mark	Gierok
Form Letter B 218	Mark	Reilly
Form Letter B 219	Mark	Reilly
Form Letter B 220	Mark	Triolo
Form Letter B 221	Mark	Warner
Form Letter B 222	Marlee	Chamberlin
Form Letter B 223	Marlee	Chamberlin
Form Letter B 224	Martin	Lombardi
Form Letter B 225	Martin	Lombardi
Form Letter B 226	Mary	Pickett
Form Letter B 227	Mary	Pickett
Form Letter B 228	Mary	Pickett
Form Letter B 229	Melissa	Shepard
Form Letter B 230	Meredith	Manning
Form Letter B 231	Mert	Austin
Form Letter B 232	Mert	Austin
Form Letter B 233	Micah	Pierce
Form Letter B 234	Michael	Baker
Form Letter B 235	Michael	Baker
Form Letter B 236	Michael	Barber
Form Letter B 237	Michael	Barber
Form Letter B 238	Michael	Barber
Form Letter B 239	Mike	Stolla
Form Letter B 240	Mike	Stolla
Form Letter B 241	Mike	Weaver
Form Letter B 242	Mildred	Seedman
Form Letter B 243	Mindy	Oberne
Form Letter B 244	Mindy	Oberne
Form Letter B 245	Munson	Dowd
Form Letter B 246	Munson	Dowd
Form Letter B 247	Nancy	Jacobsen
Form Letter B 248	Nancy	Jacobsen
Form Letter B 249	Nancy	Miller
Form Letter B 250	Natalie	Weaver
Form Letter B 251	Natina	Pistone
Form Letter B 252	Nicole	Florez
Form Letter B 253	Nicole	Florez
Form Letter B 254	Nicolette	Ronningen
Form Letter B 255	Norman	Ely
Form Letter B 256	Olivia	Ronningen
Form Letter B 257	Pam	Kisor
Form Letter B 258	Pamela	Jung
Form Letter B 259	Pamela	Jung

Form Letter B 260	Patricia	Gillings
Form Letter B 261	Paul	Berger
Form Letter B 262	Pauline	Marie
Form Letter B 263	Pauline	Marie
Form Letter B 264	Peter	Alsina
Form Letter B 265	Peter	Alsina
Form Letter B 266	Prairie	Bauman
Form Letter B 267	Rachel	McCullough
Form Letter B 268	Randi	Pratini
Form Letter B 269	Rhonda	Young
Form Letter B 270	Rhonda	Young
Form Letter B 271	Richard	Callan
Form Letter B 272	Rob	Katzenstein
Form Letter B 273	Robert	Erickson
Form Letter B 274	Robert	Erickson
Form Letter B 275	Robert	Trent
Form Letter B 276	Roberta	Hue
Form Letter B 277	Robin	Hart
Form Letter B 278	Robin	Hart
Form Letter B 279	Ross	McKnight
Form Letter B 280	Ruth	Ghio
Form Letter B 281	Ruth	Ghio
Form Letter B 282	Ruth	Jones
Form Letter B 283	Ruth	Jones
Form Letter B 284	Sandra	Burke
Form Letter B 285	Sandra	Yanko
Form Letter B 286	Sandra	Yanko
Form Letter B 287	Sandy	Pack
Form Letter B 288	Sandy	Pack
Form Letter B 289	Sequoia	Haughey
Form Letter B 290	Sequoia	Haughey
Form Letter B 291	Shana	Maziarz
Form Letter B 292	Shana	Maziarz
Form Letter B 293	Sheila	Baker
Form Letter B 294	Sheila	Baker
Form Letter B 295	Sheila	Baker
Form Letter B 296	Sheila	Baker
Form Letter B 297	Sheila	Baker
Form Letter B 298	Shirley	Fenicle
Form Letter B 299	Shirley	Fenicle
Form Letter B 300	Shirley	Osgood
Form Letter B 301	Shirley	Osgood
Form Letter B 302	Shirley	Porter
Form Letter B 303	Solomon	Bassoff
Form Letter B 304	Spencer	Wingfield
Form Letter B 305	Spencer	Wingfield
Form Letter B 306	Star	Carroll
Form Letter B 307	Sue	Cutuli
Form Letter B 308	Sue	Cutuli
Form Letter B 309	Susan	Hart
Form Letter B 310	Susan	Joanne
Form Letter B 311	Susan	Joanne

Form Letter B 312	Susan	Joanne
Form Letter B 313	Susan	Joanne
Form Letter B 314	Susan	Sanford
Form Letter B 315	Susan	Sanford
Form Letter B 316	Suzanne	Marriott
Form Letter B 317	Suzanne	Marriott
Form Letter B 318	Tamara	Zuromskis
Form Letter B 319	Tamara	Zuromskis
Form Letter B 320	Tara	Kelly
Form Letter B 321	Tara	Kelly
Form Letter B 322	Teena	Wagner
Form Letter B 323	Teresa	Freeman
Form Letter B 324	Tessie	Moore
Form Letter B 325	Theresa	Houtman
Form Letter B 326	Thomas	Dyer
Form Letter B 327	Thomas	Schreiner
Form Letter B 328	Thomas	Schreiner
Form Letter B 329	Ursula	Flint
Form Letter B 330	Ursula	Flint
Form Letter B 331	Vickie Fred	Tobey Slikkee
Form Letter B 332	Virginia	Knott
Form Letter B 333	Virginia	Knott
Form Letter B 334	Virginia	Knott
Form Letter B 335	Walt	Froloff
Form Letter B 336	Walt	Froloff
Form Letter B 337	William	Albin
Form Letter B 338	William	Bulley
Form Letter B 339	William	Gully
Form Letter B 340	William	Packard
Form Letter B 341	William	Packard
Form Letter B 342	Willow	Heir
Form Letter B 343	Wolfgang	Jung
Form Letter B 344	Wolfgang	Jung

Form Letter C

Letter Number	Author(s)	
	First Name	Last Name
Form Letter C 1	Alan	Dunn
Form Letter C 2	Alan	Dunn
Form Letter C 3	Amie	Cantu
Form Letter C 4	Amie	Cantu
Form Letter C 5	Amie	Cantu
Form Letter C 6	Austin	Gee
Form Letter C 7	Austin	Gee
Form Letter C 8	Benjamin	Mossman
Form Letter C 9	Bob	Norman
Form Letter C 10	Bob	Norman
Form Letter C 11	Bob	Norman
Form Letter C 12	Bob	Treadwell
Form Letter C 13	Bob	Treadwell

Form Letter C 14	Bob	Treadwell
Form Letter C 15	Brandon	Wilkins
Form Letter C 16	Brandon	Wilkins
Form Letter C 17	Brian	Guthrie
Form Letter C 18	Brian	Guthrie
Form Letter C 19	Brian	Guthrie
Form Letter C 20	Caleb	Carpenter
Form Letter C 21	Caleb	Carpenter
Form Letter C 22	Caleb	Carpenter
Form Letter C 23	Carl	Todd
Form Letter C 24	Carl	Todd
Form Letter C 25	Carl	Todd
Form Letter C 26	Carmen	Mateo
Form Letter C 27	Carmen	Mateo
Form Letter C 28	Carmen	Mateo
Form Letter C 29	Carolyn	Voss
Form Letter C 30	Carolyn	Voss
Form Letter C 31	Carolyn	Voss
Form Letter C 32	Cathleen	Yaksic
Form Letter C 33	Cathleen	Yaksic
Form Letter C 34	Cathleen	Yaksic
Form Letter C 35	Charleen	Martin
Form Letter C 36	Charleen	Martin
Form Letter C 37	Charles	Vold
Form Letter C 38	Charles	Vold
Form Letter C 39	Charles	Vold
Form Letter C 40	Chris	Frank
Form Letter C 41	Chris	Frank
Form Letter C 42	Chris	Frank
Form Letter C 43	Chris	Miller
Form Letter C 44	Chris	Miller
Form Letter C 45	Chris	Miller
Form Letter C 46	Christopher	Reilly
Form Letter C 47	Christopher	Reilly
Form Letter C 48	Christopher	Reilly
Form Letter C 49	Chuck	Treadwell
Form Letter C 50	Chuck	Treadwell
Form Letter C 51	Cindi	Anderson
Form Letter C 52	Cindi	Anderson
Form Letter C 53	Clark	Pearson
Form Letter C 54	Clark	Pearson
Form Letter C 55	Clark	Pearson
Form Letter C 56	Clyde	King
Form Letter C 57	Clyde	King
Form Letter C 58	Clyde	King
Form Letter C 59	Dale	Bohnenberger
Form Letter C 60	Dale	Bohnenberger
Form Letter C 61	Dale	Bohnenberger
Form Letter C 62	Dale	Hafelfinger
Form Letter C 63	Dale	Hafelfinger
Form Letter C 64	Dale	Hafelfinger
Form Letter C 65	Daniel	Danckert

Form Letter C 66	Daniel	Danckert
Form Letter C 67	Darla	Draper
Form Letter C 68	Darla	Draper
Form Letter C 69	Darla	Draper
Form Letter C 70	Darla	Draper
Form Letter C 71	Darla	Draper
Form Letter C 72	Darla	Draper
Form Letter C 73	Darryl	Snow
Form Letter C 74	Darryl	Snow
Form Letter C 75	Darryl	Snow
Form Letter C 76	Dawn	Fredricks
Form Letter C 77	Dawn	Fredricks
Form Letter C 78	Dennis	Wessels
Form Letter C 79	Dennis	Wessels
Form Letter C 80	Dennis	Wessels
Form Letter C 81	Donna	Clark-Salmonson
Form Letter C 82	Donna	Clark-Salmonson
Form Letter C 83	Donna	Clark-Salmonson
Form Letter C 84	Donna	Treadwell
Form Letter C 85	Donna	Treadwell
Form Letter C 86	Donna	Treadwell
Form Letter C 87	Douglas	Miller
Form Letter C 88	Douglas	Miller
Form Letter C 89	Douglas	Miller
Form Letter C 90	Douglas	Miller
Form Letter C 91	Douglas	Miller
Form Letter C 92	Douglas	Miller
Form Letter C 93	Earnie	Smith
Form Letter C 94	Earnie	Smith
Form Letter C 95	Earnie	Smith
Form Letter C 96	Edward	Strange
Form Letter C 97	Edward	Strange
Form Letter C 98	Edward	Strange
Form Letter C 99	Elvis	Cantu
Form Letter C 100	Elvis	Cantu
Form Letter C 101	Elvis	Cantu
Form Letter C 102	Elvis	Cantu
Form Letter C 103	Elvis	Cantu
Form Letter C 104	Elvis	Cantu
Form Letter C 105	Emily	Forman
Form Letter C 106	Emily	Forman
Form Letter C 107	Emily	Forman
Form Letter C 108	Erin	Beatie
Form Letter C 109	Erin	Beatie
Form Letter C 110	Erin	Beatie
Form Letter C 111	Erin	Dunne
Form Letter C 112	Erin	Dunne
Form Letter C 113	Erin	Dunne
Form Letter C 114	Erin	Dunne
Form Letter C 115	Fredrick	Myers
Form Letter C 116	Fredrick	Myers
Form Letter C 117	Fredrick	Myers

Form Letter C 118	Gary	Benedict
Form Letter C 119	Gary	Benedict
Form Letter C 120	Gary	Benedict
Form Letter C 121	Gene	Adams
Form Letter C 122	Gene	Adams
Form Letter C 123	Gene	Adams
Form Letter C 124	Gerald	Gierszewski
Form Letter C 125	Gerald	Gierszewski
Form Letter C 126	Gerald	Gierszewski
Form Letter C 127	Gerald	Gierszewski
Form Letter C 128	Gerald	Gierszewski
Form Letter C 129	Gerald	Gierszewski
Form Letter C 130	Grady	Wilson
Form Letter C 131	Grady	Wilson
Form Letter C 132	Grady	Wilson
Form Letter C 133	Greg	Schimke
Form Letter C 134	Greg	Schimke
Form Letter C 135	Harrison	Shrader
Form Letter C 136	Harrison	Shrader
Form Letter C 137	Herb	Miller
Form Letter C 138	Herb	Miller
Form Letter C 139	Herb	Miller
Form Letter C 140	Holly	Rose
Form Letter C 141	Holly	Rose
Form Letter C 142	Holly	Rose
Form Letter C 143	Holly	Rose
Form Letter C 144	Holly	Rose
Form Letter C 145	Hope	Rodriguez
Form Letter C 146	Hope	Rodriguez
Form Letter C 147	Hope	Rodriguez
Form Letter C 148	Jacob	Carcerano
Form Letter C 149	Jacob	Carcerano
Form Letter C 150	James	Geach
Form Letter C 151	James	Geach
Form Letter C 152	James	Geach
Form Letter C 153	James	Self
Form Letter C 154	James	Self
Form Letter C 155	James	Self
Form Letter C 156	Jan	Holmgren
Form Letter C 157	Jan	Holmgren
Form Letter C 158	Jarryd	Gonzales
Form Letter C 159	Jarryd	Gonzales
Form Letter C 160	Jason	Condon
Form Letter C 161	Jason	Condon
Form Letter C 162	Jedd	Caddy
Form Letter C 163	Jedd	Caddy
Form Letter C 164	Jedd	Caddy
Form Letter C 165	Jeffrey	Kyle
Form Letter C 166	Jeffrey	Kyle
Form Letter C 167	Jeffrey	Kyle
Form Letter C 168	Jim	Baku
Form Letter C 169	Jim	Baku

Form Letter C 170	Jim	Baku
Form Letter C 171	Jim	Schuessler
Form Letter C 172	Jim	Schuessler
Form Letter C 173	Joe	Bimmy
Form Letter C 174	Joe	Bimmy
Form Letter C 175	John	Brown
Form Letter C 176	John	Brown
Form Letter C 177	John	Brown
Form Letter C 178	John	Morton
Form Letter C 179	John	Morton
Form Letter C 180	John	Morton
Form Letter C 181	John	Eramouspe
Form Letter C 182	John	Eramouspe
Form Letter C 183	John	Eramouspe
Form Letter C 184	John	Morton
Form Letter C 185	John	Morton
Form Letter C 186	John	Morton
Form Letter C 187	John	Price
Form Letter C 188	John	Price
Form Letter C 189	John	Price
Form Letter C 190	Jon	Siptrott
Form Letter C 191	Jon	Siptrott
Form Letter C 192	Jordan	Kohler
Form Letter C 193	Jordan	Kohler
Form Letter C 194	Jordan	Kohler
Form Letter C 195	Joyce	Elsner
Form Letter C 196	Joyce	Elsner
Form Letter C 197	Kaitlynn	White
Form Letter C 198	Kaitlynn	White
Form Letter C 199	Kaitlynn	White
Form Letter C 200	Kenneth	Roberts
Form Letter C 201	Kenneth	Roberts
Form Letter C 202	Kevin	Halpin
Form Letter C 203	Kevin	Halpin
Form Letter C 204	Kevin	Halpin
Form Letter C 205	Kurt	Senkbeil
Form Letter C 206	Kurt	Senkbeil
Form Letter C 207	Kurt	Senkbeil
Form Letter C 208	Kurt	Senkbeil
Form Letter C 209	Kurt	Senkbeil
Form Letter C 210	Kurt	Senkbeil
Form Letter C 211	Kurt	Senkbeil
Form Letter C 212	Kurt	Senkbeil
Form Letter C 213	Kurt	Senkbeil
Form Letter C 214	Larry	Arzt
Form Letter C 215	Larry	Arzt
Form Letter C 216	Larry	Arzt
Form Letter C 217	Larry	Starn
Form Letter C 218	Larry	Starn
Form Letter C 219	Larry	Starn
Form Letter C 220	Larry	Starn
Form Letter C 221	Larry	Starn

Form Letter C 222	Laura	Preece
Form Letter C 223	Laura	Preece
Form Letter C 224	Laura	Preece
Form Letter C 225	Lee	Matthews
Form Letter C 226	Lee	Matthews
Form Letter C 227	Lee	Matthews
Form Letter C 228	Linda	Fuentes
Form Letter C 229	Linda	Fuentes
Form Letter C 230	Linda	Fuentes
Form Letter C 231	Lock	Richards
Form Letter C 232	Lock	Richards
Form Letter C 233	Lock	Richards
Form Letter C 234	Lynn	Haight
Form Letter C 235	Lynn	Haight
Form Letter C 236	Lynn	Haight
Form Letter C 237	Marc	Davis
Form Letter C 238	Marc	Davis
Form Letter C 239	Marc	Davis
Form Letter C 240	Marc	Davis
Form Letter C 241	Marc	Davis
Form Letter C 242	Marc	Davis
Form Letter C 243	Margaret	Harcourt
Form Letter C 244	Margaret	Harcourt
Form Letter C 245	Margaret	Harcourt
Form Letter C 246	Margaret	Harcourt
Form Letter C 247	Margaret	Harcourt
Form Letter C 248	Margaret	Harcourt
Form Letter C 249	Margaret	Urke
Form Letter C 250	Margaret	Urke
Form Letter C 251	Margaret	Harcourt
Form Letter C 252	Margaret	Harcourt
Form Letter C 253	Margaret	Harcourt
Form Letter C 254	Marie	Allen
Form Letter C 255	Marie	Allen
Form Letter C 256	Martha	Turner
Form Letter C 257	Martha	Turner
Form Letter C 258	Martha	Turner
Form Letter C 259	Matt	McDonald
Form Letter C 260	Matt	McDonald
Form Letter C 261	Matt	McDonald
Form Letter C 262	Matt	McDonald
Form Letter C 263	Michael	Norton
Form Letter C 264	Michael	Norton
Form Letter C 265	Michael	Pesonen
Form Letter C 266	Michael	Pesonen
Form Letter C 267	Michael	Pesonen
Form Letter C 268	Mike	Alcala
Form Letter C 269	Mike	Alcala
Form Letter C 270	Mike	Alcala
Form Letter C 271	Mike	Wade
Form Letter C 272	Mike	Wade
Form Letter C 273	Morgan	Juric



Form Letter C 274	Morgan	Juric
Form Letter C 275	Myles	Vickers
Form Letter C 276	Myles	Vickers
Form Letter C 277	Paul	Jordan
Form Letter C 278	Paul	Jordan
Form Letter C 279	Paul	Jordan
Form Letter C 280	Paul	Jordan
Form Letter C 281	Paul	Jordan
Form Letter C 282	Paul	Jordan
Form Letter C 283	Pearce	Boyer
Form Letter C 284	Pearce	Boyer
Form Letter C 285	Pearce	Boyer
Form Letter C 286	Pete	Perez
Form Letter C 287	Pete	Perez
Form Letter C 288	Philippe	Mickelson
Form Letter C 289	Philippe	Mickelson
Form Letter C 290	Ricardo	Fuentes
Form Letter C 291	Ricardo	Fuentes
Form Letter C 292	Ricardo	Fuentes
Form Letter C 293	Richard	Carter
Form Letter C 294	Richard	Carter
Form Letter C 295	Richard	Carter
Form Letter C 296	Richard	Kuhwarth
Form Letter C 297	Richard	Kuhwarth
Form Letter C 298	Richard	Kuhwarth
Form Letter C 299	Robert	Haight
Form Letter C 300	Robert	Haight
Form Letter C 301	Robert	Haight
Form Letter C 302	Robert	Ludwig
Form Letter C 303	Robert	Ludwig
Form Letter C 304	Robert	Seidlitz
Form Letter C 305	Robert	Seidlitz
Form Letter C 306	Robert	Seidlitz
Form Letter C 307	Robert	Seidlitz
Form Letter C 308	Robert	Seidlitz
Form Letter C 309	Robert	Seidlitz
Form Letter C 310	Ron	Kliewer
Form Letter C 311	Ron	Kliewer
Form Letter C 312	Ronald	Arndt
Form Letter C 313	Ronald	Arndt
Form Letter C 314	Ronald	Arndt
Form Letter C 315	Ronald	Arndt
Form Letter C 316	Ronald	Arndt
Form Letter C 317	Ronald	Arndt
Form Letter C 318	Russell	George
Form Letter C 319	Russell	George
Form Letter C 320	Russell	George
Form Letter C 321	Sadie	Potter
Form Letter C 322	Sadie	Potter
Form Letter C 323	Scott	Kimura
Form Letter C 324	Scott	Kimura
Form Letter C 325	Sharon	Delgado

Form Letter C 326	Sharon	Delgado
Form Letter C 327	Sharon	Delgado
Form Letter C 328	Sherri	Oakley
Form Letter C 329	Sherri	Oakley
Form Letter C 330	Sherri	Oakley
Form Letter C 331	Shirlyn	Vogel
Form Letter C 332	Shirlyn	Vogel
Form Letter C 333	Shirlyn	Vogel
Form Letter C 334	Steve	Barnes
Form Letter C 335	Steve	Barnes
Form Letter C 336	Steve	Murphy
Form Letter C 337	Steve	Murphy
Form Letter C 338	Steve	Murphy
Form Letter C 339	Steven	Borgnis
Form Letter C 340	Steven	Borgnis
Form Letter C 341	Steven	Borgnis
Form Letter C 342	Steven	Borgnis
Form Letter C 343	Steven	Borgnis
Form Letter C 344	Steven	Borgnis
Form Letter C 345	Steven	Borgnis
Form Letter C 346	Steven	Borgnis
Form Letter C 347	Steven	Borgnis
Form Letter C 348	Sunnie	Skiles
Form Letter C 349	Sunnie	Skiles
Form Letter C 350	Susan	Jueck
Form Letter C 351	Susan	Jueck
Form Letter C 352	Susan	Jueck
Form Letter C 353	Susan	Jueck
Form Letter C 354	Susan	Jueck
Form Letter C 355	Susan	Jueck
Form Letter C 356	Susan	Jueck
Form Letter C 357	Susan	Jueck
Form Letter C 358	Susan	Jueck
Form Letter C 359	Suzanne	King
Form Letter C 360	Suzanne	King
Form Letter C 361	Suzanne	King
Form Letter C 362	Tamar	Brinkman
Form Letter C 363	Tamar	Brinkman
Form Letter C 364	Tamar	Brinkman
Form Letter C 365	Test	Person
Form Letter C 366	Thomas	Kitchar
Form Letter C 367	Thomas	Kitchar
Form Letter C 368	Thomas	Amesbury
Form Letter C 369	Thomas	Amesbury
Form Letter C 370	Thomas	Amesbury
Form Letter C 371	Tim	McShane
Form Letter C 372	Tim	McShane
Form Letter C 373	Tim	McShane
Form Letter C 374	Tom	Andersen
Form Letter C 375	Tom	Andersen
Form Letter C 376	Tom	Andersen
Form Letter C 377	Tom	Jacobson



Form Letter C 378	Tom	Jacobson
Form Letter C 379	Tom	Jacobson
Form Letter C 380	Walter	Snook
Form Letter C 381	Walter	Snook
Form Letter C 382	Walter	Snook
Form Letter C 383	Wes	Hawkins
Form Letter C 384	Wes	Hawkins
Form Letter C 385	Wes	Hawkins
Form Letter C 386	William	Allsop
Form Letter C 387	William	Allsop
Form Letter C 388	William	Allsop
Form Letter C 389	Wilton	Fryer
Form Letter C 390	Wilton	Fryer
Form Letter C 391	Wilton	Fryer
Form Letter C 392	Wilton	Fryer
Form Letter C 393	Wilton	Fryer
Form Letter C 394	Wilton	Fryer

Form Letter D

Letter Number	Author(s)	
	First Name	Last Name
Form Letter D 1	Aldo	
Form Letter D 2	Alyssa	Rurup
Form Letter D 3	April	Dunham
Form Letter D 4	C.	Taylor
Form Letter D 5	Caroline	Corasaniti
Form Letter D 6	Colleen	Heater
Form Letter D 7	Corey	Vanderwould
Form Letter D 8	Dori	Greenbaum
Form Letter D 9	Julie	Kane
Form Letter D 10	Marion	Gillbert
Form Letter D 11	Susan	Hollon
Form Letter D 12	Thira	Gillbert
Form Letter D 13	Tiffany	Brunello
Form Letter D 14	Wrynne	Kohler

Support Cards

Letter Number	Author(s)	
	First Name	Last Name
Support Card 1	Aaron	Hill
Support Card 2	Aaron	Hill
Support Card 3	Aaron	McIntyre
Support Card 4	Abeli	
Support Card 5	Addison	Kramer
Support Card 6	Al	Mader
Support Card 7	Al	Reichmuth
Support Card 8	Alan	Corcoran
Support Card 9	Alan	Eagleton
Support Card 10	Albert	Nuijens
Support Card 11	Alexander	Eagle

Support Card 12	Alexander	Owens
Support Card 13	Alfred	Bulf
Support Card 14	Allen	Ramsey
Support Card 15	Alonna-Lynn	Alunbar
Support Card 16	Amos	Seghezzi
Support Card 17	Amos	Seghezzi
Support Card 18	Andre	Lubarsky
Support Card 19	Andrea	Harris
Support Card 20	Andrew	Hinz
Support Card 21	Andrew	Kuhnmuench
Support Card 22	Andrew	Kuhnmuench
Support Card 23	Andrew	Rust
Support Card 24	Andrew	Wilkinson
Support Card 25	Andy	Cassano
Support Card 26	Angus	Mackay
Support Card 27	Anna Marie	Mansfield
Support Card 28	Anthony	Domschot
Support Card 29	April	Pfeiler
Support Card 30	Arlene	Trevethick
Support Card 31	Arlene	Trevethick
Support Card 32	Arlene	Trevethick
Support Card 33	Arletha	Richardson
Support Card 34	Art	Mennick
Support Card 35	Artshade Construction	
Support Card 36	B.	Montoya
Support Card 37	B.	Wiederhold
Support Card 38	Bam Realty, LLC	
Support Card 39	Barbara	Hall
Support Card 40	Barbara	Kay
Support Card 41	Barbara	Kelley
Support Card 42	Barbara	Lauderdale
Support Card 43	Barbara	Lauderdale
Support Card 44	Barbara	Perry
Support Card 45	Barbara	Reamer
Support Card 46	Barbara	Schumacher
Support Card 47	Barry	Lowery
Support Card 48	Barry	Mingst
Support Card 49	Beau	Huiskens
Support Card 50	Beckey	Kidder
Support Card 51	Ben	Coleman
Support Card 52	Ben	Joiner
Support Card 53	Ben	Kaplan
Support Card 54	Ben	Coleman
Support Card 55	Ben	Kaplan
Support Card 56	Ben	Veblen
Support Card 57	Bernadette	Jaeger
Support Card 58	Bernice	Owczerzak
Support Card 59	Bethany	Denkers
Support Card 60	Betti	Taormina
Support Card 61	Bettie	Ferry
Support Card 62	Betty	Maddoy
Support Card 63	Beverly	Bologna

Support Card 64	Beverly	Schuetz
Support Card 65	Beverly	Sieler
Support Card 66	Beverly	Sieler
Support Card 67	Beverly	Stillwater
Support Card 68	Beverly	Suenram
Support Card 69	Bill	Bakker
Support Card 70	Bill	Brooks
Support Card 71	Bill	Case
Support Card 72	Bill	Chappel
Support Card 73	Bill	Lewis
Support Card 74	Bill	Lewis
Support Card 75	Bill	Maudru
Support Card 76	Bill	Murray
Support Card 77	Bill	Riske
Support Card 78	Bill	Riske
Support Card 79	Bill	Standley
Support Card 80	Bill	Riske
Support Card 81	Bo	Vaughan
Support Card 82	Bob	Corrigan
Support Card 83	Bob	Ortwein
Support Card 84	Bob	Treadwell
Support Card 85	Bob	Wilder
Support Card 86	Bob	Beams
Support Card 87	Bob	Carman
Support Card 88	Bob	Larive
Support Card 89	Bob	Personevi
Support Card 90	Bob	Swanson
Support Card 91	Bob	Treadwell
Support Card 92	Bob	Wilder
Support Card 93	Bob	Ybarrondo
Support Card 94	Bobbe	Pfau
Support Card 95	Brad	Sparks
Support Card 96	Bradley	Hertan
Support Card 97	Brady	Tanner
Support Card 98	Brandy	Morris
Support Card 99	Brenda	Gildea
Support Card 100	Brenda	Jensen
Support Card 101	Brenda	Jensen
Support Card 102	Brenda	Jensen
Support Card 103	Brent	Boling
Support Card 104	Brent	Jonas
Support Card 105	Brent	Oakley
Support Card 106	Bret	Dove
Support Card 107	Brian	Foster
Support Card 108	Brian	Foster
Support Card 109	Brian	Warrensford
Support Card 110	Bruce	McDonald
Support Card 111	Bruce	McDonald
Support Card 112	Bruce	Schmauder
Support Card 113	Bruce	Hunt
Support Card 114	Bruce	McDonald
Support Card 115	Bruce	Schmauder

Support Card 116	Bryan	Lopin
Support Card 117	Buzz	Presser
Support Card 118	Byron	Jones
Support Card 119	Byron	Maynard
Support Card 120	Cara	Clifton
Support Card 121	Carl	Barnes
Support Card 122	Carl	Barnes
Support Card 123	Carl	Todd
Support Card 124	Carl	Gordon
Support Card 125	Carla	Cipollne
Support Card 126	Carla	Gianquento
Support Card 127	Carmen	Browning
Support Card 128	Carol	Barrett
Support Card 129	Carol	Pureier
Support Card 130	Carolanne	Beren
Support Card 131	Carolyn	Parmley-Wyman
Support Card 132	Carolyn	Seyler
Support Card 133	Carrie	Highfall
Support Card 134	Casey	Chadwick
Support Card 135	Cathy	Runne
Support Card 136	Centero	Vasquez
Support Card 137	Chad	Bohman
Support Card 138	Chad	Graybill
Support Card 139	Chad	Graybill
Support Card 140	Chalmer	DeCecco
Support Card 141	Charleen	Nugent
Support Card 142	Charles	Babiarz
Support Card 143	Charles	Bardsley
Support Card 144	Charles	Erikson
Support Card 145	Charles	Nowell
Support Card 146	Charles	Nowell
Support Card 147	Charles	Rowe
Support Card 148	Charles	Rowe
Support Card 149	Charles	Smith
Support Card 150	Charles	Whittlesey
Support Card 151	Charles	Wilson
Support Card 152	Charles	Windsor
Support Card 153	Charles	Randall
Support Card 154	Cheryl	Goodrow
Support Card 155	Chris	Buti
Support Card 156	Chris	Friedman
Support Card 157	Chris	Hansen
Support Card 158	Chris	Harris
Support Card 159	Chris	Hofland
Support Card 160	Chris	Hughes
Support Card 161	Chris	Johnson
Support Card 162	Chris	McBride
Support Card 163	Chris	Torreyson
Support Card 164	Christi	Lamica
Support Card 165	Christina	Feise
Support Card 166	Christopher	Lewis
Support Card 167	Christopher	Phelan

Support Card 168	Christopher	Reilly
Support Card 169	Christopher	Reilly
Support Card 170	Chuck	Nowell
Support Card 171	Cindi	Anderson
Support Card 172	Cindi	Anderson
Support Card 173	Cindy	Anderson
Support Card 174	Cindy	Wong
Support Card 175	Clarence	Taylor
Support Card 176	Clark	Pearson
Support Card 177	Claudette	Granados
Support Card 178	Claudia	Bennett
Support Card 179	Cliff	Goodson
Support Card 180	Clint	Nallington
Support Card 181	Clyde	King
Support Card 182	Collin	Smith
Support Card 183	Constance	Huebner
Support Card 184	Craig	Comeaux
Support Card 185	Craig	Fox
Support Card 186	Craig	Garner
Support Card 187	Curtis	McMullan
Support Card 188	Curtis	McMullan
Support Card 189	Curtis	Price
Support Card 190	Cynthia	Pekarek
Support Card 191	D.L.	Bloche
Support Card 192	Dale	Bohnenberger
Support Card 193	Dale	Bolin
Support Card 194	Dale	Bolin
Support Card 195	Dale	Hafelfinger
Support Card 196	Dale	Hafelfinger
Support Card 197	Dan	Brokaw
Support Card 198	Dan	Demartini
Support Card 199	Dan	Driscol
Support Card 200	Dan	Fadling
Support Card 201	Dan	Mower
Support Card 202	Dan	Riffle
Support Card 203	Dan	Young
Support Card 204	Daniel	Burdekin
Support Card 205	Daniel	Danckert
Support Card 206	Daniel	DiPietro
Support Card 207	Daniel	Leidel
Support Card 208	Daniel	Reiswig
Support Card 209	Daniel	Siegle
Support Card 210	Danielle	White
Support Card 211	Danielle	White
Support Card 212	Dannie	Andrews
Support Card 213	Darrel	Edzards
Support Card 214	Darrel	Freude
Support Card 215	Darrell	Murphy
Support Card 216	Darryl	Stoner
Support Card 217	Daryl	Barth
Support Card 218	Dave	Frye
Support Card 219	Dave	Matson

Support Card 220	Dave	Matson
Support Card 221	Dave	Sivertsen
Support Card 222	Dave	Travis
Support Card 223	David	Bloche
Support Card 224	David	Casner
Support Card 225	David	Clayton
Support Card 226	David	Frazer
Support Card 227	David	Glubatch
Support Card 228	David	Higbee
Support Card 229	David	Landon
Support Card 230	David	Laurenzo
Support Card 231	David	Mapa
Support Card 232	David	Rice
Support Card 233	David	Saller
Support Card 234	David	Thompson
Support Card 235	David	Vertini
Support Card 236	David	Whatley
Support Card 237	David	Ashworth
Support Card 238	David	Dodd
Support Card 239	David	Hughes
Support Card 240	David	Kimmich
Support Card 241	David	Kimmich
Support Card 242	David	Koerver
Support Card 243	David	Kuttler
Support Card 244	David	Laurenzo
Support Card 245	David	Nelson
Support Card 246	David	Swift
Support Card 247	Dawna	Allen
Support Card 248	Dean	Blodgett
Support Card 249	Dean	Christensen
Support Card 250	Debbie	Dajas
Support Card 251	Debbie	Dajas
Support Card 252	Debbie	Ghiringhell
Support Card 253	Debbie	Ghiringhell
Support Card 254	Debora	Ghiringhell
Support Card 255	Deborah	Balmino-Graham
Support Card 256	Deborah	Brown
Support Card 257	Deborah	Burnett
Support Card 258	Deborah	Frank
Support Card 259	Deborah	Schepperle
Support Card 260	Del	Liverey
Support Card 261	Deloise	Sutton
Support Card 262	Deloise	Sutton
Support Card 263	Delulace	Rueppel
Support Card 264	Denise	Youngman
Support Card 265	Dennis	Chipchase
Support Card 266	Dennis	Cole
Support Card 267	Dennis	Elliott
Support Card 268	Dennis	Grube
Support Card 269	Dennis	Hanson
Support Card 270	Dennis	Kocher
Support Card 271	Dennis	Madsen



Support Card 272	Dennis	Madsen
Support Card 273	Dennis	Madsen
Support Card 274	Dennis	Sorrell
Support Card 275	Dennis	Wessels
Support Card 276	Dennis	Wessels
Support Card 277	Derek	Spangler
Support Card 278	Dian	Fischer
Support Card 279	Diana	Pruski
Support Card 280	Diana	Riley
Support Card 281	Diana	Riley
Support Card 282	Diane	Myers
Support Card 283	Diane	Rossi
Support Card 284	Diane	Rossi
Support Card 285	Diane	Richardson
Support Card 286	Dianna	Biococca
Support Card 287	Dirk	Meyer
Support Card 288	Don	Burrows
Support Card 289	Don	Daniels
Support Card 290	Don	Daniels
Support Card 291	Don	Foulk
Support Card 292	Don	Jones
Support Card 293	Don	Jones
Support Card 294	Don	Malcolm
Support Card 295	Don	Pettis
Support Card 296	Don	Swartz
Support Card 297	Donald	Bartoli
Support Card 298	Donald	Bartoli
Support Card 299	Donald	Hoffler
Support Card 300	Donald	McEdwards
Support Card 301	Donald	Williams
Support Card 302	Donald	Williams
Support Card 303	Donald	Wirta
Support Card 304	Donna	Imsand
Support Card 305	Donna	Salmonson
Support Card 306	Donna	Stewart
Support Card 307	Donna	Stewart
Support Card 308	Donna-Lynn	Dunbar
Support Card 309	Dora	Hermansen
Support Card 310	Doris	Penaluna
Support Card 311	Dorothy	Feloni
Support Card 312	Dorothy	Harding
Support Card 313	Doug	Dreher
Support Card 314	Doug	Miller
Support Card 315	Doug	Plumley
Support Card 316	Douglas	Leruchett
Support Card 317	Duane	Breiton
Support Card 318	Dwayne	Tomson
Support Card 319	Dwayne	Tomson
Support Card 320	Dwight	Johnson
Support Card 321	Dwight	Johnson
Support Card 322	Ed	Strange
Support Card 323	Ed	Townsend

Support Card 324	Edward	Quick
Support Card 325	Edward	Smith
Support Card 326	Edwardo	Valdevino
Support Card 327	Elinor	Mulloy
Support Card 328	Elise	Timoney
Support Card 329	Elizabeth	Price
Support Card 330	Elizabeth	Price
Support Card 331	Elton	Butler
Support Card 332	Environmental	Systems
Support Card 333	Eric	Dove
Support Card 334	Eric	Dove
Support Card 335	Eric	Leffingwell
Support Card 336	Eric	Daniels
Support Card 337	Eric	Dove
Support Card 338	Erik	Van Der Zalm
Support Card 339	Erik	Angle
Support Card 340	Ernie	Harries
Support Card 341	Ernie	Harries
Support Card 342	Ernylla	England
Support Card 343	Errol	McIntyre
Support Card 344	Estelle	LeMere
Support Card 345	Evelyn	McCallister
Support Card 346	F.E.	Mohr
Support Card 347	Frank	Barna
Support Card 348	Frank	Kulczyk
Support Card 349	Frank	Piner
Support Card 350	Frank	Rowe
Support Card 351	Frankie	Churchill
Support Card 352	Fred	Anderson
Support Card 353	G.	Mitchelmore
Support Card 354	G.P.	Combes
Support Card 355	Gabe	Alvarado
Support Card 356	Gail	Corondoni
Support Card 357	Garvin	Francis
Support Card 358	Gary	Benedict
Support Card 359	Gary	Benedict
Support Card 360	Gary	Benedict
Support Card 361	Gary	Berkheimer
Support Card 362	Gary	Franza
Support Card 363	Gary	Jones
Support Card 364	Gary	Sirois
Support Card 365	Gary	Smith
Support Card 366	Gayle	Hannan
Support Card 367	Gayle	Hannan
Support Card 368	Geoffrey	Gomer
Support Card 369	Georgann	Russell
Support Card 370	George	Beatty
Support Card 371	George	Kilner
Support Card 372	George	Kilner
Support Card 373	George	Kilner
Support Card 374	George	Loftus
Support Card 375	George	Loftus

Support Card 376	George	Matson
Support Card 377	George	Noud
Support Card 378	George	Sovey
Support Card 379	Gerald	Gierszewski
Support Card 380	Gerald	Satterfield
Support Card 381	Gerald	Swartz
Support Card 382	Gerard	Bushore
Support Card 383	Gerrad	Cichowicz
Support Card 384	Gerry	Anderson
Support Card 385	Gerry	Anderson
Support Card 386	Gina	Rogers
Support Card 387	Glen	Chileski
Support Card 388	Glen	Weisgerber
Support Card 389	Glen	Chileski
Support Card 390	Glendora	Andrews
Support Card 391	Glenn	Jones
Support Card 392	Glenn	Jones
Support Card 393	Glenn	Jones
Support Card 394	Glenn	Ward
Support Card 395	Glenn	Woodruff
Support Card 396	Gordon	Ghiglioine
Support Card 397	Gordon	Ghiglione
Support Card 398	Gordon	Ghiglione
Support Card 399	Gordon	Richey
Support Card 400	Grady	Wilson
Support Card 401	Greg	Frederking
Support Card 402	Greg	Gregory
Support Card 403	Greg	King
Support Card 404	Greg	Millar
Support Card 405	Greg	Osborne
Support Card 406	Greg	Mast
Support Card 407	Gregg	Manoogian
Support Card 408	Gregom	Pears
Support Card 409	Gregoni	Pesiri
Support Card 410	Gregory	Greg
Support Card 411	Gregory	Morgan
Support Card 412	Gretchen	Swinson
Support Card 413	Greydon	Hicks
Support Card 414	Gwena	McCarthy
Support Card 415	Hal	Lindval
Support Card 416	Harold	Anderson
Support Card 417	Hazel	Myers
Support Card 418	Heather	Houston
Support Card 419	Helen	Hansen
Support Card 420	Henry	Tardif
Support Card 421	Herb	Miller
Support Card 422	Herman	Pegoda
Support Card 423	Herman	Pegoda
Support Card 424	Hilton	Smith
Support Card 425	Hope	Justice
Support Card 426	Howard	Mordell
Support Card 427	Howard	Raikowski

Support Card 428	Howard	Simmons
Support Card 429	Howard	Freele
Support Card 430	H.P.	Vaughan
Support Card 431	H.P.	Vaughan
Support Card 432	Hugh	Tower
Support Card 433	Hugh	Tower
Support Card 434	Ila	Dunbar
Support Card 435	Ivan	Plascencia
Support Card 436	Ivia	Colon
Support Card 437	J.S.	Ellsworth
Support Card 438	Jack	Bishop
Support Card 439	Jack	Cramer
Support Card 440	Jack	Cramer
Support Card 441	Jack	Victor
Support Card 442	Jack	Bishop
Support Card 443	Jackie	Scholsser
Support Card 444	Jacqueline	Koch-Turner
Support Card 445	Jad	Funk
Support Card 446	Jaime	Recarens
Support Card 447	Jake	Dabis
Support Card 448	James	Barbour
Support Card 449	James	Barbour
Support Card 450	James	Butler
Support Card 451	James	Butler
Support Card 452	James	Butler
Support Card 453	James	Garmire
Support Card 454	James	Griffin
Support Card 455	James	Grill
Support Card 456	James	Haan
Support Card 457	James	Harrold
Support Card 458	James	Klauer
Support Card 459	James	Landsbush
Support Card 460	James	McCawn
Support Card 461	James	McKenzie
Support Card 462	James	Murray
Support Card 463	James	Quintal
Support Card 464	James	Sartori
Support Card 465	James	Self
Support Card 466	James	Slane
Support Card 467	James	Slane
Support Card 468	James	Soto
Support Card 469	James	Studabaker
Support Card 470	James	Sullivan
Support Card 471	James	Williams
Support Card 472	Jan	Hagel
Support Card 473	Janine	Priante
Support Card 474	Janis	Jones
Support Card 475	Janis	Jones
Support Card 476	Jared	Hicks
Support Card 477	Jason	Bice
Support Card 478	Jason	White
Support Card 479	Jean	Carli

Support Card 480	Jedd	Caddy
Support Card 481	Jedd	Caddy
Support Card 482	Jeff	Baranska
Support Card 483	Jeff	Biscotti
Support Card 484	Jeff	Freeman
Support Card 485	Jeff	Palm
Support Card 486	Jeff	Spencer
Support Card 487	Jeff	Thomsen
Support Card 488	Jeff	Wagner
Support Card 489	Jeff	Wagner
Support Card 490	Jeff	Zall
Support Card 491	Jeff Sue	
Support Card 492	Jeffery	Hunter
Support Card 493	Jeffery	Hunter
Support Card 494	Jennifer	Peterson
Support Card 495	Jenny	Crowell
Support Card 496	Jerel	Shapp
Support Card 497	Jeremiah	Crouse
Support Card 498	Jeremy	Deterding
Support Card 499	Jerrett	Davis
Support Card 500	Jerry	Cirino
Support Card 501	Jerry	Karnow
Support Card 502	Jerry	Karnow
Support Card 503	Jerry	Uhlig
Support Card 504	Jerry	Uhlig
Support Card 505	Jerry	Warmerdam
Support Card 506	Jerry	Short
Support Card 507	Jesse	Glenn
Support Card 508	Jesse	McKenna
Support Card 509	Jesse	White
Support Card 510	Jessica	Burlee
Support Card 511	Ji	Miller
Support Card 512	Jill	Muhlbach
Support Card 513	Jim	Baku
Support Card 514	Jim	Curry
Support Card 515	Jim	Curry
Support Card 516	Jim	Darnell
Support Card 517	Jim	Darnell
Support Card 518	Jim	Harrold
Support Card 519	Jim	Landsburg
Support Card 520	Jim	Myers
Support Card 521	Jim	Self
Support Card 522	Jim	Smith
Support Card 523	Jim	Wilson
Support Card 524	Jim	Geach
Support Card 525	Jo	DeSoto
Support Card 526	Joan	Brown
Support Card 527	Joan	Dahl
Support Card 528	Joan	Manud
Support Card 529	Joan	O'Donnell
Support Card 530	JoAnn	Baku

Support Card 531	Joann	McDermott
Support Card 532	Joanna	Fahey
Support Card 533	Joanne	Brown
Support Card 534	Joanne	Drumond
Support Card 535	Jodi	Davis
Support Card 536	Jodi	Steele
Support Card 537	Jodi	Steele
Support Card 538	Jody	Sweet
Support Card 539	Joe	Bonchonsky
Support Card 540	Joe	Fowler
Support Card 541	Joe	Fowler
Support Card 542	Joe	Glick
Support Card 543	Joe	Glick
Support Card 544	Joe	Glick
Support Card 545	Joe	Liggell
Support Card 546	Joe	Neidel
Support Card 547	Joe	Leidel
Support Card 548	John	Alspaugh
Support Card 549	John	Bain
Support Card 550	John	Bernice
Support Card 551	John	Butler
Support Card 552	John	Carter
Support Card 553	John	Clune
Support Card 554	John	Delgado
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Support Card 556	John	Drew
Support Card 557	John	Eagleton
Support Card 558	John	Eramouspe
Support Card 559	John	Eramouspe
Support Card 560	John	Fairchild
Support Card 561	John	Fotinos
Support Card 562	John	Godfrey
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Support Card 565	John	Morton
Support Card 566	John	Pekarek
Support Card 567	John	Philpot
Support Card 568	John	Reader
Support Card 569	John	Rice
Support Card 570	John	Sample
Support Card 571	John	Sanchez
Support Card 572	John	Schwabecher
Support Card 573	John	Tucker
Support Card 574	John	Wadden
Support Card 575	John	Young
Support Card 576	Jon	Constantin
Support Card 577	Jon	Grappi
Support Card 578	Jonathan	Ettlin
Support Card 579	Joseph	Anguiano
Support Card 580	Joseph	Anguiano
Support Card 581	Joseph	Anguiano
Support Card 582	Joseph	Aventheler

Support Card 583	Joseph	Bergeron
Support Card 584	Joseph	Gaeta
Support Card 585	Joseph	Seck
Support Card 586	Joseph	Woulfe
Support Card 587	Joseph	Woulfe
Support Card 588	Joshua	Hynie
Support Card 589	Joyce	Shillingburg
Support Card 590	Judith	Cole
Support Card 591	Judith	Cole
Support Card 592	Judith	Ellis
Support Card 593	Judith	McBride
Support Card 594	Judith	Parker
Support Card 595	Judy	Ellis
Support Card 596	Judy	Kistner
Support Card 597	Judy	Ten Eyer
Support Card 598	Juli	Reasor
Support Card 599	Julia	Amaral
Support Card 600	Julia	Amaral
Support Card 601	Julia	Amaral
Support Card 602	Justin	Krosi
Support Card 603	Justin	Simkins
Support Card 604	Justin	Smith
Support Card 605	K.E.	Dickey
Support Card 606	Kaeden	Tracy
Support Card 607	Kaeden	Tracy
Support Card 608	Kara	Liller
Support Card 609	Karen	Cromwell
Support Card 610	Karen	Kennedy
Support Card 611	Karen	Kinne
Support Card 612	Karen	Markulis
Support Card 613	Karen	Snapp
Support Card 614	Karl	Blanco
Support Card 615	Karl	Meyer
Support Card 616	Karl	Resett
Support Card 617	Katherine	Eyre
Support Card 618	Kathleen	Pimentel
Support Card 619	Kathleen	Vold
Support Card 620	Kathryn	Connolly
Support Card 621	Kathryn	Penk
Support Card 622	Kathryn	Penk
Support Card 623	Kathy	Montero
Support Card 624	Kathy	Palmer
Support Card 625	Kathy	Whittlesey
Support Card 626	Kathy	Whittlesey
Support Card 627	Kay	Swasey
Support Card 628	Keith	Atkins
Support Card 629	Keith	Cantrell
Support Card 630	Keith	Foran
Support Card 631	Kelly	Davis
Support Card 632	Kelly	Giacomini
Support Card 633	Kelly	Giacomini
Support Card 634	Kelly	Quinn

Support Card 635	Kelly	Sinclair
Support Card 636	Ken	Baker
Support Card 637	Ken	Bilderback
Support Card 638	Ken	Buck
Support Card 639	Ken	Draper
Support Card 640	Ken	Efird
Support Card 641	Ken	Efird
Support Card 642	Ken	Efird
Support Card 643	Ken	Harney
Support Card 644	Ken	Wenze
Support Card 645	Ken	Wyman
Support Card 646	Kenneth	Kemp
Support Card 647	Kenneth	Marti
Support Card 648	Kenneth	Roberts
Support Card 649	Kenneth	Wyman
Support Card 650	Kevin	Blowers
Support Card 651	Kevin	Brune
Support Card 652	Kevin	Cayer
Support Card 653	Kevin	Cookson
Support Card 654	Kevin	Heinisch
Support Card 655	Kevin	Jones
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Support Card 658	Kevin	Krikorian
Support Card 659	Kevin	Maxwell
Support Card 660	Kevin	McCarty
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Support Card 662	Kim	Herman
Support Card 663	Kim	Herman
Support Card 664	Kimber	Goodman
Support Card 665	Kimberly	Lovely
Support Card 666	Kindra	Nelson
Support Card 667	Kirby	DeLaunay
Support Card 668	Kirk	Senseney
Support Card 669	Kris	Stepanian
Support Card 670	Kua	Ortman
Support Card 671	Kubbah	Hoffman
Support Card 672	Kurt	Graversgaard
Support Card 673	Kurt	Meyer
Support Card 674	Kurt	Senkbeil
Support Card 675	Kurt	Scott
Support Card 676	Kyle	Corchero
Support Card 677	Kylene	Ellinwood
Support Card 678	L.	Richards
Support Card 679	L.J.	Will
Support Card 680	Lance	Pauly
Support Card 681	Larry	Ames
Support Card 682	Larry	Gross
Support Card 683	Larry	King
Support Card 684	Larry	Packard
Support Card 685	Larry	Packard
Support Card 686	Larry	Purciel

Support Card 687	Larry	Ryan
Support Card 688	Larry	Starn
Support Card 689	Larry	Stowe
Support Card 690	Larry	Youngman
Support Card 691	Larry	King
Support Card 692	Lars	Droivold
Support Card 693	Lars	Droivold
Support Card 694	Lars	Droivold
Support Card 695	Laura	Preece
Support Card 696	LaVonne	Ludian
Support Card 697	LaVonne	Ludian
Support Card 698	Lawrence	Beck
Support Card 699	Lawrence	Meyers
Support Card 700	Lee	Blakemore
Support Card 701	Lee	Matthews
Support Card 702	Lee	Tope
Support Card 703	Lee	Trumbull
Support Card 704	Les	Hickinbotham
Support Card 705	Les	Nicholson
Support Card 706	Leslie	DeVito
Support Card 707	Leslie	Jacob
Support Card 708	Liberty	Sunbear
Support Card 709	Linda	Couper
Support Card 710	Linda	Keck
Support Card 711	Linda	Montano
Support Card 712	Linda	Shulte
Support Card 713	Linda	Taylor
Support Card 714	Linda	Thode
Support Card 715	Lionel	Deboisblanc
Support Card 716	Lionel	DeBoisblanc
Support Card 717	Lisa	Milone
Support Card 718	Lori	Brady
Support Card 719	Lori	Dana
Support Card 720	Lori	Murphy
Support Card 721	Lori	Peters
Support Card 722	Lorraine	Plagge
Support Card 723	Lou	Janakos
Support Card 724	Lou	Linnet
Support Card 725	Lou	Freschi
Support Card 726	Louis	Balsamo
Support Card 727	Louis	Greenwood
Support Card 728	Louis	Greenwood
Support Card 729	Louise	Bradley
Support Card 730	Lucy	Garbraith
Support Card 731	Luisa	Varo
Support Card 732	Luke	Hale
Support Card 733	Lynn	Beck
Support Card 734	Lynn	Beck
Support Card 735	Lynn	Heyes
Support Card 736	Lynn	Zankich
Support Card 737	Lynn	Zankich
Support Card 738	M.	Andreasen

Support Card 739	M.	McEwen
Support Card 740	Madeline	Bartorillo
Support Card 741	Mandy	McLloyd
Support Card 742	Manfred	Weil
Support Card 743	Manuel	Recendez
Support Card 744	Marc	Davis
Support Card 745	Marc	Mikan
Support Card 746	Marcus	Adkison
Support Card 747	Margaret	Burlew
Support Card 748	Margaret	Burlew
Support Card 749	Margaret	Harcourt
Support Card 750	Margaret	Urke
Support Card 751	Maria	Auxiliadora
Support Card 752	Mariah	Romero
Support Card 753	Marie	Camaeda
Support Card 754	Marja	Miller
Support Card 755	Mark	Bauman
Support Card 756	Mark	Davis
Support Card 757	Mark	Di Salvo
Support Card 758	Mark	Gage
Support Card 759	Mark	Kendall
Support Card 760	Mark	Kiser
Support Card 761	Mark	Kubich
Support Card 762	Mark	Paye
Support Card 763	Mark	Robertson
Support Card 764	Mark	Stoutner
Support Card 765	Mark	Stoutner
Support Card 766	Mark	Strate
Support Card 767	Mark	Strate
Support Card 768	Mark	Strate
Support Card 769	Mark	Kubich
Support Card 770	Marlin	Houser
Support Card 771	Marlyn	Stark
Support Card 772	Marti	McBride
Support Card 773	Martin	Harvey
Support Card 774	Marvin	Rackley
Support Card 775	Marvir	Cook
Support Card 776	Mary	Pringle
Support Card 777	Mary	Belesut
Support Card 778	Maryalyce	Hansen
Support Card 779	Maryalyce	Hansen
Support Card 780	Matt	Bouchard
Support Card 781	Matt	Quentmeyer
Support Card 782	Matt	Johnson
Support Card 783	Matthew	Boman
Support Card 784	Matthew	Boman
Support Card 785	Matthew	Mitchell
Support Card 786	Melissa	Teague
Support Card 787	Melody	Raglin
Support Card 788	Michael	Glayson
Support Card 789	Michael	Gregersen
Support Card 790	Michael	Hooker

Support Card 791	Michael	Linn-Kidwell
Support Card 792	Michael	Linn-Kidwell
Support Card 793	Michael	Lyman
Support Card 794	Michael	McCauley
Support Card 795	Michael	Norton
Support Card 796	Michael	Ortola
Support Card 797	Michael	Ramirez
Support Card 798	Michael	Sabato
Support Card 799	Michael	Vasquez
Support Card 800	Michael	Wedel
Support Card 801	Michael	Williams
Support Card 802	Michelle	Jackson
Support Card 803	Michelle	LaValles
Support Card 804	Michelle	Wooster
Support Card 805	Mike	Leslie
Support Card 806	Mike	Leslie
Support Card 807	Mike	Neuer
Support Card 808	Mike	Pemberton
Support Card 809	Mike	Pemberton
Support Card 810	Mike	Peterson
Support Card 811	Mike	Wood
Support Card 812	Mike	Griffin
Support Card 813	Mitchell	Coffee
Support Card 814	Mitchell	Coffee
Support Card 815	Mitchell	Pendo
Support Card 816	Monica	Crain
Support Card 817	Morris	Anderson
Support Card 818	Mr.	Gibbons
Support Card 819	Myron	Putman
Support Card 820	Myron	Putman
Support Card 821	Myron	Putman
Support Card 822	Nancy	Hendrix
Support Card 823	Nancy	Leslie
Support Card 824	Nanette	Kalman
Support Card 825	Nathan	Glowniak
Support Card 826	Nathan	Hooker
Support Card 827	Nathan	Hooker
Support Card 828	Neil	Bolton
Support Card 829	Netha	Hill
Support Card 830	Nicholas	Breeze
Support Card 831	Nicholas	Fitting
Support Card 832	Nicholas	Pello
Support Card 833	Nicholas	Whittlesey
Support Card 834	Nick	Pello
Support Card 835	Norma	Buich
Support Card 836	Norman	Nielsen
Support Card 837	Norman	Nielson
Support Card 838	Norman	Winn
Support Card 839	Orta	Eckel
Support Card 840	Orta	Eckel
Support Card 841	Otto	Fischer
Support Card 842	Otto	Fischer

Support Card 843	Otto	Fischer
Support Card 844	Overton	Caperton
Support Card 845	P.	Pyle
Support Card 846	P.N.	Prichard
Support Card 847	Pam	White
Support Card 848	Pamela	Dallucki
Support Card 849	Pamela	Dobbas
Support Card 850	Pamela	Hayden
Support Card 851	Pamela	Pemberton
Support Card 852	Pamela	Ryan
Support Card 853	Pamela	Mardy
Support Card 854	Pat	Browning
Support Card 855	Pat	Davis
Support Card 856	Pat	Nelson
Support Card 857	Pat	Sutherland
Support Card 858	Pati	Costa
Support Card 859	Patricia	Anderson
Support Card 860	Patricia	Davis
Support Card 861	Patricia	Nattrass
Support Card 862	Patrick	Harding
Support Card 863	Patrick	Hauser
Support Card 864	Patrick	Schwartz
Support Card 865	Patrick	Schwartz
Support Card 866	Patrick	Sutherland
Support Card 867	Patsy	Boman
Support Card 868	Patti	Michael
Support Card 869	Patti	Unger
Support Card 870	Paul	Hollenbeck
Support Card 871	Paul	McClain
Support Card 872	Paul	McElroy
Support Card 873	Paul	Mosher
Support Card 874	Paul	Rankin
Support Card 875	Paul	Silva
Support Card 876	Paul	Speers
Support Card 877	Paul	Wilson
Support Card 878	Paul	Jordan
Support Card 879	Paul	Pekarek
Support Card 880	Paul	Thayer
Support Card 881	Paula	Lewis
Support Card 882	Pearce	Boyer
Support Card 883	Pedro	Perez
Support Card 884	Peggy	Griffin
Support Card 885	Percy	Dutrieux
Support Card 886	Perris	Hale
Support Card 887	Pete	Christensen
Support Card 888	Pete	Medrano
Support Card 889	Pete	Christensen
Support Card 890	Peter	Coussoulis
Support Card 891	Peter	Coussoulis
Support Card 892	Peter	Falk
Support Card 893	Peter	Gruber
Support Card 894	Peter	Gruber

Support Card 895	Peter	Snyder
Support Card 896	Petra	Juvinall
Support Card 897	Phil	Zink
Support Card 898	Philip	McCoy
Support Card 899	Philip	McCoy
Support Card 900	Phillip	Milam
Support Card 901	Phillip	Parker
Support Card 902	Priscilla	Vanderpas
Support Card 903	Quentin	Browne
Support Card 904	Rachael	Harvey
Support Card 905	Rachel	Weston
Support Card 906	Ralph	Morris
Support Card 907	Randolph	Lanzendorfer
Support Card 908	Randy	Freeman
Support Card 909	Randy	Smith
Support Card 910	Randy	Casto
Support Card 911	Randy	Nunnink
Support Card 912	Randy	Smith
Support Card 913	Raymond	Gedney
Support Card 914	Raymond	Knowle
Support Card 915	Raymond	Shepherd
Support Card 916	Rebecca	French
Support Card 917	Reed	Newcomb
Support Card 918	Rhett	Lewis
Support Card 919	Ricardo	Fuentes
Support Card 920	Rich	Fox
Support Card 921	Richard	Bucher
Support Card 922	Richard	Carter
Support Card 923	Richard	Cortez
Support Card 924	Richard	Deterding
Support Card 925	Richard	French
Support Card 926	Richard	Graydon
Support Card 927	Richard	Hansen
Support Card 928	Richard	Heather
Support Card 929	Richard	Kuhwarth
Support Card 930	Richard	Kuna
Support Card 931	Richard	Musa
Support Card 932	Richard	Okuma
Support Card 933	Richard	Preece
Support Card 934	Richard	Rodeck
Support Card 935	Richard	Rodeck
Support Card 936	Richard	Washburn
Support Card 937	Richard	Davis
Support Card 938	Richard	Terrell
Support Card 939	Rick	Lynn
Support Card 940	Ritadina	Arriaga
Support Card 941	Rob	Baldwin
Support Card 942	Rob	Beam
Support Card 943	Rob	Bosma
Support Card 944	Rob	Curry
Support Card 945	Rob	Penn
Support Card 946	Rob	Ullom

Support Card 947	Robert	Ash
Support Card 948	Robert	Chrisman
Support Card 949	Robert	Crouse
Support Card 950	Robert	Foster
Support Card 951	Robert	Free
Support Card 952	Robert	Haight
Support Card 953	Robert	Haight
Support Card 954	Robert	Hickins
Support Card 955	Robert	Hudspeth
Support Card 956	Robert	Ingram
Support Card 957	Robert	Johnson
Support Card 958	Robert	Kilroy
Support Card 959	Robert	Kilroy
Support Card 960	Robert	Kilroy
Support Card 961	Robert	Lang
Support Card 962	Robert	Lewis
Support Card 963	Robert	Lowenthal
Support Card 964	Robert	Lowenthal
Support Card 965	Robert	Matson
Support Card 966	Robert	McGee
Support Card 967	Robert	Mills
Support Card 968	Robert	Mills
Support Card 969	Robert	Mills
Support Card 970	Robert	Newkirk
Support Card 971	Robert	Parks
Support Card 972	Robert	Rist
Support Card 973	Robert	Seidlitz
Support Card 974	Robert	Shrader
Support Card 975	Robert	Tote
Support Card 976	Robert	Wilden
Support Card 977	Robert	Wilson
Support Card 978	Robert	Wilson
Support Card 979	Robert	Zoellin
Support Card 980	Robert	Birk
Support Card 981	Robert	Spencer
Support Card 982	Robin	Kitts
Support Card 983	Robin	Kitts
Support Card 984	Roger	Carmine
Support Card 985	Roger	Chapman
Support Card 986	Rolf	Ivey
Support Card 987	Romuald	Choron
Support Card 988	Ron	Foster
Support Card 989	Ron	Foster
Support Card 990	Ron	Henley
Support Card 991	Ron	Higgins
Support Card 992	Ron	Higgins
Support Card 993	Ron	Mewes
Support Card 994	Ron	Slay
Support Card 995	Ron	Slay
Support Card 996	Ron	Tuttle
Support Card 997	Ron	Weiser
Support Card 998	Ron	Mewes

Support Card 999	Ronald	Nevis
Support Card 1000	Ronald	Picken
Support Card 1001	Ronald	Skewes
Support Card 1002	Ronald	Skewes
Support Card 1003	Ronald	Buzzard
Support Card 1004	Ronnie	Thomas
Support Card 1005	Rosalyn	Johansen
Support Card 1006	Rosanne	Palmer
Support Card 1007	Rosemarie	Morris
Support Card 1008	Ross	Crary
Support Card 1009	Ross	Crary
Support Card 1010	Roxanna	Hill
Support Card 1011	Roy	Ramey
Support Card 1012	Russ	Broughan
Support Card 1013	Russ	Howell
Support Card 1014	Russel	Peterson
Support Card 1015	Russell	King
Support Card 1016	Russell	Lorang
Support Card 1017	Russell	Prinz
Support Card 1018	Russell	Williams
Support Card 1019	Ruth	Poulter
Support Card 1020	Ryan	Deniz
Support Card 1021	Ryan	Tidwell
Support Card 1022	Ryan	DeYoung
Support Card 1023	Ryan	Holmes
Support Card 1024	S.	Paulus
Support Card 1025	S.	Francone
Support Card 1026	Sally	Salivar
Support Card 1027	Sam	Griffith
Support Card 1028	Sam	Griffith
Support Card 1029	Sam	MacGregor
Support Card 1030	Sam	Marsico
Support Card 1031	Sam	Youngman
Support Card 1032	Samantha	Peebles
Support Card 1033	Samantha	Randall
Support Card 1034	Samuel	Phillips
Support Card 1035	Samuel	Youngman
Support Card 1036	Samuel	Youngman
Support Card 1037	Sandra	Collins
Support Card 1038	Sandra	Knapp
Support Card 1039	Sandra	Tishlarich
Support Card 1040	Sandra	Collins
Support Card 1041	Sandy	Hall
Support Card 1042	Sarah	Maslov
Support Card 1043	Scot	Little
Support Card 1044	Scot	Little
Support Card 1045	Scott	Landre
Support Card 1046	Sean	Bernard
Support Card 1047	Sean	Dolbee
Support Card 1048	Sean	Minor
Support Card 1049	Sean	O'Brien
Support Card 1050	Sean	Reynolds



Support Card 1051	Shaun	Kelly
Support Card 1052	Shawn	Bratcher
Support Card 1053	Shawn	Kobliska
Support Card 1054	Shawn	Oneill
Support Card 1055	Sheri	Anastasio
Support Card 1056	Sherri	Oakley
Support Card 1057	Sherri	Oakley
Support Card 1058	Shirley	Weldemere
Support Card 1059	Shirley	Weldemere
Support Card 1060	Shirlyn	Vogel
Support Card 1061	Stephen	Longacre
Support Card 1062	Stephen	Waterbrook
Support Card 1063	Steve	Borgnis
Support Card 1064	Steve	Borgnis
Support Card 1065	Steve	Clifton
Support Card 1066	Steve	Cloud
Support Card 1067	Steve	Elder
Support Card 1068	Steve	Engell
Support Card 1069	Steve	Gonet
Support Card 1070	Steve	Gonet
Support Card 1071	Steve	Hurliman
Support Card 1072	Steve	O'Brien
Support Card 1073	Steve	Pachaud
Support Card 1074	Steve	Shappert
Support Card 1075	Steve	Shappert
Support Card 1076	Steve	Smith
Support Card 1077	Steve	Wade
Support Card 1078	Steven	Barnes
Support Card 1079	Steven	Sharsmitt
Support Card 1080	Steven	Holli
Support Card 1081	Steven	Kuester
Support Card 1082	Sue	Sins
Support Card 1083	Sumita	Davis
Support Card 1084	Susan	Jueck
Support Card 1085	Susan	Walsh
Support Card 1086	Suzanne	King
Support Card 1087	Suzette	Urlie
Support Card 1088	Suzie	Bailey
Support Card 1089	T.	Trathen
Support Card 1090	Tadhg	Hennessy
Support Card 1091	Tamara	McFarland
Support Card 1092	Tammy	Andreozzi
Support Card 1093	Taura	Whitehead
Support Card 1094	Tava	Riley
Support Card 1095	Ted	Scruggs
Support Card 1096	Ted	Scruggs
Support Card 1097	Tera	Yeoman
Support Card 1098	Terence	Prechter
Support Card 1099	Teresa	Baumgartner
Support Card 1100	Teresa	Baumgartner
Support Card 1101	Teresa	Baumgartner
Support Card 1102	Terry	Thompson

Support Card 1103	Terryl	Merritt
Support Card 1104	Theresa	Bonetti
Support Card 1105	Theresa	Kingsbury
Support Card 1106	Thomas	Burns
Support Card 1107	Thomas	Coopman
Support Card 1108	Thomas	McDermott
Support Card 1109	Thomas	Schmidt
Support Card 1110	Tim	Cacy
Support Card 1111	Tim	Callaway
Support Card 1112	Tim	Harrington
Support Card 1113	Tim	Leach
Support Card 1114	Tim	McCall
Support Card 1115	Tim	McKim
Support Card 1116	Tim	McKim
Support Card 1117	Tim	Merry
Support Card 1118	Tim	Palua
Support Card 1119	Tim	Robinson
Support Card 1120	Tina	Stoutner
Support Card 1121	Todd	Newman
Support Card 1122	Tom	Amesbury
Support Card 1123	Tom	Andersen
Support Card 1124	Tom	Andersen
Support Card 1125	Tom	Falls
Support Card 1126	Tom	Jacobson
Support Card 1127	Tom	Kempf
Support Card 1128	Tom	Sackman
Support Card 1129	Tom	Sackman
Support Card 1130	Tom	Schultz
Support Card 1131	Tom	Stockton
Support Card 1132	Tony	Tamayd
Support Card 1133	Travis	Peebles
Support Card 1134	Trent	Wooster
Support Card 1135	Tricia	Allen
Support Card 1136	Trista	Hencley
Support Card 1137	Trista	Hewlley
Support Card 1138	Troy	Frederick
Support Card 1139	Tucker	Cirzius
Support Card 1140	Tyler	Hargrove
Support Card 1141	Tyler	Patchin
Support Card 1142	Valmore	Gauthier
Support Card 1143	Valmore	Gauthier
Support Card 1144	Van	Anthony
Support Card 1145	Vern	Elkins
Support Card 1146	Vivienne	Lahey
Support Card 1147	W. Allsop	McFarland
Support Card 1148	Walter	Snook
Support Card 1149	Warner	Hooker
Support Card 1150	Warner	Hooker
Support Card 1151	Warner	Hooker
Support Card 1152	Wayne	Glenn
Support Card 1153	Wayne	Klauer
Support Card 1154	Wayne	McKay

Support Card 1155	Wayne	Schwartzkopf
Support Card 1156	Wayne	Schwartzkopf
Support Card 1157	Wendy	Horn
Support Card 1158	Wendy	Hutton
Support Card 1159	Wendy	Norman
Support Card 1160	Wes	Hawkins
Support Card 1161	Wes	Mayfield
Support Card 1162	Wes	Mayfield
Support Card 1163	Wilbur	Marshall
Support Card 1164	Willard	Schoellerman
Support Card 1165	William	Allsop
Support Card 1166	William	Bishop
Support Card 1167	William	Burke
Support Card 1168	William	Carlson
Support Card 1169	William	Ferris
Support Card 1170	William	Mudd
Support Card 1171	William	Mudd
Support Card 1172	William	Murray
Support Card 1173	William	Ogilvie
Support Card 1174	William	Asher
Support Card 1175	William	Ferris
Support Card 1176	Wilma	Wilkinson
Support Card 1177	Wilton	Fryer
Support Card 1178	Wilton	Fryer
Support Card 1179	Zeth	Cooper
Support Card 1180	Zeth	Cooper
Support Card 1181	Zola	Rackley
Support Card 1182		Beeman
Support Card 1183		Dodd
Support Card 1184		Wyman

Individual Letters

Letter Number	Author(s)	
	First Name	Last Name
Individual Letter 1	Aaron	Zueck
Individual Letter 2	Abby	Velasquez
Individual Letter 3	Addie	Patrick
Individual Letter 4	Addie	Patrick
Individual Letter 5	Al	Mader
Individual Letter 6	Alan	Emerson
Individual Letter 7	Alecia	Weisman
Individual Letter 8	Alex	Lerch
Individual Letter 9	Ali	Arnerich
Individual Letter 10	Alice	Williams-Root
Individual Letter 11	Alice	Williams-Root
Individual Letter 12	Alison	Alkon
Individual Letter 13	Allison	Bischofberger
Individual Letter 14	Allison	Roush
Individual Letter 15	Amie	Ferrier
Individual Letter 16	Amy	Geiser

Individual Letter 17	Amy Todd	Hobbs Sutler
Individual Letter 18	Andrea	Berry
Individual Letter 19	Andrew	Ribotto
Individual Letter 20	Andrew	Wilson
Individual Letter 21	Angie	Pereira
Individual Letter 22	Ani	Kington
Individual Letter 23	Anita	Pearson
Individual Letter 24	Anita	Wald-Tuttle
Individual Letter 25	Anita	Wald-Tuttle
Individual Letter 26	Anita	Wald-Tuttle
Individual Letter 27	Ann	Finneran
Individual Letter 28	Ann	Vogel
Individual Letter 29	Ann	Wallace
Individual Letter 30	Anna	Sullivan
Individual Letter 31	Anne	Costa
Individual Letter 32	Anne	Lyon
Individual Letter 33	Anne Ken	Merdinger Merdinger
Individual Letter 34	Antoinette	Regan
Individual Letter 35	Antonio	Dominguez
Individual Letter 36	April	Webb
Individual Letter 37	Aque	Baila
Individual Letter 38	Art	Healy
Individual Letter 39	Ashley	Hall
Individual Letter 40	Audrey Carolyn Larry Ginger Carol Jack Lynda Patricia Walt	Hight Homan Homan Van Wagner McDonald Broneith Cooper Holler Watson
Individual Letter 41	Audrey	Jacus
Individual Letter 42	Austin	Fouyer
Individual Letter 43	Avila	Lowrance
Individual Letter 44	Barbara	Gentry
Individual Letter 45	Barbara	Jensen
Individual Letter 46	Barbara	Kroczak
Individual Letter 47	Barbara	Larsen
Individual Letter 48	Barbara	Raymond
Individual Letter 49	Barney	Dewey
Individual Letter 50	Becky	Smith
Individual Letter 51	Ben	Preston
Individual Letter 52	Bernell	Scott
Individual Letter 53	Bernell	Scott
Individual Letter 54	Bernie	Zimmerman
Individual Letter 55	Bert	Heinzelman
Individual Letter 56	Betty	Pearson
Individual Letter 57	Beverly	Martling
Individual Letter 58	Beverly	Stout
Individual Letter 59	Bill	Lawrence

Individual Letter 60	Bishop	Randall
Individual Letter 61	B.J.	Flint
Individual Letter 62	B.J. Holly Pat Gayle	Griffin Bundock Sharp Crossley
Individual Letter 63	B.J. Holly Pat Gayle	Griffin Bundock Sharp Crossley
Individual Letter 64	Bob Betty	Larimer Larimer
Individual Letter 65	Bob	Zuelsdorf
Individual Letter 66	Bonnie	Murphy
Individual Letter 67	Brandon	Butrick
Individual Letter 68	Brandon	Butrick
Individual Letter 69	Brandon	Hall
Individual Letter 70	Brian	Swagerty
Individual Letter 71	Brion	Dunbar
Individual Letter 72	Bruce Deborah	Kilmesh Cole
Individual Letter 73	Cameron	Brown
Individual Letter 74	Carlyle	Miller
Individual Letter 75	Carol Bill	Brady Brady
Individual Letter 76	Carol	Fenner
Individual Letter 77	Carol	Gicker
Individual Letter 78	Carol	Hyndman
Individual Letter 79	Carol	Kuczora
Individual Letter 80	Carol	Kuczora
Individual Letter 81	Carol	McMillan
Individual Letter 82	Carol	Nelson
Individual Letter 83	Carol	Purchase
Individual Letter 84	Carol	Todd
Individual Letter 85	Carolee	Weisberg
Individual Letter 86	Caroline	Courtright
Individual Letter 87	Caroline	Courtright
Individual Letter 88	Caroline	Courtright
Individual Letter 89	Carolyn Steve	Battaini Battaini
Individual Letter 90	Carolyn Steve	Battaini Battaini
Individual Letter 91	Carolyn Steve	Battaini Battaini
Individual Letter 92	Carolyn	Hansen-Dix
Individual Letter 93	Carrie	Finlay
Individual Letter 94	Catalina	Davis
Individual Letter 95	Cate	Keller
Individual Letter 96	Catherine	Flowers
Individual Letter 97	Catherine	Hardy
Individual Letter 98	Catherine	Stifter
Individual Letter 99	Cathy	Benoit
Individual Letter 100	Cathy	Boyle-Dowd

Individual Letter 101	Cathy	Edger
Individual Letter 102	Cauleen	Lauria
Individual Letter 103	Cecelia	Royal
Individual Letter 104	Cecilia	Reynolds
Individual Letter 105	Chad	Henderson
Individual Letter 106	Charles	Benner
Individual Letter 107	Charles	Brock
Individual Letter 108	Charlie	Landau
Individual Letter 109	Charlotte	Benner
Individual Letter 110	Charly	Price
Individual Letter 111	Charly	Price
Individual Letter 112	Charmian	Railsback
Individual Letter 113	Cheri	Flanigan
Individual Letter 114	Cheri	Martin
Individual Letter 115	Cheryl	Balmain
Individual Letter 116	Cheryl	Borad
Individual Letter 117	Cheryl	Morris
Individual Letter 118	Cheryl Byron	Zook Zook
Individual Letter 119	Chris	Buzzini
Individual Letter 120	Chris	Colbert
Individual Letter 121	Chris	Themelis
Individual Letter 122	Christie	Gillison
Individual Letter 123	Christina	Pradhan
Individual Letter 124	Christina	Pradhan
Individual Letter 125	Christina	Pradhan
Individual Letter 126	Christine	Alford
Individual Letter 127	Christopher	Carpenter
Individual Letter 128	Christopher	Hall
Individual Letter 129	Christy	Hubbard
Individual Letter 130	Chuck	Cropley
Individual Letter 131	Chula	Gemignani
Individual Letter 132	Clay	Olson
Individual Letter 133	Clay	Olson
Individual Letter 134	Clea	Vigneux
Individual Letter 135	Cliff	Case
Individual Letter 136	Colleen	Carson
Individual Letter 137	Collete Michael	Castro McLean
Individual Letter 138	Connie	Finster
Individual Letter 139	Constance	Wright
Individual Letter 140	Corinna	Fish
Individual Letter 141	Corrine	Jones
Individual Letter 142	Craig	Arthur
Individual Letter 143	Craig	Crebbin
Individual Letter 144	Craig	McCann
Individual Letter 145	Cynthia	Yaguda
Individual Letter 146	D.	Virva
Individual Letter 147	Daniel	Behn
Individual Letter 148	Daniel	Behn
Individual Letter 149	Danielle	Boucher
Individual Letter 150	Danny	Milman

Individual Letter 151	Daun	Langston
Individual Letter 152	Dave Dianna	Connell Connell
Individual Letter 153	Dave Renae	Ericksen Ericksen
Individual Letter 154	Dave	Taylor
Individual Letter 155	David	Agran
Individual Letter 156	David	Agran
Individual Letter 157	David	Bowman
Individual Letter 158	David	Bowman
Individual Letter 159	David	Costa
Individual Letter 160	David	Figuly
Individual Letter 161	David	George
Individual Letter 162	David Victoria	Hardy Hardy
Individual Letter 163	David	Herbst
Individual Letter 164	David	Herbst
Individual Letter 165	David	Kimmel
Individual Letter 166	David	Morris
Individual Letter 167	David	O'Donnell
Individual Letter 168	David	Putnam
Individual Letter 169	David	Putnam
Individual Letter 170	David	Unterman
Individual Letter 171	David	Ward
Individual Letter 172	Dawn	C.
Individual Letter 173	Dawna	Johnson
Individual Letter 174	D.C.	Spooner
Individual Letter 175	Deb	LeBlanc
Individual Letter 176	Debbie	Lindh
Individual Letter 177	Debbie	McKitrick
Individual Letter 178	Deborah	Churchill
Individual Letter 179	Deborah	Curtis
Individual Letter 180	Deborah	Pinto
Individual Letter 181	Deborah Maureen	Shriver Miranda
Individual Letter 182	Deborah Maureen	Shriver Miranda
Individual Letter 183	Deborah Maureen	Shriver Miranda
Individual Letter 184	Deborah Maureen	Shriver Miranda
Individual Letter 185	Deborah	Stone-Stapleton
Individual Letter 186	Debra	Dworaczyk
Individual Letter 187	Denis Barbara	Drew Drew
Individual Letter 188	Denise	Bellas
Individual Letter 189	Denise	Cain
Individual Letter 190	Denise	Ilmanen
Individual Letter 191	Denise	Rockwood
Individual Letter 192	Dennis	Wolfers
Individual Letter 193	Diana	Runnels
Individual Letter 194	Diane	Cherry
Individual Letter 195	Diane	Figuly

Individual Letter 196	Diane	Gould
Individual Letter 197	Diane	Gould
Individual Letter 198	Diane	Graham
Individual Letter 199	Dianna	Suarez
Individual Letter 200	Diedra	Spohler
Individual Letter 201	Don	Haislet
Individual Letter 202	Don	Madden
Individual Letter 203	Donald Karen	Davis Davis
Individual Letter 204	Donald	Gagliasso
Individual Letter 205	Donn	Carlson
Individual Letter 206	Donna	Peizer
Individual Letter 207	Donna	Taggart
Individual Letter 208	Doug	Farrell
Individual Letter 209	Douglas	Haussler
Individual Letter 210	Ed Lynette	Cepeda Cepeda
Individual Letter 211	Ed	Suchow
Individual Letter 212	Ed	Suchow
Individual Letter 213	Edward	Falick
Individual Letter 214	Edward Linda	Falick Marting
Individual Letter 215	Eileen	Stutz
Individual Letter 216	E.J.	Sheffner
Individual Letter 217	Elaine	Westfall
Individual Letter 218	Elaine	Westfall
Individual Letter 219	Elaine	Whooley
Individual Letter 220	Elalina	Cuss
Individual Letter 221	Eli	Duber
Individual Letter 222	Eli	Ferrier
Individual Letter 223	Elise	Stupi
Individual Letter 224	Elise	Zink
Individual Letter 225	Elissa Benjamin	Preston Preston
Individual Letter 226	Elizabeth	Mendelsohn
Individual Letter 227	Elizabeth	Barron
Individual Letter 228	Elizabeth	Linsky
Individual Letter 229	Ellen	Davis
Individual Letter 230	Ellen	Johnson
Individual Letter 231	Ellen	Macdonald
Individual Letter 232	Elliot	Schneiderman
Individual Letter 233	Elsa	Burt
Individual Letter 234	Emilie	Rose
Individual Letter 235	Emily	Weissman
Individual Letter 236	Eric	Dunn
Individual Letter 237	Eric	Jorgensen
Individual Letter 238	Ericha	Woolley
Individual Letter 239	Erika	Gaylor
Individual Letter 240	Erika	Johnson
Individual Letter 241	Erika	Neeley
Individual Letter 242	Erin	Carter
Individual Letter 243	Erin	Smith

Individual Letter 244	Eugene	Gilligan
Individual Letter 245	Eugene	Gilligan
Individual Letter 246	Eva	Saelens
Individual Letter 247	Eva	Saelens
Individual Letter 248	Evelyn	Soltero
Individual Letter 249	Fernando Nancy	Rojo Rojo
Individual Letter 250	Florence	Themelis
Individual Letter 251	Frank	Gould
Individual Letter 252	Frank	Lawrence
Individual Letter 253	Fred	Pohlmann
Individual Letter 254	G. Larry	Engel
Individual Letter 255	G. Larry	Engel
Individual Letter 256	Gabriel	Kulp
Individual Letter 257	Gail	Vaughan
Individual Letter 258	Gail	Vaughan
Individual Letter 259	Garrett	Stuessy
Individual Letter 260	Gary	Ambuehl
Individual Letter 261	Gary	Ambuehl
Individual Letter 262	Gary	Baker
Individual Letter 263	Gary	Cartzdafner
Individual Letter 264	Gary	Emanuel
Individual Letter 265	Gary	Griffith
Individual Letter 266	Gary Christine	Griffith Griffith
Individual Letter 267	Gary	Spriggs
Individual Letter 268	Gary	Zimmerman
Individual Letter 269	Gary	Zimmerman
Individual Letter 270	Gaven	Moore
Individual Letter 271	Geoff	Pollard
Individual Letter 272	Geoffrey	Nelson
Individual Letter 273	Gerald	Thomas
Individual Letter 274	Geri	Stout
Individual Letter 275	Geri	Stout
Individual Letter 276	Gerri	Snell
Individual Letter 277	Glen	Garrod
Individual Letter 278	Glenna	Rogers
Individual Letter 279	Gordon	Mann
Individual Letter 280	Greg	DeYoung
Individual Letter 281	Greg	Wolfe
Individual Letter 282	Gregory	Weisswasser
Individual Letter 283	Guarionex	Delgado
Individual Letter 284	Gwen	Moore
Individual Letter 285	Hank	Meals
Individual Letter 286	Harry	Woodum
Individual Letter 287	Harry	Wyeth
Individual Letter 288	Heidi	Breuer
Individual Letter 289	Helen Gerald	Martini Martini
Individual Letter 290	Holly	Ahrens
Individual Letter 291	Holly	Ahrens
Individual Letter 292	Hunter	Jones

Individual Letter 293	Inge	Ivens
Individual Letter 294	Irene	Frazier
Individual Letter 295	Itara	O'Connell
Individual Letter 296	J.T.	Mayr
Individual Letter 297	J.T.	Mayr
Individual Letter 298	Jackie	McRae
Individual Letter 299	Jacqi	Britton
Individual Letter 300	Jacqueline	Finley
Individual Letter 301	Jake	Jacus
Individual Letter 302	Jalana	Smith
Individual Letter 303	James	Blimthorpe
Individual Letter 304	James	Blimthorpe
Individual Letter 305	James	Haufler
Individual Letter 306	James	McMaster
Individual Letter 307	James	Mullen
Individual Letter 308	Jamie	Legon
Individual Letter 309	Jan	Todd
Individual Letter 310	Jan	Zimmerman
Individual Letter 311	Janak	Kimmel
Individual Letter 312	Jane	Baylis-Garcia
Individual Letter 313	Jane	Garcia
Individual Letter 314	Jane	Markham
Individual Letter 315	Jane	Pelton
Individual Letter 316	Jane	Primrose
Individual Letter 317	Janet	Brisson
Individual Letter 318	Janet	Cinquegrana
Individual Letter 319	Janet	Cinquegrana
Individual Letter 320	Janet	Dunstan
Individual Letter 321	Janet	Richman
Individual Letter 322	Janet	Rosner
Individual Letter 323	Janette Chris	Carpenter Carpenter
Individual Letter 324	Janice	Bedayn
Individual Letter 325	Jason	Privett
Individual Letter 326	Jason	White
Individual Letter 327	Jay	Jacquet
Individual Letter 328	Jean	Matsuno
Individual Letter 329	Jeannine	Mayer
Individual Letter 330	Jeff	Brownwood
Individual Letter 331	Jeff	Claussen
Individual Letter 332	Jeff	Kane
Individual Letter 333	Jeff	Kane
Individual Letter 334	Jeff	Kane
Individual Letter 335	Jeff	Litton
Individual Letter 336	Jeff	Peach
Individual Letter 337	Jeff	Russell
Individual Letter 338	Jeffrey	Mason
Individual Letter 339	Jennifer	Buck-Diaz
Individual Letter 340	Jennifer	Burt
Individual Letter 341	Jennifer	Dalmau
Individual Letter 342	Jennifer	Iams-McGuire
Individual Letter 343	Jennifer	Kelly

Individual Letter 344	Jennifer	Long
Individual Letter 345	Jennifer	Todd
Individual Letter 346	Jennifer	Weir
Individual Letter 347	Jere	McGrew
Individual Letter 348	Jeree	Waller
Individual Letter 349	Jesse	Mendez
Individual Letter 350	Jesse	Nugent
Individual Letter 351	Jessica	Higgins
Individual Letter 352	Jill	Francis
Individual Letter 353	Jim	Bair
Individual Letter 354	Jim Helen	Bradshaw Bradshaw
Individual Letter 355	Jim	Cunningham
Individual Letter 356	Jim	Cunningham
Individual Letter 357	Jim	Haynes
Individual Letter 358	Jim	Haynes
Individual Letter 359	Jim	Haynes
Individual Letter 360	Jim Erika	Haynes Haynes
Individual Letter 361	Jim	Morris
Individual Letter 362	Jim Renate	Otto Otto
Individual Letter 363	Jim	Wahler
Individual Letter 364	Jim	Wahler
Individual Letter 365	Jim	Weir
Individual Letter 366	Jimena	Saravia
Individual Letter 367	Joan	Goddard
Individual Letter 368	Joan	Griffin
Individual Letter 369	Joan Jonathan	Keyes Peck
Individual Letter 370	Joan Jonathan	Keyes Peck
Individual Letter 371	Joan Jonathan	Keyes Peck
Individual Letter 372	Joan	Robertson
Individual Letter 373	Joanna	Pedroncelli
Individual Letter 374	Joanne	Drummond
Individual Letter 375	Joanne Susan	Evers Greenawald
Individual Letter 376	Joanne	Wohlfeld
Individual Letter 377	John	Alevizakis
Individual Letter 378	John	Alevizakis
Individual Letter 379	John	Alevizakis
Individual Letter 380	John	Deam
Individual Letter 381	John	Fischer
Individual Letter 382	John	Haverty
Individual Letter 383	John	Hellwig
Individual Letter 384	John Melody	O'Shea O'Shea
Individual Letter 385	John	Palmer
Individual Letter 386	John	Purchase
Individual Letter 387	John	Reeder
Individual Letter 388	John	Vaughan

Individual Letter 389	John	Vaughan
Individual Letter 390	John	Vaughan
Individual Letter 391	John	Vaughan
Individual Letter 392	John	Vaughan
Individual Letter 393	John	Vaughan
Individual Letter 394	John	Vaughan
Individual Letter 395	John	Volz
Individual Letter 396	John	Volz
Individual Letter 397	Jon	Benner
Individual Letter 398	Jonas	Ketterle
Individual Letter 399	Jonathan	Keehn
Individual Letter 400	Jonathan	Nolan
Individual Letter 401	Jorge	Velasquez
Individual Letter 402	Jorge	Velasquez
Individual Letter 403	Joseph	Riley
Individual Letter 404	Joshua	Fisher
Individual Letter 405	Joy	Waite
Individual Letter 406	Joy	Waite
Individual Letter 407	Joyce	Hoffman
Individual Letter 408	Jude	Bischoff
Individual Letter 409	Judith	Brown
Individual Letter 410	Judith	Cooper
Individual Letter 411	Judith	DeVine
Individual Letter 412	Judith Lawrence	Emmons Emmons
Individual Letter 413	Judy	McGrain
Individual Letter 414	Judy Brian	Miner Miner
Individual Letter 415	Julie	Barnum
Individual Letter 416	Julie	Becker
Individual Letter 417	Julie	Carville
Individual Letter 418	Julie	Enzor-Wilson
Individual Letter 419	Julie	Enzor-Wilson
Individual Letter 420	Juliette	Kunin
Individual Letter 421	June	Oberdorfer
Individual Letter 422	Justine	Jacus
Individual Letter 423	K. Robert	Foster
Individual Letter 424	Kali	Feiereisel
Individual Letter 425	Karen	Farlee
Individual Letter 426	Karen	Melquist
Individual Letter 427	Karin	Davenport
Individual Letter 428	Karri	Knowles
Individual Letter 429	Kate	Frame
Individual Letter 430	Kate	Gazzo
Individual Letter 431	Kate	Kane
Individual Letter 432	Katharine	Popenuk
Individual Letter 433	Katherine	Plocharczyk
Individual Letter 434	Katherine	Thompson
Individual Letter 435	Kathleen	Fenton
Individual Letter 436	Kathleen	Madeira
Individual Letter 437	Kathleen	Madeira
Individual Letter 438	Kathleen	Madeira

Individual Letter 439	Kathleen	Ogburn
Individual Letter 440	Kathleen	Woodson
Individual Letter 441	Kathryn	Eldredge
Individual Letter 442	Katrina	Christenson
Individual Letter 443	Kay	Maston
Individual Letter 444	Kayla	Koontz
Individual Letter 445	Kayla	Pearson
Individual Letter 446	Keith	Brown
Individual Letter 447	Keith	Thomassen
Individual Letter 448	Kelly Jim	Holland Holland
Individual Letter 449	Kelly	Trueman
Individual Letter 450	Kendal	Smeeth
Individual Letter 451	Kerry Sue	Anderson Anderson
Individual Letter 452	Kim	Crevoiserat
Individual Letter 453	Kim	James
Individual Letter 454	Kim	James
Individual Letter 455	Kim	Taylor
Individual Letter 456	Kimberly	Cappa
Individual Letter 457	Kimberly	Shureen
Individual Letter 458	Kovill	Shine
Individual Letter 459	Kristen	Hensley
Individual Letter 460	Kristen	Krauel-Privett
Individual Letter 461	Kristen	Krauel-Privett
Individual Letter 462	Kristy	Bennett
Individual Letter 463	L. Tim	Ackerman
Individual Letter 464	Laina	Levy
Individual Letter 465	LaMont	Reynolds
Individual Letter 466	Lanny	Netz
Individual Letter 467	Larik	Butyrin
Individual Letter 468	Larry Patsy	Rieger Rieger
Individual Letter 469	Laura	Balch
Individual Letter 470	Laura Donald	Gagliasso Gagliasso
Individual Letter 471	Laura	Gerhart
Individual Letter 472	Laura	LeBleu
Individual Letter 473	Laura	Pendell
Individual Letter 474	Lauran Cy	Rinck Rinck
Individual Letter 475	Lauren	Anderson
Individual Letter 476	Lauren	Drutz
Individual Letter 477	Lauren	Drutz
Individual Letter 478	Laurie	DesJardins
Individual Letter 479	Laurie	Segal
Individual Letter 480	Laurie	Segal
Individual Letter 481	Lea	Wheatley
Individual Letter 482	Len Debbie	Schneider Schneider
Individual Letter 483	Letitia Robert	Jacobs Jacobs
Individual Letter 484	Lew	Sitzer

Individual Letter 485	Lew	Sitzer
Individual Letter 486	Liese	Greensfelder
Individual Letter 487	Lilly	Grenz
Individual Letter 488	Lily	Marie
Individual Letter 489	Linda	Boswell
Individual Letter 490	Linda	Carlson
Individual Letter 491	Linda	Cohen
Individual Letter 492	Linda	Ennis
Individual Letter 493	Linda	Fillion
Individual Letter 494	Linda	Howe
Individual Letter 495	Linda Daniel	Ketcham Ketcham
Individual Letter 496	Linda	Meyers
Individual Letter 497	Lisa	McCandless
Individual Letter 498	Lisa	Nowlain
Individual Letter 499	Lisa	Rowe
Individual Letter 500	Lizary Jeremy	Jones Jones
Individual Letter 501	Lorraine	Hendriksen
Individual Letter 502	Lorraine	Hendriksen
Individual Letter 503	Lorraine	Reich
Individual Letter 504	Lorraine Terry	Walter Sullivan
Individual Letter 505	Lou	Johnson
Individual Letter 506	Louay	Owaidat
Individual Letter 507	Louis	Jones
Individual Letter 508	Louis	Quaintance
Individual Letter 509	Louisa	Suta
Individual Letter 510	Louise	Jackson
Individual Letter 511	Louise	Taylor
Individual Letter 512	Luke	Berliner
Individual Letter 513	Lynn	Forbes
Individual Letter 514	M.	Nyborg
Individual Letter 515	Madeleine	Dowd
Individual Letter 516	Maile	McGrew-Frede
Individual Letter 517	Maile	McGrew-Frede
Individual Letter 518	Mardi	Naythons
Individual Letter 519	Margaret	Joehnck
Individual Letter 520	Margaret Milan	Vodicka Vodicka
Individual Letter 521	Maria	Benner
Individual Letter 522	Marion	Blair
Individual Letter 523	Marion	Blair
Individual Letter 524	Marisa	Jackson-Kinman
Individual Letter 525	Mark	Fenicle
Individual Letter 526	Mark	Fenicle
Individual Letter 527	Mark	Johnson
Individual Letter 528	Mark	Johnson
Individual Letter 529	Mark	Johnson
Individual Letter 530	Mark	Johnson
Individual Letter 531	Mark	Johnson
Individual Letter 532	Mark	Johnson

Individual Letter 533	Mark	Johnson
Individual Letter 534	Mark	Johnson
Individual Letter 535	Mark	Johnson
Individual Letter 536	Mark	Johnson
Individual Letter 537	Mark	Johnson
Individual Letter 538	Mark	Johnson
Individual Letter 539	Mark	Johnson
Individual Letter 540	Mark	Johnson
Individual Letter 541	Mark	Johnson
Individual Letter 542	Mark Dawna	Johnson Johnson
Individual Letter 543	Mark	Johnson
Individual Letter 544	Mark	Machado
Individual Letter 545	Mark	Seufert
Individual Letter 546	Mark	Wilson
Individual Letter 547	Mark	Wilson
Individual Letter 548	Martha	Turner
Individual Letter 549	Martha	Turner
Individual Letter 550	Marv	Hoffman
Individual Letter 551	Marv	Hoffman
Individual Letter 552	Marv	Hoffman
Individual Letter 553	Mary	Anderson
Individual Letter 554	Mary	Bennett
Individual Letter 555	Mary	Coleman
Individual Letter 556	Mary	Good
Individual Letter 557	Mary	Lee
Individual Letter 558	Mary	Padua
Individual Letter 559	Mary	Peterson
Individual Letter 560	Mary	Swagerty
Individual Letter 561	Maryanne	Murphy
Individual Letter 562	Maryanne	Murphy
Individual Letter 563	Maryanne	Murphy
Individual Letter 564	Maryanne	Murphy
Individual Letter 565	Maryanne	Murphy
Individual Letter 566	Maryanne	Murphy
Individual Letter 567	Maryanne	Murphy
Individual Letter 568	Maryanne	Murphy
Individual Letter 569	Maryanne	Murphy
Individual Letter 570	Matt Shannon	Cotter Cotter
Individual Letter 571	Matt	Gottschalk
Individual Letter 572	Matthew	Coulter
Individual Letter 573	Maureen	Cuthbert
Individual Letter 574	Maureen	Miranda
Individual Letter 575	Megan	Hart
Individual Letter 576	Melanie	Bright
Individual Letter 577	Menkin	Nelson
Individual Letter 578	Michael	Brisson
Individual Letter 579	Michael	Frey
Individual Letter 580	Michael	Habeeb
Individual Letter 581	Michael	Leydon
Individual Letter 582	Michael	Malakian

Individual Letter 583	Michael	Shaw
Individual Letter 584	Michael	Shaw
Individual Letter 585	Michael	Shea
Individual Letter 586	Michael	Way
Individual Letter 587	Michelene	Bowman
Individual Letter 588	Michelle	Belon
Individual Letter 589	Michelle	Lewis
Individual Letter 590	Michelle	Reynolds
Individual Letter 591	Mickey	Jaynes
Individual Letter 592	Mickey	Jaynes
Individual Letter 593	Mielle	Rose
Individual Letter 594	Mike	Frasu
Individual Letter 595	Mike	French
Individual Letter 596	Mike	Pasner
Individual Letter 597	Mike Mary	Peterson Peterson
Individual Letter 598	Mike Jan	Weaver Weaver
Individual Letter 599	Mikos	Fabersunne
Individual Letter 600	Miles	Wolfers
Individual Letter 601	Mindy	Oberne
Individual Letter 602	Mira	Clark
Individual Letter 603	Molly	Harrison
Individual Letter 604	Molly Warren	Harrison Pfahl
Individual Letter 605	Molly	Nichols
Individual Letter 606	Mykola	Kindrat
Individual Letter 607	Nancy	Dewey
Individual Letter 608	Nancy	Dewey
Individual Letter 609	Nancy	Henson
Individual Letter 610	Nancy	Piette
Individual Letter 611	Nancy	Rojo
Individual Letter 612	Nancy	Rojo
Individual Letter 613	Nancy	Shanteau
Individual Letter 614	Natalie	Browning
Individual Letter 615	Nate	Collins
Individual Letter 616	Nathan	Helm-Burger
Individual Letter 617	Nathan	W.
Individual Letter 618	Nathan	W.
Individual Letter 619	Neal	Siller
Individual Letter 620	Nelson	Foster
Individual Letter 621	Nicki	Hansen-Dix
Individual Letter 622	Nicki	Hansen-Dix
Individual Letter 623	Nicki	Hansen-Dix
Individual Letter 624	Nina	Cunningham
Individual Letter 625	Nina	Cunningham
Individual Letter 626	Nina	Cunningham
Individual Letter 627	Nora	Nausbaum
Individual Letter 628	Nora	Risen
Individual Letter 629	Norema	Strongin
Individual Letter 630	Norema	Strongin
Individual Letter 631	Norma	Solarz

Individual Letter 632	Norma	Solarz
Individual Letter 633	Osher	Levi
Individual Letter 634	Pam	Heard
Individual Letter 635	Pam	Kissler
Individual Letter 636	Pam	Kissler
Individual Letter 637	Pamela	Biery
Individual Letter 638	Pamela	Jung
Individual Letter 639	Pamela	Whitman
Individual Letter 640	Pat	Henderson
Individual Letter 641	Patricia	Bennett
Individual Letter 642	Patrick	Johnson
Individual Letter 643	Patti	Grijalva
Individual Letter 644	Paul	Crovo
Individual Letter 645	Paul	Elms
Individual Letter 646	Paul	McGrew
Individual Letter 647	Paul	McMillan
Individual Letter 648	Paul	Schwartz
Individual Letter 649	Paul	Schwartz
Individual Letter 650	Paul	Snyder
Individual Letter 651	Paula	Strang
Individual Letter 652	Peggy	Kelly
Individual Letter 653	Penelope	Curtis
Individual Letter 654	Perissa	Busick
Individual Letter 655	Pete	Christakes
Individual Letter 656	Peter	Arbin
Individual Letter 657	Peter	Brewer
Individual Letter 658	Peter	Fromm
Individual Letter 659	Peter	Stevenson
Individual Letter 660	Peter	Stevenson
Individual Letter 661	Rachael	Elam
Individual Letter 662	Rachel	
Individual Letter 663	Ralph	Silberstein
Individual Letter 664	Ray	Bryars
Individual Letter 665	Ray	Kinman
Individual Letter 666	Ray	Kinman
Individual Letter 667	Rebecca	DePont
Individual Letter 668	Rebecca	Vandegrift
Individual Letter 669	Reed	Hamilton
Individual Letter 670	Renata	Henry
Individual Letter 671	Resa	Huck
Individual Letter 672	Richard	Charnley
Individual Letter 673	Richard	Drace
Individual Letter 674	Richard	Johnston
Individual Letter 675	Rick	Range
Individual Letter 676	Rick Dianne	Range Range
Individual Letter 677	Rick Dianne	Range Range
Individual Letter 678	Rick	Smith
Individual Letter 679	Ricki	Heck
Individual Letter 680	Risa	Roseman
Individual Letter 681	Rob	Katzenstein

Individual Letter 682	Robert Francesca	Erickson Erickson
Individual Letter 683	Robert	Gulbis
Individual Letter 684	Robert	Gulbis
Individual Letter 685	Robert	Hubbard
Individual Letter 686	Robert	Jewel
Individual Letter 687	Robert	Rhodes
Individual Letter 688	Robert	Root
Individual Letter 689	Robert	Shulman
Individual Letter 690	Robert Ann	Thorpe Thorpe
Individual Letter 691	Robert	Wheatley
Individual Letter 692	Robin	DeMartini
Individual Letter 693	Robin	Ehlers
Individual Letter 694	Robin	Hart
Individual Letter 695	Robin	Milam
Individual Letter 696	Robin	Resovich
Individual Letter 697	Ron	Rosner
Individual Letter 698	Ron Julie	
Individual Letter 699	Rona	Scablook
Individual Letter 700	Ronald	Dow
Individual Letter 701	Rondal	Snodgrass
Individual Letter 702	Rondal	Snodgrass
Individual Letter 703	Rondal	Snodgrass
Individual Letter 704	Rose	Capaccioli
Individual Letter 705	Rosemarie	Capaccioli
Individual Letter 706	Ross	Guenther
Individual Letter 707	Roxanne	Shepherd
Individual Letter 708	S.	Fenile
Individual Letter 709	Sandra	Bacon
Individual Letter 710	Sandra	Hewston
Individual Letter 711	Sara	Brownwood
Individual Letter 712	Sarah	Lazard
Individual Letter 713	Sarah	Snyder
Individual Letter 714	Sasha	Soukup
Individual Letter 715	Scot Patty	Marsters Marsters
Individual Letter 716	Scott	Peterson
Individual Letter 717	Sean	Johnson
Individual Letter 718	Shannon	Ross
Individual Letter 719	Shar	McLeod
Individual Letter 720	Sharon	Delgado
Individual Letter 721	Sharon	Seck
Individual Letter 722	Sharon	Wagner
Individual Letter 723	Shayna	Christie
Individual Letter 724	Sheerlie	Ryngler
Individual Letter 725	Sheila	LaRue
Individual Letter 726	Sheri	Fogarty
Individual Letter 727	Sheri	Hoss
Individual Letter 728	Sheryl	Luxon
Individual Letter 729	Shirley	Freriks

Individual Letter 730	Shirley	Williams
Individual Letter 731	Stacy	Beilman
Individual Letter 732	Stacy	Beilman
Individual Letter 733	Stefanie	Martinez
Individual Letter 734	Stephanie	Almanzar
Individual Letter 735	Stephanie	Steyer
Individual Letter 736	Stephen	Baker
Individual Letter 737	Sterling	Bailey
Individual Letter 738	Sterling	Honea
Individual Letter 739	Sterling	Honea
Individual Letter 740	Sterling	Honea
Individual Letter 741	Sterling	Honea
Individual Letter 742	Steve Carolyn	Battaini Battaini
Individual Letter 743	Steve	Farrage
Individual Letter 744	Steve	Hartshorn
Individual Letter 745	Steve Claudia	Mendoza Groves
Individual Letter 746	Steve	Nicola
Individual Letter 747	Steve Wendy	Nicola Thompson
Individual Letter 748	Stevee	Duber
Individual Letter 749	Steven	Millard
Individual Letter 750	Stuart	Beach
Individual Letter 751	Summer	Scanlan
Individual Letter 752	Summer	Scanlan
Individual Letter 753	Sunnie	Skiles
Individual Letter 754	Susan	Brandt
Individual Letter 755	Susan	Graf
Individual Letter 756	Susan	Graf
Individual Letter 757	Susan	Jaffe
Individual Letter 758	Susan	Kemp
Individual Letter 759	Susan	Merrill
Individual Letter 760	Susan	Reynolds
Individual Letter 761	Susan Edward	Turney Sherman
Individual Letter 762	Susan	Wilson
Individual Letter 763	Susanna	Wilson
Individual Letter 764	Suzanne Kevin	Costa Costa
Individual Letter 765	Suzanne Rob	Ferroggiaro Ferroggiaro
Individual Letter 766	Suzanne	Hall
Individual Letter 767	Suzanne	Smith
Individual Letter 768	Suzi	Kerston
Individual Letter 769	Syd	Brown
Individual Letter 770	Syd	Brown
Individual Letter 771	Sylvia	Otton
Individual Letter 772	Tamara	Snyder
Individual Letter 773	Tammy	McCrary
Individual Letter 774	Tandra	Webb
Individual Letter 775	Tanis	Thorne
Individual Letter 776	Tanis	Thorne

Individual Letter 777	Ted	Ahrens
Individual Letter 778	Teresa	Eckerling
Individual Letter 779	Teresa	Langness
Individual Letter 780	Teresa	Wagner
Individual Letter 781	Terri	Pencovic
Individual Letter 782	Terry	Anderson
Individual Letter 783	Terry	McLaughlin
Individual Letter 784	Tess	Lotter
Individual Letter 785	Thomas	Jacobsen
Individual Letter 786	Thomas	Krauel
Individual Letter 787	Thomas	Maher
Individual Letter 788	Thomas	Prato
Individual Letter 789	Tiffany	French
Individual Letter 790	Tiffany	Graves
Individual Letter 791	Tim	Brennan
Individual Letter 792	Tim	Brown
Individual Letter 793	Tim	Stokes
Individual Letter 794	Tina	Hannon
Individual Letter 795	Todd	Wulf
Individual Letter 796	Tom	Behlmer
Individual Letter 797	Tom	Behlmer
Individual Letter 798	Tom	Behlmer
Individual Letter 799	Tom	Behlmer
Individual Letter 800	Tom	Bremser
Individual Letter 801	Tom	Larsen
Individual Letter 802	Tom	Martin
Individual Letter 803	Tom Gloria	Meyers Meyers
Individual Letter 804	Tony	Lauria
Individual Letter 805	Tulum	Dothee
Individual Letter 806	Turiya	Hill
Individual Letter 807	Unknown	
Individual Letter 808	Unknown	
Individual Letter 809	Unknown	
Individual Letter 810	Unknown	
Individual Letter 811	Unknown	
Individual Letter 812	Unknown	
Individual Letter 813	Unknown	
Individual Letter 814	Unknown	
Individual Letter 815	Unknown	
Individual Letter 816	Unknown	
Individual Letter 817	Unknown	
Individual Letter 818	Uta	Reimnitz
Individual Letter 819	Valerie	Kach
Individual Letter 820	Victoria	Rubiales
Individual Letter 821	Virginia	Moran
Individual Letter 822	Wade	Laughter
Individual Letter 823	Walt	Froloff
Individual Letter 824	Walt	Froloff
Individual Letter 825	Walt	Froloff
Individual Letter 826	Walt	Froloff
Individual Letter 827	Walt	Froloff

Individual Letter 828	Walter	O'Dwyer
Individual Letter 829	Wendy	Thompson
Individual Letter 830	William	Clark
Individual Letter 831	William	Clark
Individual Letter 832	William	Clark
Individual Letter 833	William Linda	Culbertson Culbertson
Individual Letter 834	William	Hall
Individual Letter 835	William	Heck
Individual Letter 836	William	Huddleston
Individual Letter 837	William	Larsen
Individual Letter 838	William	Maas
Individual Letter 839	Yasha	Aginsky
Individual Letter 840	Yvonne	Navarro
Individual Letter 841	Zohar	Alevizakis
Individual Letter 842		Borelli/Mann
Individual Letter 843		Nausbaum
Individual Letter 844		Savelly
Individual Letter 845		Walsh

Late Letters

Letter Number	Author(s)	
	First Name	Last Name
Late Letter 1	Christopher	Claydon
Late Letter 2	Nealeen	Coward
Late Letter 3	Rick	Larsen
Late Letter 4	Robert	Burbridge
Late Letter 5	Sebastian	Gotla
Late Letter 6	Valerie	Kack

Special Public Meeting

A transcript of the verbal comments received at the Special Public Meeting on the DEIR is included in this Final EIR and is identified as comment letter "DEIR Meeting."

1.6 ORGANIZATION OF THE FINAL EIR

The Final EIR is organized into the following chapters:

1. Introduction and List of Commenters

Chapter 1 provides an introduction and overview of the document, describing the background and organization of the Final EIR. Chapter 1 also provides a list of commenters who submitted letters in response to the DEIR.

2. Responses to Comments

Chapter 2 presents the comment letters received and responses to each comment. Each comment letter received has been numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. As noted above, for efficiency and clarity, the comment letters have been organized into 10 distinct categories: Agency Letters; Group Letters;

Form Letter A; Form Letter B; Form Letter C; Form Letter D; Support Cards; Individual Letters; Late Letters; and DEIR Meeting. Therefore, the letter number will correspond to the category (i.e., the first agency letter would be numbered Agency Letter 1), and the first comment in Agency Letter 1 would have the following format: Agcy 1-1. For further example and clarification, the first comment in Group Letter 1 would be numbered Grp 1-1; the first comment in Form Letter A 1 would be A 1-1; the first comment in Form Letter B 1 would be B 1-1; the first comment in Form Letter C 1 would be C 1-1; the first comment in Form Letter D would be D 1-1; the first comment in Support Card 1 would be Sup 1-1; the first comment in Individual Letter 1 would be Ind 1-1; the first comment in Late Letter 1 would be Lt 1-1; and the first comment in the DEIR Meeting transcript would be Meet-1. The response to each comment will reference the comment number.

3. Revisions to the DEIR Text

Chapter 3 summarizes minor changes made to the DEIR text since its release.

4. Mitigation Monitoring and Reporting Program

CEQA Guidelines, Section 15097, requires lead agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The intent of the Mitigation Monitoring and Reporting Program (MMRP) is to ensure implementation of the mitigation measures identified within the EIR for the proposed project.

2. Responses to Comments

2. RESPONSES TO COMMENTS

2.1 INTRODUCTION

The Responses to Comments chapter contains responses to each of the comment letters submitted regarding the proposed project DEIR during the public review period, as well as responses to the verbal comments received at the hearing to receive public comment.

2.2 MASTER RESPONSES

Many of the commenters raised similar concerns. For such concerns, the County has prepared a master response. Through master responses, the County can address the common topics in a comprehensive manner and without duplication in the individual responses. Some of the thematic comments submitted on the DEIR pertain to issues that are not considered significant impacts on the environment under CEQA, as will be discussed in Master Responses 1, 2, and 3. Such issues include administrative issues, social and economic impacts, and responsibilities of the Project Applicant. A number of thematic comments regarding the technical analysis of the DEIR were also submitted and are addressed through the remaining Master Responses presented below.

The responses amplify or clarify information provided in the DEIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Where revisions to the DEIR text are required in response to the comments, such revisions are noted in the response to the comment, and are also listed in Chapter 3 of this Final EIR. All new text is shown as <u>double underlined</u> and deleted text is shown as ~~struck through~~.

The changes to the analysis contained in the DEIR represent only minor clarifications/amplifications and do not constitute significant new information. In accordance with CEQA Guidelines, Section 15088.5, recirculation of the DEIR is not required, as discussed in detail in Chapter 1 of this Final EIR.

Master Response 1 - Non-EIR/Administrative Issues

Comments

The CEQA Guidelines frame the scope and focus of review and the extent, nature and scope of responses by a lead agency to comments on a DEIR. This Final EIR addresses both comments pertaining to impacts analyses and acknowledges comments not related to environmental impact and analysis. However, other comments received, continued the commenter's opinion on approval or denial, how the Project could affect the commenter's perceived "quality of life," and/or concerns regarding changes in property value. This section provides a response to these types of comments, which are either general or unrelated to the Project's impacts on the physical environment.

Discussion

15204. FOCUS OF REVIEW

(a) In reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on

> the environment and ways in which the significant effects of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate the significant environmental effects. At the same time, reviewers should be aware that the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project. CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commentors. When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.
>
> (c) Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments. Pursuant to Section 15064, an effect shall not be considered significant in the absence of substantial evidence.

Notwithstanding the above guidelines language, CEQA Guidelines section 15204(e) states that these limitations should "not be used to restrict the ability of reviewers to comment on the general adequacy of a document or of the lead agency to reject comments not focused as recommended by this section."

Oppose/Support Project

Commenters voiced general opposition to or support for the Project. Often these comments were combined with other general statements about environmental concerns (e.g., air quality, traffic, noise). According to CEQA Guidelines section 15088, "The level of detail contained in the response, however, may correspond to the level of detail provided in the comment (i.e., responses to general comments may be general). A general response may be appropriate when a comment does not contain or specifically refer to readily available information, or does not explain the relevance of evidence submitted with the comment." Thus, when a commenter expresses general concerns like the proposed project would result in "more traffic", "increased air pollution", "effects on water quality", or "increased noise", a specific response is not offered. Rather, the commenter is referred to those sections of the DEIR where the referenced general concern is evaluated in detail. For example, project-related traffic and its effect on the regional roadway network is evaluated in Chapter 4.12, Transportation, of the DEIR. The project-related increase in air quality emissions and their effect on the surrounding environment, including human health, is addressed in Chapter 4.3, Air Quality and Greenhouse Gas Emissions. The potential effects of the project on local hydrology and water quality, including groundwater, are addressed in Chapter 4.8, Hydrology and Water Quality, of the DEIR, and potential impacts related to noise and vibration associated with construction and operation of the proposed project are addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Etc.

The environmental review process provides an impartial evaluation of the environmental impacts should the Project be implemented and not opinions on whether the Project should be approved or denied. The County Planning Department, as the public agency with land use authority, is the primary agency providing information and recommendations on land development to the Planning Commission and Board of Supervisors. The decision-makers, typically the Planning Commission and/or Board of Supervisors, weigh factors outside the scope of the EIR, including public support,

taxes, jobs, economic benefits, and other non-environmental factors, in considering approval of a Project.

Those comments in support/opposition do not concern environmental impacts; therefore, they are hereby noted and referred to the decision-makers for consideration in their deliberations for approval or denial of the Project.

Quality of Life

Other comment letters opposed the proposed project because it would allegedly affect the rural nature of the community or otherwise negatively affect residents' perceived current quality of life.

In enacting CEQA, the California Legislature declared policies explaining its intent. Included were:

> Public Resources Code, §21000-21001:
> - The maintenance of a quality environment for the people of this state now and in the future is a matter of statewide concern.
> - It is necessary to provide a high-quality environment that at all times is healthful and pleasing to the senses and intellect of man.
> - The capacity of the environment is limited, and it is the intent of the Legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached.
> - Create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations.

The EIR process undertaken by the County has been accomplished in a manner consistent with the CEQA statute and guidelines. CEQA is not a tool to forestall any and all changes to the environment, but rather to establish thresholds and manage such changes accordingly, while meeting the economic requirements and needs of the community.

To this end, the CEQA statute and guidelines confirm that environmental needs must at times be secondary to economic and social needs, and authorized lead agencies, after considering the environmental consequences, to approve projects in spite of one or more significant effects:

> Public Resources Code, §21002:
> The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

Thus, CEQA considers issues related to quality of life and acknowledges that a project may be approved despite environmental effects. The environmental review process focuses on physical impacts to the environment. Therefore, quality of life comments are hereby noted and referred to the decisionmakers for consideration in their deliberations for approval or denial of the Project.

Economic Effect on Property Values

Some comment letters questioned whether permitting the Project would reduce property values of surrounding lands. Because CEQA is primarily concerned with physical changes in the environment, economic effects alone do not trigger a finding of a substantial impact under CEQA; "[T]here must be a physical change resulting from the project directly or indirectly before CEQA will apply." Such changes can be direct or indirect. Economic and social impacts of a proposed project "shall not be treated as significant effects on the environment" (CEQA Guidelines §15131(a) (emphasis added). In other words, if a proposed project may cause economic and social consequences, but no significant environmental impacts, CEQA does not require that an EIR be prepared.

The courts have specifically rejected consideration of economic concerns unless the Project's economic impact would cause changes to the physical environment such as blight. For example, courts have held that "the economic impact of small businesses on property values" did not trigger CEQA review in City of Orange v. Valenti (4th Dist. 1974) 37 Cal. App. 3d 240, 249 [112 Cal. Rptr. 379]. Please also refer to Master Response 2.

Where an EIR does identify significant environmental effects, however, related economic and social impacts are not irrelevant. For example:

> CEQA Guidelines, §15131(a):
> "An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic and social changes. The intermediate economic and social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes."

Indirect off-site impacts associated with the Project are limited; the EIR clearly identifies such effects. There is no evidence that physical effects to other properties would occur that could result in reduction of property values, or that if such reduction in property values happened to occur, such reduced values would result in physical effects subject to CEQA review. Comments regarding the project's potential to affect property values are hereby noted and referred to the decision-makers for consideration in their deliberations for approval or denial of the Project.

Conclusion

Pursuant to the CEQA Guidelines, in reviewing draft EIRs, persons and public agencies should focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the project might be avoided or mitigated. When responding to comments, lead agencies need only respond to significant environmental issues. This master response recognizes that many public comments submitted on the Idaho-Maryland Mine DEIR are outside of the scope of CEQA; and thus, do not require a specific response from the County. Nevertheless, this Final EIR includes all comments for the record and review and consideration by the decisionmakers.

Master Response 2 - Social and Economic Impacts

Comments

Select comments submitted on the DEIR state that the project would result in social or economic impacts, such as potentially having an effect on neighboring property values.

Discussion

The scope of an EIR is limited to a local agency's evaluation of potentially significant environmental impacts of a project, which by definition are limited to physical conditions, rather than social or economic conditions. (Pub. Res. Code § 21060.5; CEQA Guidelines § 15360.) The analysis of social or economic impacts unrelated to a physical change is not included within an EIR because such potential impacts are not considered to be effects on the environment. (CEQA Guidelines §§ 15064(e), 15131(a), 15358(b), 15382.) Therefore, potential social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment, are not substantial evidence of a significant environmental effect. (Pub. Res. Code § 21080(e)(2); CEQA Guidelines § 15064(f)(6).)

California courts have routinely dismissed challenges to projects under CEQA when premised on potential social or economic impacts. (see*, e.g.*, *Clews Land & Livestock, LLC v. City of San Diego* (2017) 19 Cal.App.5th 161, 196 [potential effect of project's noise on nearby business's economic viability not reviewable under CEQA]; *Chico Advocates for a Responsible Economy v. City of Chico* (2019) 40 Cal.App.5th 839, 846–48 [loss of close and convenient shopping not an environmental issue subject to CEQA review]; *City of Hayward v. Board of Trustees of the California State University* (2015) 242 Cal.App.4th 833, 840–47 [project's potential economic impacts on costs of providing public services not a cognizable environmental impact under CEQA]; *Maintain Our Desert Environment v. Town of Apple Valley* (2004) 124 Cal.App.4th 430, 446 ["[S]ocial, economic and business competition concerns are not relevant to CEQA analysis unless it is demonstrated that those concerns will have a significant effect on the physical environment."]; *Preserve Poway v. City of Poway* (2016) 245 Cal.App.4th 560, 576–82 [change in community character is a social and psychological impact not reviewable under CEQA].)

More specifically, courts have dismissed CEQA challenges that are based on an assertion that a project will have an adverse impact on nearby property values. For example, in *Porterville Citizens for Responsible Hillside Development v. City of Porterville* (2007) 157 Cal.App.4th 885, neighboring landowners expressed concern that a housing project would have the effect of lowering their property values. The Court of Appeal held that such concerns were not reviewable under CEQA and were not substantial evidence of an environmental effect. The Court confirmed:

> CEQA is not an economic protection statute. Landowners surrounding a proposed project site do not state a valid CEQA concern when they express fears that the proposed project could adversely affect their property value.

(*Porterville Citizens*, 157 Cal.App.4th at 903 [citing *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1205 *and* CEQA Guidelines § 15131(a)].) The California Supreme Court subsequently denied review of the *Porterville Citizens* decision. Therefore, the court's holding remains valid and no CEQA concerns have been raised. Additionally

in *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, the Court of Appeal came to a similar conclusion in evaluating neighboring landowners' claims that a hard rock quarry project would cause economic impacts to their property values because of the potential impact of the mine project on water levels in the landowners' private wells. The Court held that the landowners had raised merely economic and social concerns, the claimed impacts were not physical changes to the environment, and thus the concerns were not evidence to be considered in connection with the environmental review of the project under CEQA. (*Gray*, 167 Cal.App.4th at 1120–21.)

Conclusion
As such, comments concerning potential social or economic effects of the project, when not contributing to, or when not caused by, a physical change to the environment, need not be analyzed or addressed further in this EIR.

Master Response 3 - Operator Responsibility

Comments
The County has received several comments stating that the Project should not be approved due to the past record of Rise Gold and its CEO, Ben Mossman. Specifically, the commenters allege that Rise Gold will fail to comply with its conditions of approval and will operate the mine in an illegal manner, causing harm to the community and the environment.

Discussion
These comments do not raise an issue relevant to CEQA analysis, as the possibility of non-compliance with conditions of approval or mitigation measures is not considered an environmental impact under CEQA. Moreover, the County has ample authority to revoke the Project's permits if the operator does not comply with the required mitigation measures and conditions of approval. The County will also continue to monitor the project through implementation of CEQA mitigation monitoring. Specifically, County Code Section L-II 5.11 states that the County may revoke a use permit or other permit for the following reasons:

1. Non-compliance with conditions of approval, mitigation measures or the approved site plan.
2. Violation of any law in connection with the permit.
3. Expansion of the use or structure without amending the existing permit or receiving a new permit.
4. Operating in a manner that threatens or is injurious to the public health or safety, or constitutes a nuisance.
5. The permit was issued, in whole or in part, on the basis of a misrepresentation or omission of a material statement in the application, or in the applicant's testimony presented during the public hearing, for the permit.
6. Circumstances under which the permit was granted have been changed by the applicant to a degree that one or more of the findings contained in the original permit can no longer be made and the public health, safety, and welfare require the revocation.

As such, in the event that the mine operator fails to comply with its mitigation measures or conditions of approval, the County would initiate proceedings to revoke its permit. If the County revoked the use permit for the mine due to non-compliance with permit requirements, the mine could no longer operate.

While the commenter's concerns are not a CEQA environmental issue for purposes of the EIR, Mr. Mossman provided background information on a discharge incident at a previously operated mine in Canada, which summary is set forth below:

> Benjamin Mossman was a director and officer of Banks Island Gold Ltd. ("Banks"), a company formerly listed on the TSX Venture Exchange that traded under the symbol "BOZ". Banks operated the Yellow Giant Gold Mine (the "Mine") located in British Columbia, Canada. In 2015, unusually heavy rains occurred at the Mine site, which caused an alleged discharge to occur on a small portion of the site. Mr. Mossman was not at the

site at the time the alleged discharge occurred. Further, as soon as Mr. Mossman was made aware of the alleged discharge, he ordered that the incident be reported. Mr. Mossman cooperated with authorities throughout the investigation process.

Despite British Columbia's Chief Inspector of Mines', Al Hoffman, statement that he does not think the discharge is that serious (see Times Colonist, "Yellow Giant Gold Mine Spill Sparks Investigation" (July 29, 2015), https://www.timescolonist.com/news/b-c/yellow-giant-gold-mine-spill-sparks-investigation-1.2015061), Mr. Mossman, Banks, and two other former employees of Banks, were subject to summary conviction proceedings commenced in August 2016 for alleged violations of the British Columbia provincial Environmental Management Act (the "EMA"), the provincial Water Act, and the federal Fisheries Act. The court found Mr. Mossman not guilty and acquitted him of all charges, including pollution-related charges, but found Mr. Mossman guilty of two minor administrative charges. More specifically, Mr. Mossman was only found guilty of charges for failing to call each of the provincial and federal phone numbers (respectively) required to be called when an incident occurred that was required to be called under those statutes. For those two minor offences, the court imposed a $15,000 fine against Mr. Mossman.

Subsequent to the decision, the Crown appealed certain aspects of the trial judge's findings as they related to Mr. Mossman. The summary conviction appeal was heard by the BC Supreme Court in May 2019. In February 2020, the court set aside the two minor convictions against Mr. Mossman, but also ordered a new trial in the matter. The reasons behind the court's order for a new trial related to a disagreement on the admissibility of certain evidence. The new trial has not yet been scheduled but is currently forecasted to start sometime in 2022.

In a separate but concurrent trial involving the same incidents as the first, the Crown charged Mr. Mossman with obstruction of justice related to the investigation of the underlying EMA-related charges. After a full trial, the court acquitted him of that charge on March 6, 2019. More importantly, the Court made affirmative findings of fact that could support innocence in that trial, which included confirmation that Mr. Mossman was not at the site at the time of the alleged discharge and Mr. Mossman ordered that the incident be reported. The Crown did not appeal that acquittal.

It is worthy to note that the Mine is not currently closed for environmental reasons. Rather, the Mine is closed due to a change in Canadian law which effectively requires the Tribal Nation's consent for permitting and operations. The Mine property is now owned by MCC Canadian Gold Ventures, who is currently seeking the consent of the Tribal Nation to reopen the Mine.

Conclusion

Comments related to Rise Gold's past record and concerns that said record suggests the applicant will operate the Idaho-Maryland Mine in an illegal manner are outside the scope of CEQA. Moreover, the County has ample authority to revoke the Project's permits if the operator does not comply with the required mitigation measures and conditions of approval. The County will also continue to monitor the project through implementation of CEQA mitigation monitoring.

Master Response 4 - Cleanup Project is a Separate Project Under CEQA

Comments

The County has received numerous comments asserting that the Idaho Maryland Mine Project ("IMM Project") should be analyzed in combination with the Centennial Industrial Site Clean-Up Project ("Clean-Up Project") as a single project for CEQA purposes. Some of the various

commenters asserted that the Centennial Industrial Site is only being remediated for the purpose of accepting engineered fill from the IMM Project, and that the Idaho Maryland Mine Project cannot proceed without the Clean-Up Project. Accordingly, several commenters argue that the impacts associated with the clean-up project must be analyzed in the EIR for the Idaho Maryland Mine Project. On the Contrary, the Clean-Up Project is a separate Project to remediate site conditions including the presence of lead, asbestos, mercury and other metals, as mandated by the U.S. EPA.

Discussion

First, as a preliminary matter, the Idaho Maryland Mine Project is designed to proceed whether the DTSC clean-up project is completed or is not completed. If the DTSC clean-up project is completed, the Project is designed such that engineered fill will be transported to the Centennial Industrial Site and used to create useable land for future uses consistent with the applicable zoning. Conversely, if the DTSC clean-up project is not completed within the life of the Project, rock material from the Project that would have been transported to the Centennial Industrial Site, instead would be sold in the regional market as construction aggregate.

Second, the Clean-Up Project is a separate project from the IMM Project that is independently necessary to remediate site conditions caused by historic operations on the Centennial Industrial Site. The reason for the Clean-Up Project was the identification of the Centennial Industrial Site by the U.S. EPA as potentially requiring environmental cleanup and the later coordination between the property owner and the DTSC to implement a remedial action plan to remediate lead, arsenic, mercury and other metals found onsite. The U.S. EPA first performed a preliminary analysis on the Centennial Industrial Site in June of 2002, nearly two decades before the IMM Project was proposed, and before the IMM Project Site was owned by the current owner. Based on the report from 2002, the U.S. EPA recommended that further assessment was necessary under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The U.S. EPA subsequently performed additional assessments of the Centennial Industrial Site in 2005, 2011, 2018 and 2019. Discussions regarding cleanup of the Centennial Industrial Site began between the U.S. EPA, the DTSC and the site owner prior to any application for the IMM Project having been submitted. As the Centennial Industrial Site has been targeted by the U.S. EPA for cleanup since 2002, and discussions regarding cleanup of the Project site were well underway before the IMM Project application was submitted, statements from commenters that the Project is merely a component of a larger plan to develop an underground gold mine (the IMM Project), is factually incorrect. Third, the Clean-Up Project is under the authority of the California Department of Toxic Substances Control.

Case Law Supports the Separation of the Current Project and the Clean-Up Project for CEQA Purposes

California courts do not consider distinct activities as one CEQA project required to be reviewed together, except in two situations: 1) When the purpose of the project under review is to provide the necessary first step toward a larger development; and 2) When development of the project under review requires or presumes completion of another activity. (*Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1223). Further, California courts have been clear that even related projects are not required to be analyzed as one project where each project has independent utility, serves a different purpose, or can be implemented independently from the completion of the related activity. (Id. at pp. 1223-1224, citing *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 99 [refinery upgrade and construction of pipeline exporting excess hydrogen from upgraded refinery were "independently justified separate projects with different project proponents"]; *Planning & Conservation League v.*

Castaic Lake Water Agency (2009) 180 Cal.App.4th 210, 237 [water transfer had "significant independent or local utility" from broader water supply agreement, and would be implemented with or without it]; *Sierra Club v. West Side Irrigation District* (2005) 128 Cal.App.4th 690, 699 [two water-rights assignments to city were "approved by different independent agencies" and "could be implemented independently of each other].)

The Clean-Up Project and the IMM Project each have independent utility, each serve a different purpose, and each can be implemented independently from the completion of the other. The utility and purpose of the Clean-Up Project is to ensure timely and efficient cleanup of the Centennial Industrial Site due to existing site conditions, and is required under both California and federal environmental regulations—not because it would benefit the IMM Project. The separate Clean-Up Project is necessary whether or not the IMM Project is approved by Nevada County. Consequently, under the holding in Banning Ranch, the Clean-Up Project should be analyzed separately from the IMM Project under CEQA. (see Banning Ranch, supra, at pp. 1223-1224.)

Conversely, the utility and purpose of the IMM Project is to allow for exploration and development of underground natural resources, and the IMM Project does not help nor hinder the environmental cleanup of the Centennial Industrial Site proposed as a separate DTSC project. The IMM Project's option to place engineered fill on the Centennial Industrial Site is not for environmental cleanup purposes, but for the purpose of creating usable industrial land on that property and for disposal of waste rock from the underground mine. While it is true that if the Clean-Up Project is not approved by the DTSC, the waste rock from the IMM Project cannot be placed on the Centennial M-1 property, the IMM Project can nonetheless proceed. As such, the IMM Project also satisfies the holding in Banning Ranch, such that it has independent utility, serves a different purpose, and can be implemented independently from the completion of the Clean-Up Project. Accordingly, the Clean-Up Project should be reviewed separately from the IMM Project under California law.

Notably, California courts have already addressed a similar situation relating to environmental cleanup activities that were not yet completed but were assumed to be completed prior to a development project on Treasure Island within San Francisco. (*Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal.App.4th 1036.) In *Citizens for a Sustainable Treasure Island*, San Francisco approved a project that included "a new, mixed-use community, including up to 8,000 residential units … up to 140,000 square feet of new commercial and retail space; up to 100,000 square feet of new office space; restoration and reuse of historic buildings on Treasure Island; about 500 hotel rooms; public utilities; 300 acres of parks, playgrounds, and public open space; bike and transit facilities; and a new ferry terminal and intermodal transit hub." (Id. at 1044.) The project site (Treasure Island) in that case was known to have extensive contamination with hazardous materials; however, cleanup had not yet been completed at the time of that project's approval. (Id. at 1056.) As stated by the court, "the 'operating assumption' is that the Navy will complete the cleanup before the property is conveyed to the City." (Id.)

However, the appellant in *Citizens for a Sustainable Treasure Island* asserted that the EIR in that case was deficient because it "provides no project-level details as to precisely where, when or to what extent [remediation] activities may be required … [and that the] City unlawfully deferred the development and adoption of mitigation measures for significant, adverse impacts resulting from the disturbance of contaminated soil and groundwater...." (Id. at 1057.) The Appellant did not prevail and the Court rejected these claims. The court ultimately concluded that the EIR in that case was adequate and had appropriately relied on an assumption that the Navy would clean up the site consistent with applicable laws and regulations. (Id. at 1060.) Further the court rejected

the argument that the EIR in that case was required to specifically analyze the clean-up activities under the separate authority of the Navy. (Id. at 1056-1061.) Similar to the situation in *Citizens for a Sustainable Treasure Island,* the Idaho Maryland Mine Project's DEIR identifies the separate clean-up project, acknowledges that the clean-up project is under the authority of the DTSC and reasonably concludes that such cleanup would be completed prior to implementation of the Project on the Centennial Site. Further, taking an even more conservative approach than the EIR in *Citizens for a Sustainable Treasure Island,* the Project's DEIR acknowledges that Project activities would not be allowed on the Centennial Site if the DTSC cleanup project is not completed. [Draft a Conclusion]

Use of Electric Vehicles to Haul Engineered Fill Should It Be Necessary to Transport Fill to Locations other than Centennial Prior to 2033

Several commenters argued that the DEIR did not adequately address the Project's air quality impacts that would occur in the situation where the Centennial Site clean-up is not completed within the life of the Project and sale of waste rock and sand tailings were to occur sooner than anticipated. The DEIR analyzed the impacts of off-site hauling of rock material to the construction aggregate market, starting in 2033; however, it was assumed that prior to 2033, rock material would be placed on the Brunswick engineered fill pile and Centennial Site engineered fill pile. Based on public comments regarding the air quality and GHG impacts associated with hauling of rock material to construction aggregate purchasers earlier than anticipated, the applicant has agreed to a condition of approval that would require the applicant to use electric trucks for any offsite sale or transport of waste rock or sand tailings from the Brunswick site (other than to the Centennial Site) if such transport occurs prior to 2033. Hauling of material to offsite locations for use as construction aggregate starting in 2033 was already assumed in the DEIR's analysis; thus, the emissions impacts associated with this activity are already included in the DEIR, regardless of whether the Centennial Site is available for placement of fill material. The below condition would ensure that the Project would not have greater air quality and GHG emissions impacts than analyzed under the DEIR even if the Centennial Site is not available for placement of engineered fill. The text of the condition of approval is provided below:

> In the event that sand tailings or waste rock material is transported from the Brunswick Site prior to 2033 to locations other than the Centennial Site, all transport of such material shall be accomplished using electric vehicles.

Conclusion

The Clean-Up Project is a separate project from the IMM Project that is independently necessary to remediate site conditions caused by historic operations on the Centennial Industrial Site. The Idaho-Maryland Mine Project is designed to proceed whether the DTSC clean-up project is completed or is not completed. This Final EIR demonstrates that, should it be necessary to transport engineered fill to locations other than the Centennial Site prior to 2033, additional air emissions would not result from such hauling activities, as only electric haul vehicles would be utilized.

Master Response 5 - Evacuation Zones

Comments

Several commenters asserted that the Project's traffic, in particular haul trucks, could have impacts related to substantially impairing emergency evacuation of the areas surrounding the project sites, particularly in the event of a wildfire.

Discussion

These concerns are related to Appendix G Section IX(f) and Section XX(a). The DEIR evaluates these topics in Impacts 4.7-4 (Hazards) and 4.13-1 (Wildfire). As discussed below, project traffic and project employee vehicles exiting the project site during a mandatory evacuation represent a small percentage of existing traffic on the relevant evacuation routes, would be subject to the same traffic controls, and therefore would not cause any impact to the community's use of evacuation routes.

Available Evacuation Routes

The Brunswick Industrial Site is located in evacuation Zone NCO-E188 and the Centennial Industrial Site is location in Zone GRS-E222 (see Map 4 of Evaczonemaps).

The Centennial Site would only have 4 employees onsite for approximately 5 years of the project life. Given the insignificant number of employee vehicles the Centennial site is not discussed further in the regards to a potential wildfire evacuation.

The Brunswick Site is located at the junction of Brunswick Road, E. Bennett Road, and Greenhorn Road. Commenters have expressed concern about employees at the Brunswick Site interfering with a potential evacuation of residents living east of the project in the Greenhorn Road area. These areas are in Zones NCO-E189 (see Map 4) and Zone NCO-E184 (see Map 6). Approximately 810 parcels are located in this area (see Figure 1 and Table 1 below). There are two roadways from which residents could evacuate; westbound via Greenhorn Road to the intersection of Greenhorn, Brunswick, and East (E.) Bennett Roads (see Figure 2 below) or northbound via Jones Ridge Road to Banner Lava Cap Road (see Figure 3 below).

Evacuation via Jones Ridge Road routes traffic away from the project site and numerous routes to the highway are available once vehicles reach Banner Lava Cap Road including:

1) West on Banner Lava Cap Road to highway
2) West on Banner Lava Cap Road, West on Idaho-Maryland Road, North on Brunswick Road to highway
3) East Banner Quaker Hill Road, West on Quaker Hill Cross Road, West on Red Dog Road to highway

Any evacuation from Banner Mountain would also have access to these routes (see Figure 4 below).

Project Traffic Along Evacuation Routes

The only possible interference from the project's traffic would be on the segment of Brunswick Road if evacuees chose this route. Project traffic on Brunswick Road would be from trucking (6:00AM to 10:00PM) and employees during shift change. One-way truck trips would average 50 per day with a maximum of 100 per day. (see DEIR p. 3-26.) Over 16 hours, this equates to a truck passing through Brunswick Road, in either direction, approximately 6 times per hour on average. The normal volume of traffic on this roadway from 6:00AM to 10:00PM ranges from approximately 100 to 1,300 vehicles per hour and is typically 1,000 or more vehicles per hour from 7:00AM to 6:00PM (see pages to 431 - 458 of Appendix O to the DEIR). Therefore, the project truck traffic accounts for only approximately 1% of typical traffic. Approximately 20% of employees are estimated to use this segment of Brunswick Road (see Figure 6a of Appendix O to the DEIR). The largest shift change is at 7:00AM on weekdays where a total of 174 employees would be coming to or leaving from work and 35 vehicles could pass through this segment of Brunswick Road at that time. Typical traffic in this half hour is approximately 375 vehicles and

therefore employee traffic would make up less than 10% of traffic during the weekday morning shift change. During the 3:30PM weekday change approximately 8 employee vehicles would use this road segment with existing traffic of around 300 vehicles in that 15-minute period. If regular traffic were interfering with an evacuation from Banner Mountain or from the Greenhorn area via Jones Ridge Road, local authorities would implement traffic control. In such a situation, the project traffic, which is a small percentage compared to existing traffic, would also be redirected to minimize interference.

In a situation where a fire to the east of the Greenhorn area required all persons in the area to evacuate west via Greenhorn Road, the traffic from 810 parcels would be routed to the Greenhorn Road/ Brunswick Road/ E. Bennett Road intersection. This intersection is adjacent to the Brunswick Site. Regular traffic at this intersection is 1,200 vehicles per hour during the PM peak hour (see page 302 of pdf document of Appendix O to the DEIR – Intersection Turning Movement Count PM PEAK HR VOL). The number of vehicles from 810 parcels during a mandatory evacuation would be similar to routine peak hour traffic (1,200 vehicles per hour) at this intersection. If it were necessary, local authorities would implement traffic control at this intersection which would increase throughput as the all-way stop would no longer be required.

Project vehicles would not interfere with evacuation traffic because those project vehicles would be subject to the same emergency traffic controls as all other traffic. Furthermore, the project has exits on both Brunswick Road and E. Bennett Road which allows outgoing traffic to bypass this intersection. It would be highly unlikely that the mine site and Greenhorn area were subject to a mandatory evacuation order at the same time and the Greenhorn area could not use Ridge Road as an evacuation route. However, if this situation occurred the employees at the site (a maximum of 107) have access to 3 routes (northbound and southbound on Brunswick Road and westbound on E. Bennett Road). These 107 vehicles would take minimal time to exit the site and provide little to no interference with persons coming from the Greenhorn area, which are limited to the capacity of Greenhorn Road until they reach the Greenhorn Road/ Brunswick Road/ E. Bennett Road intersection.

Furthermore, if necessary, as noted in the DEIR (p. 4.13-17), in the event of an evacuation order in the vicinity of the proposed mine, such as an evacuation of residents off of Greenhorn Road, the incident command center could contact dispatch and direct them to contact the mine and request the mine operator to shut down the mine and cease all truck hauling operations. Generally, the Nevada County Regional Dispatch Center will have a 24-hour emergency contact for the mine. This information would also exist in the Emergency Action Plan for the mine, a copy of which will be provided to the Dispatch Center and County OES.

Conclusion

The DEIR adequately evaluated the project's potential to substantially interfere with emergency evacuation of the surrounding communities. Based on the limited project traffic volumes, available evacuation routes, and standard emergency procedures, the project would not have a significant impact related to substantially interfering with emergency evacuation.

References

https://readynevadacounty.org/evaczonemaps

https://community.zonehaven.com/?latlon=39.21095166217373,-120.98499778840295&z=13.027353902085414&selected=US-CA-XNE-NCO-E189&zoneDetails=true

Figure 1
Parcels in the Greenhorn Area

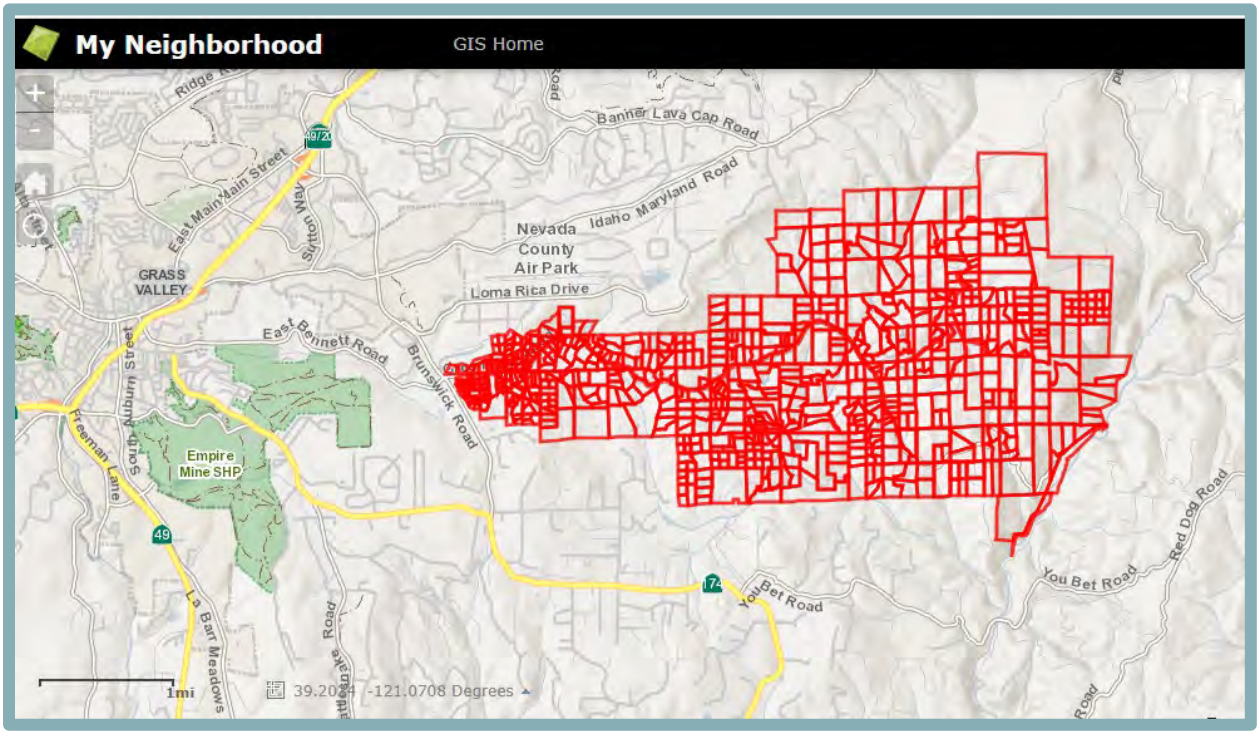


Figure 2
Route along Greenhorn Road

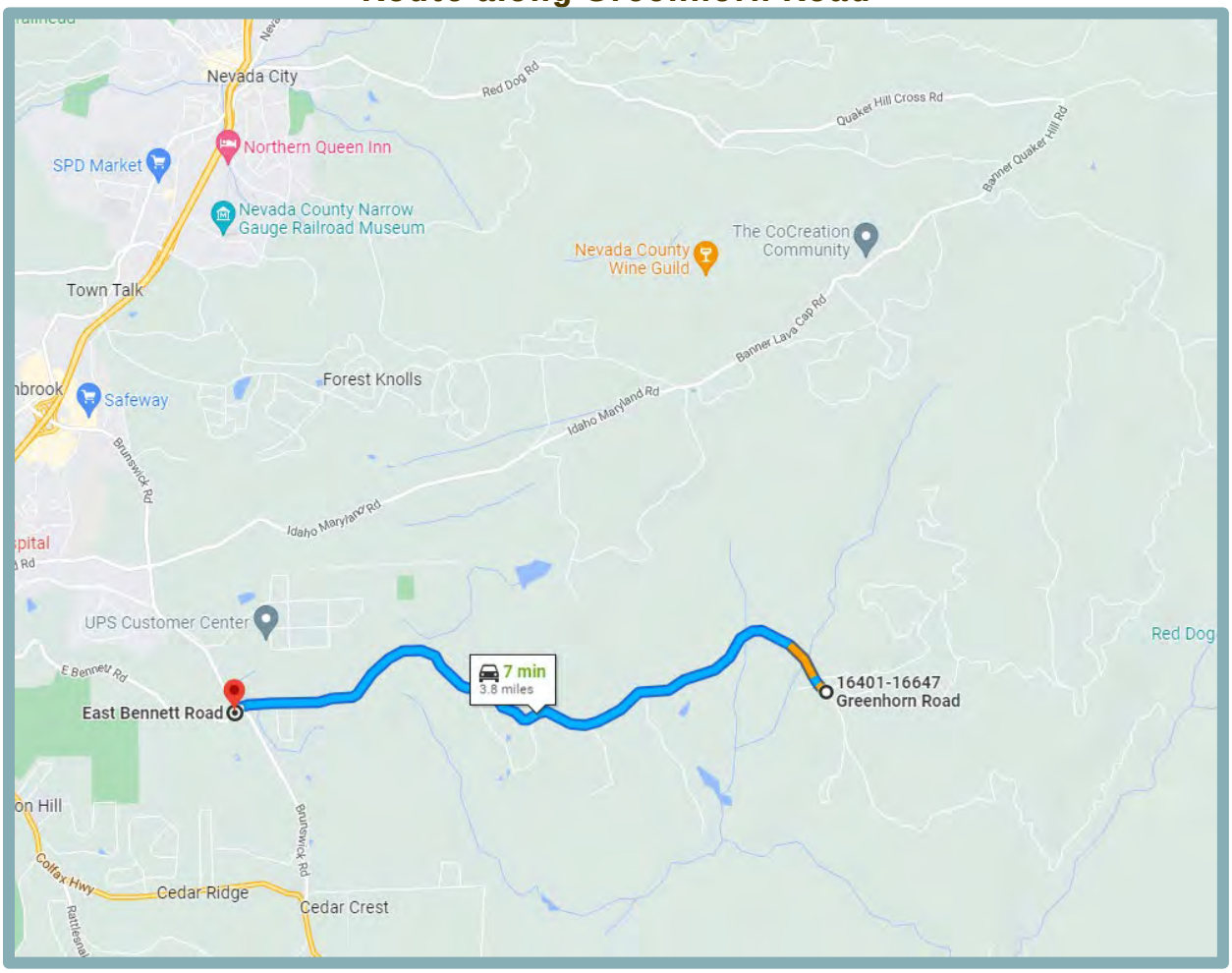


Figure 3
Route along Jones Ridge Road

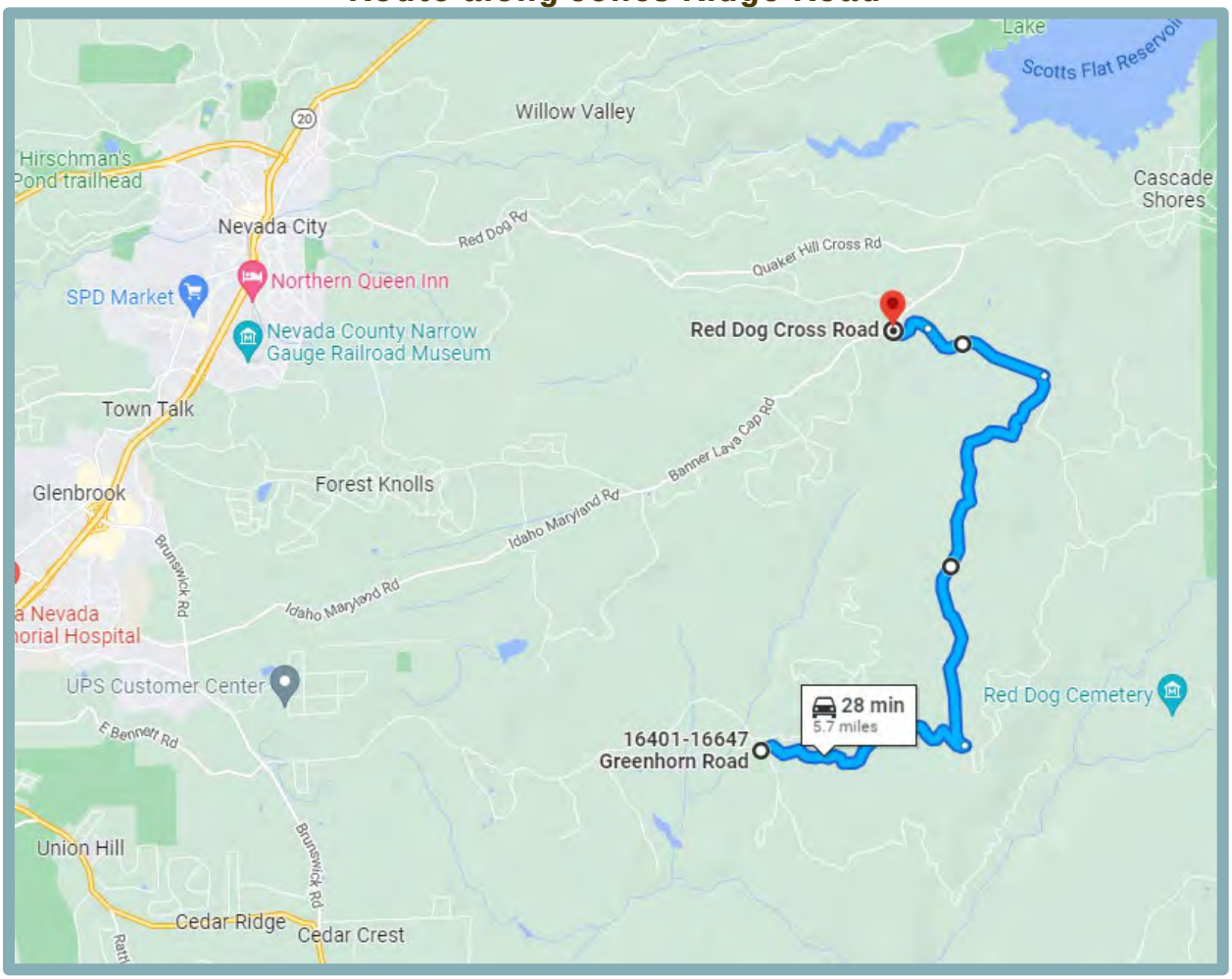


Figure 4
Routes to highway from Banner Mountain

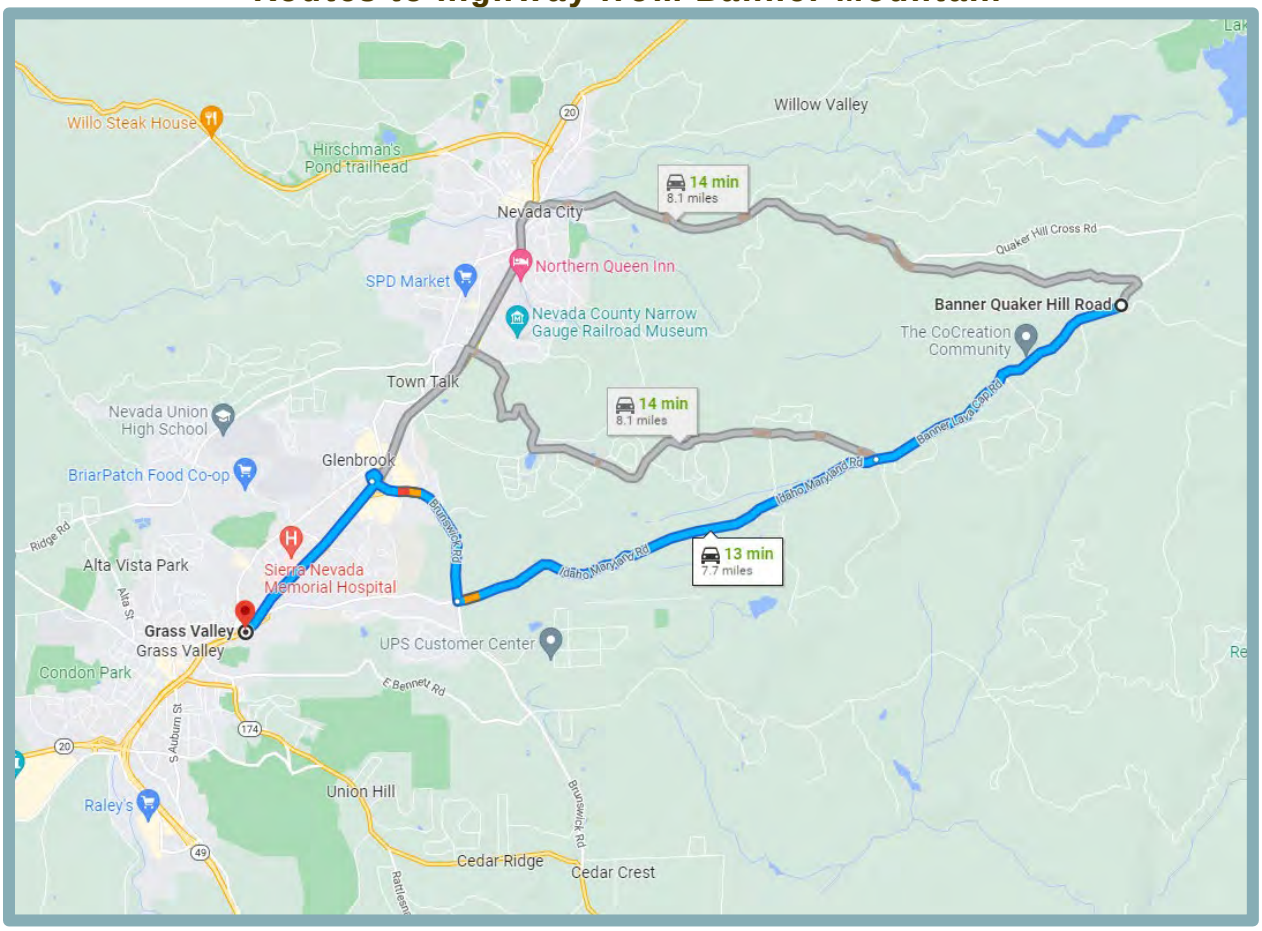


Table 1
Parcels in Greenhorn Area

	APN	Site Address	Assessed Acreage
1	006-830-051	14708 LA NORIA COURT	5.79
2	039-210-003	17046 PINE PEAK ROAD	4.86
3	039-200-070	16726 GREENHORN ROAD	2.5
4	006-820-019	14076 GLENN PINES ROAD	3.1
5	038-360-039	16435 MEADOW WAY	4.49
6	006-790-020	14384 ANCHOR LANE	3.2
7	038-440-019	17721 KNOLL TOP DRIVE	35.91
8	039-180-046	13315 MANION CANYON ROAD	8.45
9	006-830-052	14444 LA NORIA COURT	6
10	039-170-024	12354 HOPPY HOLLOW ROAD	1
11	006-820-028	13595 GREENHORN ROAD	1.81
12	039-190-086	14221 MURPHY PLACE	4.59
13	039-180-009	13490 CAMPBELL LOOP	19.9
14	006-790-001	13101 GREENHORN ROAD	1.4
15	006-820-017	14119 LIQUIDAMBAR LANE	1.29
16	038-350-009	16456 JONES RIDGE ROAD	5.18
17	039-230-052	12914 LOST LAKE ROAD	2.4
18	006-830-041	12637 HONEYDEW LANE	9.43
19	039-221-014	13718 RACCOON MOUNTAIN ROAD	5.18
20	039-170-081	14786 CRAIG LANE	4.94
21	038-440-027	18855 GREENHORN ROAD	7.32
22	039-180-048	14279 RYANS RANCH ROAD	2.33
23	039-170-060	14885 CHRISTMAS TREE LANE	5
24	039-200-002	12545 HOPPY HOLLOW ROAD	10.02
25	006-830-040	12680 HONEYDEW LANE	4.92
26	006-840-032	13407 SAFFRON DRIVE	5.17
27	006-441-015	13173 OMEGA COURT	2
28	006-441-022	13217 OMEGA COURT	1.75
29	006-720-040	13030 HOLLY BRANCH COURT	0.62
30	006-820-055	13548 GREENHORN ROAD	0.08
31	039-221-062	12697 ANVIL ROAD	2.22
32	039-210-057	17432 GREENHORN ROAD	10.02
33	006-790-045	14346 ANCHOR LANE	1
34	006-840-031	13305 ANVIL ROAD	5.17
35	039-230-054	12899 ANVIL ROAD	8.37
36	039-170-070	15102 GREENHORN ROAD	3.82
37	038-450-019	17631 GREENHORN ROAD	5.74

38	006-790-047	13231 LOWER ANCHOR LANE	2.11
39	012-800-003	N/A	7.8
40	006-410-068	13627 CALL OF THE WILD LANE	15.09
41	039-200-037	16380 PINE KNOLL ROAD	2.04
42	006-830-046	12351 DOGWOOD LANE	2.82
43	039-190-089	14011 CAMP ROAD	2.42
44	006-820-035	13315 GREENHORN ROAD	5
45	038-360-052	16979 RIDGE RANCH ROAD	4.44
46	039-230-055	13111 TRIO COURT	2
47	006-790-040	14528 LITTLE HILL LANE	3.05
48	039-221-054	12400 GOLD STARR LANE	2.01
49	039-210-013	17150 GREENHORN ROAD	29.66
50	039-221-026	12876 LOST LAKE ROAD	1.85
51	006-820-056	13564 GREENHORN ROAD	0.13
52	006-840-048	13235 ANVIL ROAD	10.84
53	039-230-023	13640 AXLE COURT	2
54	039-190-039	14495 MANION CANYON ROAD	4.91
55	038-360-060	17055 PIONEER RIDGE ROAD	4.19
56	039-170-023	15895 GREENHORN ROAD	20.15
57	039-200-008	15158 JULIA RANCH ROAD	19.99
58	006-820-038	14194 ANCHOR LANE	0.43
59	006-820-020	14046 GLENN PINES ROAD	1.5
60	039-210-054	17556 GREENHORN ROAD	20
61	006-790-026	14551 LITTLE HILL LANE	3
62	039-170-007	14441 BELLE STARR ROAD	5
63	039-200-072	18110 OHANA WAY	9.64
64	039-200-014	14969 JULIA RANCH ROAD	10.1
65	006-820-008	14006 LIQUIDAMBAR LANE	1.5
66	039-160-032	14315 BELLE STARR ROAD	10.07
67	039-190-025	13928 MANION CANYON ROAD	4.97
68	038-440-009	17767 KNOLL TOP DRIVE	9.9
69	006-830-024	14217 LA NORIA COURT	1.2
70	039-221-013	13793 RACCOON MOUNTAIN ROAD	5.62
71	039-210-018	17475 GREENHORN ROAD	10.13
72	006-710-020	14249 TIM BURR LANE	0.51
73	038-440-030	19218 GREENHORN ROAD	5.94
74	039-221-063	10818 GUNSMOKE ROAD	15.52
75	039-160-008	14446 OTT WAY	10.07
76	038-440-021	17895 KNOLL TOP DRIVE	1.2
77	039-170-049	15435 GREENHORN ROAD	3.62

78	006-790-042	14350 LITTLE HILL LANE	2.09
79	039-190-059	14238 RENMAR COURT	2.83
80	039-190-051	16190 GREENHORN ROAD	2.16
81	039-190-049	16928 LOG CABIN TRAIL	4.71
82	038-350-032	16312 JONES RIDGE ROAD	6.49
83	006-710-025	14296 TIM BURR LANE	1.05
84	006-830-064	12728 BACCARAT COURT	6.4
85	039-230-018	13100 LOST LAKE ROAD	2.9
86	039-170-042	14242 PEACEFUL PINES COURT	4.96
87	039-200-032	18993 JONES RIDGE ROAD	5.02
88	038-440-038	17093 MEADOW WAY	20.17
89	039-230-075	13195 JUPITER DRIVE	1.67
90	006-410-050	14078 GREENHORN ROAD	2.74
91	039-190-052	16178 GREENHORN ROAD	1.75
92	006-410-049	14010 GREENHORN ROAD	2
93	006-700-050	14414 TIM BURR LANE	0.64
94	006-830-067	12638 HONEYDEW LANE	5.18
95	039-221-031	12696 RODRIGUEZ COURT	3.13
96	039-230-041	13000 ECHO GLEN ROAD	7.14
97	039-200-043	15498 PINE KNOLL COURT	2
98	038-450-011	16305 SISLEY COURT	10.06
99	006-820-012	13130 GREENHORN ROAD	2
100	006-820-029	13549 GREENHORN ROAD	1.3
101	039-180-028	13287 GRIZZLY TRAIL	10.06
102	039-221-060	12641 ANVIL ROAD	1.53
103	039-130-013	14520 DEEP CREEK ROAD	31.92
104	006-441-033	12440 THE HOLLOW	15.06
105	039-170-059	14801 CHRISTMAS TREE LANE	3.97
106	039-190-045	14132 MANION CANYON ROAD	1.51
107	038-360-067	17231 SUNSET MOUNTAIN PLACE	4.91
108	006-820-059	14027 LIQUIDAMBAR LANE	2.6
109	006-410-053	12035 DOGWOOD ROAD	2.32
110	039-210-036	17405 GREENHORN ROAD	4.94
111	038-440-012	15515 NIELS MEADE DRIVE	2.38
112	038-360-079	17540 JONES RIDGE ROAD	5.44
113	039-190-015	16276 GREENHORN ROAD	2.1
114	006-410-069	13716 KENSINGTON KOURT	3.52
115	006-710-022	14282 STAR DRIVE	0.99
116	039-230-028	13105 JUPITER DRIVE	5
117	039-230-072	13045 JUPITER DRIVE	2.83

118	006-790-005	13140 LOWER ANCHOR LANE	0.68
119	038-360-069	17100 SUNSET MOUNTAIN PLACE	4.6
120	039-210-047	15011 LITTLE GREENHORN ROAD	9.04
121	006-790-023	14311 LITTLE HILL LANE	3.2
122	038-440-015	17934 KNOLL TOP DRIVE	1.98
123	039-170-065	11855 TENSY LANE	5.03
124	039-190-066	14149 CAMP ROAD	4.3
125	006-441-010	13289 LOWER ANCHOR LANE	1.75
126	039-221-050	12630 BLACKBERRY TRAIL	2
127	038-360-055	17736 JONES RIDGE ROAD	5.76
128	006-820-053	14023 GLENN PINES ROAD	1.76
129	039-221-012	13792 RACCOON MOUNTAIN ROAD	6.13
130	039-221-041	12506 LOST LAKE ROAD	5.01
131	039-170-090	13908 TOBY TRAIL	10.19
132	039-190-081	13785 MANION CANYON ROAD	2.44
133	038-360-068	17156 SUNSET MOUNTAIN PLACE	4.86
134	039-150-017	13953 MASADA DRIVE	20.35
135	038-360-029	16646 MEADOW WAY	2.22
136	006-410-060	12074 DOGWOOD ROAD	5
137	006-830-035	12344 BLACKBERRY TRAIL	4.27
138	039-200-053	15507 JULIA RANCH ROAD	5
139	006-720-025	12933 GREENHORN ROAD	0.93
140	038-360-018	11110 SCRUB OAK LANE	2.22
141	039-170-072	14104 PAULS PLACE	1.51
142	038-440-011	15621 NIELS MEADE DRIVE	9.99
143	038-360-016	16880 FRITILLARY WAY	17.78
144	006-710-029	14334 TIM BURR LANE	0.5
145	039-221-045	13100 TRIO COURT	7.93
146	038-440-013	15530 NIELS MEADE DRIVE	4
147	039-190-094	14221 RENMAR COURT	3.79
148	006-700-037	14372 TIM BURR LANE	0.58
149	039-230-045	13105 ALDERPOINT	8.21
150	039-210-046	17228 MISTY GREEN COURT	10
151	039-190-074	14594 MILL CREEK LANE	7
152	006-441-009	14149 CHRISTOPHER ROBIN WAY	2
153	006-820-007	13966 LIQUIDAMBAR LANE	1.5
154	039-170-011	13841 TOBY TRAIL	2.51

155	039-221-048	12710 BLACKBERRY TRAIL	2
156	039-170-080	14844 CRAIG LANE	4.95
157	038-440-034	17655 JONES RIDGE ROAD	10.04
158	006-790-025	14592 LITTLE HILL LANE	1.5
159	006-840-033	13473 SAFFRON DRIVE	5.17
160	039-221-003	12430 HOPPY HOLLOW ROAD	10.56
161	039-170-091	13955 TOBY TRAIL	32.89
162	006-790-030	14471 ANCHOR LANE	4.72
163	039-130-010	13181 GRIZZLY TRAIL	27.17
164	006-840-060	15570 MOUNT VERNON DRIVE	2
165	006-840-049	13226 ANVIL ROAD	4.66
166	039-190-038	16038 FLYING CLOUD DRIVE	6.1
167	039-170-085	14480 CRAIG LANE	4.95
168	038-440-017	17456 KNOLL TOP DRIVE	9.93
169	039-221-010	13916 RACCOON MOUNTAIN ROAD	5
170	039-170-084	14536 CRAIG LANE	4.95
171	006-391-015	13034 GREENHORN ROAD	1.5
172	006-830-055	14147 GREENHORN ROAD	1.19
173	006-820-015	14107 LIQUIDAMBAR LANE	0.58
174	039-200-075	N/A	5.03
175	039-180-055	17194 SWEETWATER TRAIL	6.28
176	006-700-034	14358 STAR DRIVE	0.5
177	039-200-057	16805 PINE PEAK ROAD	5
178	038-360-020	16698 FRITILLARY WAY	2.23
179	039-210-004	17072 PINE PEAK ROAD	2.5
180	006-441-017	13831 CHRISTOPHER ROBIN WAY	3.75
181	006-710-028	14316 TIM BURR LANE	0.5
182	006-830-019	12635 THE HOLLOW	34.84
183	039-230-007	13566 LOST LAKE ROAD	41.27
184	039-230-063	12967 HOPPY HOLLOW ROAD	15
185	006-410-024	13943 GREENHORN ROAD	2.93
186	039-170-058	16011 GREENHORN ROAD	4.01
187	039-170-054	13594 TOBY TRAIL	9.88
188	006-700-039	14393 STAR DRIVE	2.41
189	038-360-051	16829 PIONEER RIDGE ROAD	4.59
190	039-230-068	12999 PEARSON ROAD	12.96
191	006-410-051	14132 GREENHORN ROAD	1.84
192	006-840-059	15484 MOUNT VERNON DRIVE	2
193	006-410-057	12226 DOGWOOD ROAD	2.06

194	039-200-081	16318 PINE KNOLL ROAD	1.97
195	039-210-051	17026 GREENHORN ROAD	12.75
196	006-391-023	12890 GREENHORN ROAD	3.01
197	006-710-012	14207 TIM BURR LANE	0.72
198	006-410-037	13988 DONEGAL LANE	5
199	039-221-001	14210 RACCOON MOUNTAIN ROAD	14.41
200	039-221-073	13760 FAMILY CIRCLE	13.4
201	038-360-034	16525 MEADOW WAY	2.24
202	006-830-063	12692 BACCARAT COURT	5
203	039-180-040	13626 MANION CANYON ROAD	4.14
204	006-720-041	13025 HOLLY BRANCH COURT	0.5
205	038-450-021	17905 GREENHORN ROAD	5.07
206	039-230-078	13174 ALDERPOINT	7.73
207	038-360-074	17300 SUNSET MOUNTAIN PLACE	5.19
208	006-720-043	14278 HOLLYDALE ROAD	0.65
209	006-840-052	14230 ANVIL ROAD	3.15
210	006-830-025	14307 LA NORIA COURT	8.02
211	039-160-033	14194 BELLE STARR ROAD	10.06
212	038-350-018	16275 JONES RIDGE ROAD	20.67
213	039-230-058	12967 LOST LAKE ROAD	2.46
214	006-391-013	12990 GREENHORN ROAD	1.33
215	038-440-008	17661 KNOLL TOP DRIVE	9.86
216	039-170-035	13778 TOBY TRAIL	0.6
217	038-450-010	17627 GREENHORN ROAD	10.04
218	039-200-013	15065 JULIA RANCH ROAD	9.97
219	039-200-012	18615 JONES RIDGE ROAD	0.06
220	038-450-022	17996 GREENHORN ROAD	4.93
221	038-360-037	N/A	2.25
222	039-200-004	16405 GREENHORN ROAD	4.16
223	039-200-051	14941 JULIA RANCH ROAD	6.14
224	039-190-050	14035 MANION CANYON ROAD	5.19
225	038-440-016	17585 KNOLL TOP DRIVE	9.87
226	006-840-053	14300 ANVIL ROAD	3.15
227	006-830-027	14535 LA NORIA COURT	35.81
228	039-230-038	13670 AXLE COURT	2.49
229	039-190-013	16117 GREENHORN ROAD	1.84
230	039-200-054	15171 JULIA RANCH ROAD	5
231	039-210-009	14860 LITTLE GREENHORN ROAD	9.82



232	038-350-013	14103 RYANS RANCH ROAD	12.21
233	006-720-026	14213 STAR DRIVE	0.33
234	039-230-056	12952 ANVIL ROAD	2.16
235	039-221-072	13790 FAMILY CIRCLE	5.03
236	039-180-041	13625 MANION CANYON ROAD	5.33
237	006-410-055	13859 GREENHORN ROAD	7.08
238	006-391-008	14020 DOWNWIND COURT	2.6
239	038-360-040	11323 WALUPA WAY	2.22
240	006-410-023	13955 GREENHORN ROAD	2.57
241	006-830-032	14655 GREENHORN ROAD	2.03
242	006-920-011	13618 KANTORBERY COURT	9.14
243	039-210-034	16942 PINE PEAK ROAD	2.82
244	039-190-085	14221 MURPHY PLACE	14.49
245	038-360-064	16995 JONES RIDGE ROAD	4.85
246	039-170-030	16042 GREENHORN ROAD	0.5
247	039-221-009	13968 RACCOON MOUNTAIN ROAD	5
248	039-170-062	14040 PEACEFUL PINES COURT	4.21
249	006-410-047	13929 FRANCISCAN WAY	1.75
250	039-170-092	N/A	0.09
251	039-180-033	15397 FLYING CLOUD DRIVE	9.71
252	039-190-063	14502 MANION CANYON ROAD	4.95
253	006-720-037	13015 GREENHORN ROAD	0.75
254	006-820-010	14096 LIQUIDAMBAR LANE	1.2
255	038-360-033	17169 JONES RIDGE ROAD	4.35
256	006-391-033	12900 GREENHORN ROAD	1.35
257	006-790-034	14550 ANCHOR LANE	4.79
258	039-180-022	13558 MANION CANYON ROAD	9.49
259	006-820-057	13947 LIQUIDAMBAR LANE	2.4
260	039-170-080	14842 CRAIG LANE	4.95
261	039-190-090	14011 CAMP ROAD	2.54
262	006-391-016	13058 GREENHORN ROAD	1.5
263	039-230-049	13604 AXLE COURT	1.5
264	039-170-052	12140 HOGAN HILL ROAD	4.06
265	006-790-039	14619 ANCHOR LANE	1.5
266	006-720-039	14254 HOLLYDALE ROAD	0.6
267	006-830-058	13933 CORONADO COURT	3.39
268	039-200-065	12323 HOPPY HOLLOW ROAD	4.95
269	039-170-083	14614 CRAIG LANE	4.96
270	006-391-006	13935 DOWNWIND COURT	2
271	006-820-024	13530 GREENHORN ROAD	1.97

272	038-350-033	16312 JONES RIDGE ROAD	2.6
273	039-230-060	13127 TRIO COURT	5
274	038-360-078	17540 JONES RIDGE ROAD	12.77
275	006-840-047	13190 ANVIL ROAD	3.18
276	039-230-053	12968 LOST LAKE ROAD	3.87
277	006-830-066	12600 ANVIL ROAD	5.1
278	039-180-008	14006 MILL CREEK LANE	19.83
279	006-790-022	13203 GREENHORN ROAD	0.42
280	006-710-026	14297 TIM BURR LANE	0.5
281	006-830-068	12469 THE HOLLOW	2.66
282	038-360-026	16486 MEADOW WAY	2.25
283	006-840-010	13340 ANVIL ROAD	4
284	039-230-066	13233 LOST LAKE ROAD	7.82
285	039-170-047	12197 HOGAN HILL ROAD	4.92
286	039-200-068	16696 GREENHORN ROAD	2.72
287	039-190-022	17791 JONES RIDGE ROAD	8.52
288	006-830-044	14663 LA NORIA COURT	25
289	039-230-024	13641 AXLE COURT	2.01
290	039-230-061	12884 HOPPY HOLLOW ROAD	15
291	006-410-042	13894 COLLIER ROAD	5
292	039-221-057	14981 GREENHORN ROAD	2.15
293	006-820-042	13974 GLENN PINES ROAD	1.35
294	038-440-025	18921 GREENHORN ROAD	3.8
295	006-410-024	13939 GREENHORN ROAD	2.93
296	006-830-056	13844 CORONADO COURT	6
297	039-160-025	14495 LAVA CAP MINE ROAD	33.64
298	039-210-042	14556 LITTLE GREENHORN ROAD	4.85
299	039-230-079	13309 LOST LAKE ROAD	3.59
300	039-230-019	13680 AXLE COURT	2.49
301	039-200-076	N/A	5.03
302	039-190-078	14899 BAILOXIE RANCH ROAD	19.25
303	006-720-028	14267 STAR DRIVE	1.32
304	038-450-023	18072 GREENHORN ROAD	5.07
305	006-700-045	14388 STAR DRIVE	0.55
306	039-221-024	12840 RODRIGUEZ COURT	1.85
307	039-230-046	13173 ALDERPOINT	7.09
308	039-190-002	14360 MILL CREEK LANE	2.56
309	006-820-014	14137 LIQUIDAMBAR LANE	1.25
310	006-820-046	12681 LEAF LANE	2
311	038-481-001	16202 JONES RIDGE ROAD	152.89

312	038-360-036	16571 MEADOW WAY	2.23
313	039-170-057	13749 TOBY TRAIL	9.83
314	039-200-045	16806 GREENHORN ROAD	1.81
315	039-190-031	14866 MANION CANYON ROAD	2.97
316	038-360-039	11363 WALUPA WAY	4.49
317	039-221-021	12771 LOST LAKE ROAD	3.74
318	039-230-035	13040 ECHO GLEN ROAD	11.68
319	038-450-016	17670 GREENHORN ROAD	3.82
320	039-200-073	18232 OHANA WAY	10.05
321	006-830-041	12639 HONEYDEW LANE	9.43
322	006-840-058	15515 MOUNT VERNON DRIVE	2
323	039-221-028	12765 RODRIGUEZ COURT	1.84
324	039-200-062	16496 GREENHORN ROAD	0.25
325	006-820-023	13448 GREENHORN ROAD	1.72
326	039-180-034	13886 GRIZZLY TRAIL	10
327	038-440-024	19028 GREENHORN ROAD	14.93
328	006-830-050	14730 GREENHORN ROAD	21.47
329	039-200-091	19131 JONES RIDGE ROAD	5.01
330	039-130-014	N/A	17.82
331	039-190-014	16239 GREENHORN ROAD	5.94
332	039-170-061	14945 CHRISTMAS TREE LANE	5
333	039-200-069	16695 GREENHORN ROAD	0.14
334	006-820-016	14087 LIQUIDAMBAR LANE	0.67
335	039-170-014	13847 TOBY TRAIL	9.34
336	039-200-016	15167 JULIA RANCH ROAD	30.05
337	039-210-035	16981 PINE PEAK ROAD	2.15
338	039-150-034	13816 BELLE STARR ROAD	20.27
339	038-360-023	16524 MEADOW WAY	2.25
340	039-221-025	12835 RODRIGUEZ COURT	1.86
341	006-410-056	14065 YAMA WAY	5
342	006-830-033	14693 GREENHORN ROAD	2.98
343	039-210-027	16889 PINE PEAK ROAD	2.23
344	039-180-054	17215 SWEETWATER TRAIL	8.83
345	006-790-041	14478 LITTLE HILL LANE	3.1
346	006-720-036	13049 GREENHORN ROAD	0.76
347	039-230-077	13058 JUPITER DRIVE	1.67
348	039-221-039	13945 FAMILY CIRCLE	2.5
349	039-200-052	18108 JONES RIDGE ROAD	3.9
350	039-180-045	13970 RYANS RANCH ROAD	10.55
351	006-710-019	14248 TIM BURR LANE	0.54

352	006-840-060	13180 ANVIL ROAD	2
353	039-221-079	12673 HOPPY HOLLOW ROAD	5.48
354	039-200-015	16463 TERRAPAX PLACE	20.06
355	006-790-043	14369 ANCHOR LANE	2
356	038-450-026	18148 GREENHORN ROAD	40.85
357	039-210-006	17018 PINE PEAK ROAD	1.53
358	039-180-032	13923 GRIZZLY TRAIL	10
359	006-710-027	14326 STAR DRIVE	1.99
360	006-710-016	14232 TIM BURR LANE	0.51
361	006-830-039	12634 HONEYDEW LANE	4.96
362	039-230-042	13304 ALDERPOINT	6.19
363	006-441-008	13352 LOWER ANCHOR LANE	4.7
364	039-221-034	13676 FAMILY CIRCLE	3.05
365	039-170-077	15800 GREENHORN ROAD	5.88
366	039-190-019	14149 CAMP ROAD	1.65
367	039-180-012	12444 MANION CANYON ROAD	19.84
368	039-200-049	15552 PINE KNOLL COURT	2.12
369	039-170-027	15285 GREENHORN ROAD	0.33
370	039-170-046	12196 HOGAN HILL ROAD	4.93
371	039-200-050	15553 PINE KNOLL COURT	1.91
372	039-200-067	16616 GREENHORN ROAD	3
373	039-190-084	N/A	2.44
374	038-360-059	17054 PIONEER RIDGE ROAD	5.37
375	039-221-035	15163 GREENHORN ROAD	10
376	039-210-039	17222 SKY OAKS LANE	4.93
377	039-210-031	16943 PINE PEAK ROAD	2.55
378	039-200-031	18934 JONES RIDGE ROAD	5.03
379	038-350-035	16690 JONES RIDGE ROAD	29.88
380	006-820-048	12757 LEAF LANE	2.02
381	006-820-043	13967 GLENN PINES ROAD	2.88
382	039-210-033	15594 POVERTY POND ROAD	4.84
383	039-221-053	12388 GOLD STARR LANE	1.83
384	006-820-049	12975 LEAF LANE	3.42
385	039-230-081	13758 AXLE COURT	4.52
386	006-830-034	12490 ANVIL ROAD	5.89
387	039-190-069	13831 MANION CANYON ROAD	1.45
388	038-360-052	16940 JONES RIDGE ROAD	4.44
389	006-720-024	12901 GREENHORN ROAD	0.43
390	039-170-020	15148 GREENHORN ROAD	4.74
391	038-360-035	16607 MEADOW WAY	2.22

392	039-170-050	15366 GREENHORN ROAD	4.08
393	006-441-023	13907 CHRISTOPHER ROBIN WAY	1.75
394	006-820-052	14065 GLENN PINES ROAD	1.5
395	038-360-014	17100 FRITILLARY WAY	17.26
396	039-180-037	13240 MANION CANYON ROAD	3.33
397	006-710-021	14258 STAR DRIVE	0.5
398	006-410-039	12187 DOGWOOD ROAD	5.9
399	039-221-015	13717 RACCOON MOUNTAIN ROAD	7.01
400	039-200-056	16508 PINE KNOLL ROAD	4.53
401	006-700-040	14285 HOLLYDALE ROAD	16.63
402	038-360-042	16978 JONES RIDGE ROAD	4.49
403	039-190-021	17790 JONES RIDGE ROAD	9.9
404	006-391-012	12966 GREENHORN ROAD	1.33
405	006-700-044	14399 TIM BURR LANE	0.51
406	006-830-037	12604 HONEYDEW LANE	5
407	039-160-029	14515 LAVA CAP MINE ROAD	21.45
408	038-360-062	16949 JONES RIDGE ROAD	4.85
409	039-130-015	N/A	1.06
410	006-700-049	14392 TIM BURR LANE	0.57
411	006-830-047	14556 GREENHORN ROAD	5.68
412	039-221-043	12555 BLACKBERRY TRAIL	6.17
413	039-190-070	13867 MANION CANYON ROAD	1.55
414	039-190-060	14752 MILL CREEK LANE	6.87
415	006-820-045	14108 YAMA WAY	5.56
416	039-200-071	16726 GREENHORN ROAD	0.36
417	006-720-035	13023 GREENHORN ROAD	0.37
418	006-820-039	13203 GREENHORN ROAD	0.23
419	006-710-014	14232 STAR DRIVE	0.5
420	006-410-015	13784 GREENHORN ROAD	1.22
421	039-221-040	15017 GREENHORN ROAD	5.1
422	039-190-009	13913 CAMP ROAD	9.74
423	006-391-032	12894 GREENHORN ROAD	1.59
424	039-170-082	14170 CRAIG LANE	4.96
425	038-450-025	18504 GREENHORN ROAD	5.38
426	039-190-007	13801 MANION CANYON ROAD	4.46
427	039-190-051	14850 BAILOXIE RANCH ROAD	2.16
428	039-130-012	13196 GRIZZLY TRAIL	19.82
429	039-130-011	14510 DEEP CREEK ROAD	19.81
430	006-830-061	12354 DOGWOOD ROAD	5.05

431	006-790-050	14330 ANCHOR LANE	1.62
432	039-221-012	13794 RACCOON MOUNTAIN ROAD	6.13
433	039-221-051	12394 BLACKBERRY TRAIL	1.5
434	039-200-082	16533 GREENHORN ROAD	4.91
435	039-200-092	19069 JONES RIDGE ROAD	5.01
436	039-200-060	18810 JONES RIDGE ROAD	3
437	006-820-012	14168 LIQUIDAMBAR LANE	2
438	039-190-071	15768 FLYING CLOUD DRIVE	21.09
439	038-450-005	18610 GREENHORN ROAD	10.13
440	038-360-010	17033 JONES RIDGE ROAD	4.06
441	038-350-034	16540 JONES RIDGE ROAD	29.91
442	038-360-045	17093 JONES RIDGE ROAD	1.42
443	006-840-051	13320 ANVIL ROAD	2.42
444	006-410-008	13769 GREENHORN ROAD	1.6
445	039-210-036	17144 SKY OAKS LANE	4.94
446	006-391-007	13993 DOWNWIND COURT	2
447	038-360-031	11111 SCRUB OAK LANE	4.4
448	039-230-040	13673 AXLE COURT	2.51
449	039-221-056	12442 GOLD STARR LANE	1.5
450	039-170-066	11915 TENSY LANE	5
451	039-190-060	14674 MILL CREEK LANE	6.87
452	039-190-042	13965 MILL CREEK LANE	2.56
453	006-410-061	12100 DOGWOOD ROAD	2.5
454	006-410-010	13874 GREENHORN ROAD	2.5
455	038-350-014	13971 RYANS RANCH ROAD	7.5
456	038-450-006	18732 GREENHORN ROAD	8.45
457	039-210-002	17044 PINE PEAK ROAD	4.85
458	006-720-034	13009 GREENHORN ROAD	0.36
459	006-710-024	14270 TIM BURR LANE	1.15
460	039-221-032	12628 LOST LAKE ROAD	2
461	006-441-014	13186 OMEGA COURT	2.03
462	006-710-011	14204 TIM BURR LANE	1.53
463	039-210-022	17175 GREENHORN ROAD	9.8
464	038-360-048	17076 RIDGE RANCH ROAD	4.89
465	038-350-031	16691 JONES RIDGE ROAD	1.52
466	039-200-093	16309 PINE KNOLL ROAD	3
467	006-410-044	14057 COLLIER ROAD	2
468	039-200-046	16762 GREENHORN ROAD	1.5
469	006-720-033	12967 GREENHORN ROAD	5.81
470	006-830-054	14375 GREENHORN ROAD	7.09

471	039-170-010	15648 GREENHORN ROAD	2.1
472	039-170-040	13998 PAULS PLACE	2
473	038-360-043	16842 JONES RIDGE ROAD	4.93
474	038-360-027	11271 WALUPA WAY	4.41
475	006-790-008	14440 ANCHOR LANE	0.92
476	006-820-036	13226 GREENHORN ROAD	0.71
477	006-830-016	13550 LOWER ANCHOR LANE	13.86
478	006-830-021	14278 LA NORIA COURT	2.85
479	039-170-053	15284 GREENHORN ROAD	4.78
480	006-720-027	14229 STAR DRIVE	0.83
481	006-830-065	12766 BACCARAT COURT	7.14
482	039-170-048	15351 GREENHORN ROAD	2.49
483	039-170-056	13445 TOBY TRAIL	9.81
484	039-200-034	16458 GREENHORN ROAD	1.4
485	039-221-044	12595 BLACKBERRY TRAIL	10.34
486	039-210-032	15590 POVERTY POND ROAD	4.85
487	038-360-076	17679 JONES RIDGE ROAD	2.2
488	006-790-038	14581 ANCHOR LANE	1.5
489	039-190-077	16814 LOG CABIN TRAIL	6.58
490	006-391-036	12828 GREENHORN ROAD	3.17
491	039-230-030	13360 ALDERPOINT	42.87
492	006-830-048	14602 GREENHORN ROAD	1.5
493	039-200-058	16463 PINE KNOLL ROAD	3.67
494	039-190-082	N/A	2.43
495	006-840-046	15537 MOUNT VERNON DRIVE	3.15
496	039-190-046	14140 MANION CANYON ROAD	3.57
497	038-450-017	17707 GREENHORN ROAD	5.54
498	039-200-042	16791 GREENHORN ROAD	1.5
499	006-391-022	12920 GREENHORN ROAD	2.77
500	038-360-042	16932 RIDGE RANCH ROAD	4.49
501	038-360-017	11050 SCRUB OAK LANE	2.21
502	006-410-041	14095 COLLIER ROAD	5
503	039-190-095	13959 CAMP ROAD	4.07
504	039-210-020	17287 GREENHORN ROAD	19.58
505	039-180-021	13559 MANION CANYON ROAD	2.34
506	039-180-042	13725 MANION CANYON ROAD	3.93
507	039-230-059	13116 TRIO COURT	2
508	039-230-064	12929 HOPPY HOLLOW ROAD	15.81
509	006-820-044	14092 YAMA WAY	5.29
510	006-830-062	12626 BACCARAT COURT	6.46

511	039-221-059	15018 GREENHORN ROAD	0.28
512	039-190-080	14616 MANION CANYON ROAD	10.09
513	039-190-073	14594 MILL CREEK LANE	5
514	039-180-049	14279 RYANS RANCH ROAD	2.26
515	039-190-056	14495 MILL CREEK LANE	12.89
516	006-720-029	14285 STAR DRIVE	0.82
517	006-840-009	13378 ANVIL ROAD	2
518	039-221-030	12816 LOST LAKE ROAD	1.35
519	039-221-017	13628 RACCOON MOUNTAIN ROAD	5
520	039-210-038	17221 SKY OAKS LANE	4.78
521	039-200-063	16621 GREENHORN ROAD	3.41
522	038-440-043	16965 MEADOW WAY	22.04
523	006-700-039	14395 STAR DRIVE	2.41
524	006-441-013	14027 CHRISTOPHER ROBIN WAY	3.75
525	039-230-073	13075 HEIGEN COURT	2.47
526	039-221-023	12877 LOST LAKE ROAD	1.92
527	039-170-044	13947 TOBY TRAIL	1.91
528	039-170-079	14912 CRAIG LANE	4.96
529	038-440-020	15734 NIELS MEADE DRIVE	6.82
530	006-720-031	14315 STAR DRIVE	0.68
531	039-221-029	12778 LOST LAKE ROAD	1.32
532	039-170-025	15519 GREENHORN ROAD	6.2
533	006-820-047	12719 LEAF LANE	2
534	006-820-034	13413 GREENHORN ROAD	3.27
535	006-920-013	13634 VINCENT COURT	5.69
536	006-710-023	14271 TIM BURR LANE	0.5
537	006-410-052	11990 DOGWOOD ROAD	2.52
538	039-200-039	16753 GREENHORN ROAD	1.52
539	006-410-048	13815 FRANCISCAN WAY	4.9
540	006-920-012	13640 KANTORBERY COURT	3.12
541	039-210-043	14752 LITTLE GREENHORN ROAD	4.85
542	038-350-010	16425 JONES RIDGE ROAD	4.05
543	039-221-064	10756 GUNSMOKE ROAD	3.01
544	039-180-023	14290 MILL CREEK LANE	10.68
545	039-230-037	12930 ECHO GLEN ROAD	7.09
546	006-790-001	13103 GREENHORN ROAD	1.4
547	006-820-035	13313 GREENHORN ROAD	5
548	006-710-018	12663 GEM LANE	0.67



549	039-190-076	16920 LOG CABIN TRAIL	3.32
550	039-190-068	13838 MANION CANYON ROAD	1.67
551	006-830-053	14459 LA NORIA COURT	6.27
552	039-210-041	17338 GREENHORN ROAD	4.91
553	039-221-011	13870 RACCOON MOUNTAIN ROAD	5.68
554	006-720-032	14339 STAR DRIVE	1.09
555	006-790-053	14482 ANCHOR LANE	0.63
556	006-820-009	14054 LIQUIDAMBAR LANE	1.5
557	006-840-006	12862 ANVIL ROAD	6
558	006-410-036	13944 DONEGAL LANE	4.5
559	039-200-037	16378 PINE KNOLL ROAD	2.04
560	039-221-019	12627 LOST LAKE ROAD	10.08
561	039-170-009	15891 GREENHORN ROAD	4.64
562	039-190-053	14496 MILL CREEK LANE	15.1
563	039-190-041	13966 MILL CREEK LANE	2.37
564	038-450-027	18100 GREENHORN ROAD	20.11
565	006-710-030	14322 TIM BURR LANE	0.78
566	006-410-070	13755 KENSINGTON KOURT	5.37
567	039-160-036	14044 BELLE STARR ROAD	10.05
568	039-180-047	13315 MANION CANYON ROAD	10.6
569	006-441-020	12748 THE HOLLOW	26.42
570	006-410-065	13864 CALL OF THE WILD LANE	5.03
571	039-221-058	14934 GREENHORN ROAD	6.54
572	039-180-038	13104 MANION CANYON ROAD	7.64
573	006-840-057	15485 MOUNT VERNON DRIVE	2
574	039-221-081	12846 HOPPY HOLLOW ROAD	17.44
575	006-790-048	14285 ANCHOR LANE	0.9
576	006-790-046	13193 LOWER ANCHOR LANE	2.11
577	039-180-039	13233 MANION CANYON ROAD	2.94
578	006-920-011	13620 KANTORBERY COURT	9.14
579	039-210-013	17148 GREENHORN ROAD	29.66
580	006-441-016	13883 CHRISTOPHER ROBIN WAY	2
581	038-450-028	18599 GREENHORN ROAD	22.13
582	006-830-029	14563 GREENHORN ROAD	10
583	006-820-011	14130 LIQUIDAMBAR LANE	1
584	039-160-030	14501 LAVA CAP MINE ROAD	7.99
585	039-170-063	15928 GREENHORN ROAD	4.64
586	006-820-037	13227 GREENHORN ROAD	0.25
587	038-450-024	18578 GREENHORN ROAD	12.45

588	038-360-006	17131 JONES RIDGE ROAD	3.48
589	006-410-040	12278 DOGWOOD ROAD	5.67
590	039-180-001	15594 FLYING CLOUD DRIVE	39.8
591	006-820-022	13935 GLENN PINES ROAD	1.5
592	039-210-050	17022 GREENHORN ROAD	0.56
593	039-180-031	13847 GRIZZLY TRAIL	10.01
594	039-190-018	14184 MANION CANYON ROAD	1.65
595	039-180-019	13503 MANION CANYON ROAD	2.33
596	006-820-005	14138 GLENN PINES ROAD	1
597	006-820-057	13949 LIQUIDAMBAR LANE	2.4
598	006-410-059	12020 DOGWOOD ROAD	2.72
599	006-410-058	12156 DOGWOOD ROAD	2.06
600	006-710-017	12655 GEM LANE	0.64
601	039-221-038	13827 FAMILY CIRCLE	3
602	039-221-052	12432 BLACKBERRY TRAIL	1.81
603	039-170-041	13997 PAULS PLACE	2
604	039-160-034	N/A	10.06
605	039-200-008	18655 JONES RIDGE ROAD	19.99
606	038-440-010	18039 KNOLL TOP DRIVE	9.97
607	006-830-049	14828 GREENHORN ROAD	2.04
608	039-180-043	13747 CAMPBELL LOOP	5.22
609	006-391-009	13936 DOWNWIND COURT	2
610	039-200-010	18690 JONES RIDGE ROAD	10
611	006-720-030	14327 STAR DRIVE	0.66
612	006-790-042	14349 ANCHOR LANE	2.09
613	038-360-019	16734 FRITILLARY WAY	4.49
614	039-230-048	13605 AXLE COURT	1.5
615	039-210-017	17139 SKY OAKS LANE	10.04
616	038-360-056	17646 JONES RIDGE ROAD	3.99
617	039-200-026	16352 GREENHORN ROAD	1.91
618	038-360-024	16691 MEADOW WAY	2.2
619	006-790-002	14277 HOLLYDALE ROAD	1.58
620	038-450-003	18382 GREENHORN ROAD	38.81
621	038-440-031	17457 JONES RIDGE ROAD	20.13
622	039-170-073	14035 PAULS PLACE	5.76
623	038-360-021	16761 FRITILLARY WAY	2.23
624	039-230-074	13074 HEIGEN COURT	2.35
625	039-221-069	13567 RACCOON MOUNTAIN ROAD	3.43
626	006-410-054	11991 DOGWOOD ROAD	2.52
627	006-410-067	13731 CALL OF THE WILD LANE	5.03

628	006-790-021	14232 ANCHOR LANE	1.89
629	038-440-029	19270 GREENHORN ROAD	37.1
630	039-170-051	15472 GREENHORN ROAD	1.67
631	039-221-064	14143 RACCOON MOUNTAIN ROAD	3.01
632	039-221-055	12414 GOLD STARR LANE	1.5
633	039-200-059	18880 JONES RIDGE ROAD	3.21
634	006-840-011	14233 ANVIL ROAD	6.31
635	039-200-077	17000 GREENHORN ROAD	5.03
636	039-180-024	14276 MILL CREEK LANE	16.28
637	039-200-048	15469 PINE KNOLL COURT	2.08
638	039-190-058	14147 MANION CANYON ROAD	2.66
639	039-210-011	17027 GREENHORN ROAD	5.04
640	038-360-081	17366 JONES RIDGE ROAD	1.33
641	039-210-058	17121 SKY OAKS LANE	9.96
642	039-200-017	15235 JULIA RANCH ROAD	10.01
643	039-190-033	14323 RENMAR COURT	5
644	006-720-042	13033 HOLLY BRANCH COURT	0.52
645	039-230-051	12915 LOST LAKE ROAD	2.23
646	006-820-026	13663 GREENHORN ROAD	2
647	038-360-075	17292 SUNSET MOUNTAIN PLACE	4.57
648	038-360-038	16630 FRITILLARY WAY	2.23
649	039-230-076	13106 JUPITER DRIVE	1.67
650	039-221-074	12673 HOPPY HOLLOW ROAD	16.96
651	006-410-033	14017 FRANCISCAN WAY	2.01
652	039-210-040	17314 GREENHORN ROAD	4.95
653	006-790-043	14367 ANCHOR LANE	2
654	006-700-032	14354 TIM BURR LANE	0.66
655	039-160-035	N/A	10.05
656	006-410-021	13951 GREENHORN ROAD	2.86
657	006-920-014	13636 VINCENT COURT	6.3
658	006-790-023	14327 LITTLE HILL LANE	3.2
659	006-820-006	13399 NEVADA CITY AVENUE	2.17
660	039-230-065	13438 LOST LAKE ROAD	14.05
661	039-221-050	12630 BLACKBERRY TRAIL	2
662	039-200-083	16495 GREENHORN ROAD	4.29
663	006-820-043	13955 GLENN PINES ROAD	2.88
664	038-440-002	17644 KNOLL TOP DRIVE	29.83
665	038-440-041	17298 JONES RIDGE ROAD	7.96
666	038-350-029	16645 JONES RIDGE ROAD	56.74

667	039-230-026	13120 LOST LAKE ROAD	5
668	039-190-067	17942 JONES RIDGE ROAD	9.69
669	038-360-053	17744 JONES RIDGE ROAD	5
670	038-360-052	16940 PIONEER RIDGE ROAD	4.44
671	006-391-035	12836 GREENHORN ROAD	2.51
672	006-410-063	14063 GREENHORN ROAD	1.53
673	039-221-033	13760 FAMILY CIRCLE	7.61
674	039-221-049	12670 BLACKBERRY TRAIL	2
675	039-170-037	15863 COON HOLLOW COURT	5.06
676	039-210-037	17143 SKY OAKS LANE	4.9
677	038-360-025	11211 WALUPA WAY	2.2
678	039-210-017	17519 GREENHORN ROAD	10.04
679	006-820-054	13490 GREENHORN ROAD	0.17
680	039-230-071	13022 JUPITER DRIVE	2.37
681	039-160-028	N/A	11.01
682	006-790-036	14395 LITTLE HILL LANE	1.46
683	039-221-020	12695 LOST LAKE ROAD	6.88
684	039-221-004	12544 HOPPY HOLLOW ROAD	14.23
685	039-210-049	17318 MISTY GREEN COURT	10
686	039-200-064	16440 PINE KNOLL ROAD	3.44
687	039-190-004	14003 MILL CREEK LANE	9.93
688	006-820-013	13198 GREENHORN ROAD	1.25
689	039-210-029	17071 PINE PEAK ROAD	2.75
690	006-790-037	14451 LITTLE HILL LANE	1
691	038-360-042	16941 PIONEER RIDGE ROAD	4.49
692	039-221-027	12764 RODRIGUEZ COURT	1.5
693	006-830-069	12469 THE HOLLOW	7.34
694	039-221-042	12582 LOST LAKE ROAD	5.04
695	039-210-008	16905 GREENHORN ROAD	9.25
696	039-200-041	16829 GREENHORN ROAD	3.71
697	039-130-006	13810 GRIZZLY TRAIL	39.79
698	039-200-066	12255 HOPPY HOLLOW ROAD	5.02
699	039-180-029	13461 GRIZZLY TRAIL	10.19
700	006-700-033	14363 TIM BURR LANE	0.68
701	039-210-045	14677 LITTLE GREENHORN ROAD	4.85
702	039-160-006	14373 BELLE STARR ROAD	10.07
703	038-440-018	15566 NIELS MEADE DRIVE	3.62
704	006-410-017	13816 FRANCISCAN WAY	6.41
705	006-830-020	14216 LA NORIA COURT	1.91
706	039-210-012	17103 GREENHORN ROAD	2

707	038-360-063	16805 JONES RIDGE ROAD	4.56
708	006-830-015	13480 LOWER ANCHOR LANE	4.5
709	006-790-032	14325 ANCHOR LANE	2.05
710	038-360-065	16857 JONES RIDGE ROAD	4.85
711	039-221-022	12823 LOST LAKE ROAD	2.53
712	006-830-022	14324 LA NORIA COURT	3.05
713	039-180-044	13970 RYANS RANCH ROAD	8.4
714	039-180-036	13162 MANION CANYON ROAD	5.85
715	039-210-051	17024 GREENHORN ROAD	12.75
716	038-360-008	N/A	34.67
717	006-840-018	13330 ANVIL ROAD	2
718	039-200-086	16367 PINE KNOLL ROAD	4.01
719	006-441-021	13224 OMEGA COURT	1.72
720	006-441-011	14095 CHRISTOPHER ROBIN WAY	2
721	038-360-080	17366 JONES RIDGE ROAD	6.67
722	006-840-034	13529 SAFFRON DRIVE	5.18
723	039-230-057	13080 JUPITER DRIVE	1.98
724	006-410-008	13775 GREENHORN ROAD	1.6
725	039-200-061	18849 JONES RIDGE ROAD	3.81
726	038-440-033	17661 JONES RIDGE ROAD	10.03
727	039-190-054	16610 LOG CABIN TRAIL	8.64
728	039-190-083	N/A	2.43
729	039-221-061	12679 ANVIL ROAD	1.5
730	039-210-028	17019 PINE PEAK ROAD	2.99
731	038-440-026	19121 GREENHORN ROAD	13.14
732	006-830-060	14105 COLLIER ROAD	4.7
733	006-830-059	14011 CORONADO COURT	3.07
734	039-200-033	16404 GREENHORN ROAD	1.39
735	038-360-066	17315 SUNSET MOUNTAIN PLACE	4.86
736	006-700-069	14361 STAR DRIVE	1.22
737	006-790-017	14458 ANCHOR LANE	0.71
738	006-790-001	14225 HOLLYDALE ROAD	1.4
739	039-221-070	13627 RACCOON MOUNTAIN ROAD	5
740	039-170-055	13500 TOBY TRAIL	9.84
741	038-360-077	17679 JONES RIDGE ROAD	2.01
742	038-360-046	17101 JONES RIDGE ROAD	1.5
743	038-360-028	11272 WALUPA WAY	2.22
744	039-160-027	14499 LAVA CAP MINE ROAD	8.91

745	006-790-051	14418 ANCHOR LANE	3.16
746	006-710-015	14233 TIM BURR LANE	0.54
747	039-190-061	14799 MILL CREEK LANE	5.85
748	038-350-027	16266 MEADOW WAY	40
749	038-450-018	17617 GREENHORN ROAD	5
750	039-180-027	13612 GRIZZLY TRAIL	10.55
751	039-221-046	12725 ANVIL ROAD	5.03
752	039-170-045	13945 TOBY TRAIL	1.59
753	039-170-043	15846 COON HOLLOW COURT	4.98
754	039-230-062	13035 HOPPY HOLLOW ROAD	7.4
755	039-210-021	17179 GREENHORN ROAD	9.76
756	039-190-064	14215 MURPHY PLACE	4.94
757	038-450-020	17874 GREENHORN ROAD	5
758	039-230-036	12886 ECHO GLEN ROAD	7.03
759	039-221-053	12380 GOLD STARR LANE	1.83
760	039-200-047	15521 PINE KNOLL COURT	1.91
761	039-210-048	17244 MISTY GREEN COURT	10
762	006-790-027	14554 LITTLE HILL LANE	1.5
763	006-391-014	13010 GREENHORN ROAD	1.33
764	006-391-025	13072 GREENHORN ROAD	2.84
765	039-210-044	14655 LITTLE GREENHORN ROAD	4.85
766	006-410-045	14150 COLLIER ROAD	5
767	039-170-078	14970 CRAIG LANE	4.96
768	038-350-007	16372 PIONEER RIDGE ROAD	4.91
769	039-230-039	13675 AXLE COURT	2.51
770	006-820-027	13621 GREENHORN ROAD	0.72
771	006-840-050	13270 ANVIL ROAD	2.57
772	039-200-078	17002 GREENHORN ROAD	5.04
773	039-221-080	12770 HOPPY HOLLOW ROAD	10.88
774	039-210-025	14510 LITTLE GREENHORN ROAD	19.28
775	006-830-057	13966 CORONADO COURT	6
776	006-441-006	13272 LOWER ANCHOR LANE	2.68
777	006-820-038	13139 GREENHORN ROAD	0.43
778	039-230-047	13611 AXLE COURT	1.5
779	039-170-074	15649 GREENHORN ROAD	18.03
780	006-720-038	14240 HOLLYDALE ROAD	0.49
781	006-710-013	12855 GREENHORN ROAD	1.1
782	006-410-066	13788 CALL OF THE WILD LANE	5.03
783	039-190-065	14210 MURPHY PLACE	4.94

784	038-360-049	N/A	4.88
785	006-441-018	13793 CHRISTOPHER ROBIN WAY	3.75
786	006-820-030	13505 GREENHORN ROAD	2.29
787	038-360-030	16874 MEADOW WAY	17.28
788	039-230-066	13275 LOST LAKE ROAD	7.82
789	006-410-062	12050 DOGWOOD ROAD	2.66
790	006-410-043	13952 COLLIER ROAD	8.57
791	006-820-031	13641 GREENHORN ROAD	3.34
792	039-170-064	16004 GREENHORN ROAD	4.88
793	039-180-008	13405 CAMPBELL LOOP	19.83
794	006-820-025	13711 GREENHORN ROAD	1.6
795	039-160-031	14320 BELLE STARR ROAD	10.07
796	039-210-020	17285 GREENHORN ROAD	19.58
797	006-820-004	14093 GLENN PINES ROAD	1
798	038-350-011	16404 JONES RIDGE ROAD	5.54
799	039-200-019	15394 JULIA RANCH ROAD	19.85
800	039-180-026	14230 MILL CREEK LANE	6.47
801	006-441-012	14107 CHRISTOPHER ROBIN WAY	1.75
802	038-350-012	16259 PIONEER RIDGE ROAD	4.54
803	006-410-032	13920 GREENHORN ROAD	4.21
804	039-170-075	15750 GREENHORN ROAD	2.61
805	006-790-003	13139 GREENHORN ROAD	2.14
806	006-700-048	14436 TIM BURR LANE	1.15
807	006-710-012	12813 GREENHORN ROAD	0.72
808	039-230-050	12888 LOST LAKE ROAD	1.5
809	006-830-036	12552 HONEYDEW LANE	5.01
810	012-800-001	N/A	55.1
			4976.0

Master Response 6 - Wildfire Impacts

Comments

A number of comments received on the DEIR focus on the Project's potential to exacerbate wildfire in the area. However, as thoroughly analyzed in Chapter 4.13 of the DEIR, all potential wildfire impacts as a result of the Project, would be mitigated to less than significant.

Discussion

The following section provides a summary of the extensive discussion and analysis of wildfire in Chapter 4.13 of the DEIR.

Existing Environmental Setting

Section 4.13.2 of the DEIR describes the existing wildfire setting for the Project region. Both the Centennial and Brunswick Industrial Sites are located on lands classified as being within a Very High Fire Hazard Severity Zone. (DEIR, p. 4.13-1.) The Project sites are currently served by several fire agencies, which provide both wildland fire and structural fire response. (DEIR, p. 4.13-1.) Additionally, responsibility for wildland fire suppression for both sites is the primary responsibility of the state, given that both the Centennial and Brunswick Industrial Sites are located within State Responsibility Areas. (DEIR, pp. 4.13-1, 4.13-7, Figure 4.13-1.) Nevada County, in which the Project is located, also is home to the Grass Valley Air Attack Base and the Grass Valley Emergency Command Center, both of which are located at the Nevada County Airport in Grass Valley, and which provide emergency services related to wildfires in the region. (DEIR, p. 4.13-8.)

The Project sites vary as to their topography, although the entire Project region does not contain significant slopes (such as those in steep-walled canyons or mountainous valleys). (DEIR, p. 4.13-3.) Pursuant to the Project's baseline, the Brunswick Industrial Site includes approximately 58 acres of forest land, and the Centennial Industrial Site includes up to 10 acres of forest land. (DEIR, p. 4.13-3.) The DEIR discusses the wildfire history for the region surrounding the Project sites and notes that relatively few larger wildfires have occurred in the region over the past three years. (DEIR, pp. 4.13-3 to 4.13-4.)

The DEIR also discusses various fuel treatment efforts that have been ongoing within the Project region. (DEIR, p. 4.13-5.) Figure 4.13-2 of the DEIR depicts the completed, active, and planned fuel treatment projects within the region surrounding the Project site. (DEIR, Figure 4.13-2.) The DEIR recognizes that many of the regional fuel treatment projects are located in steep canyons or ravines, where wildfire risk is increased. (DEIR, p. 4.13-5.)

Regulatory Context

Section 4.13-3 of the DEIR summarizes the federal, state, and local wildfire regulations applicable to the Project. (DEIR, pp. 4.13-8 to 4.13-14.) Among other things, Section 4.13-3 describes the safety standards for buildings and development that the Project must implement, as well as the applicable local wildfire goals and policies in the Nevada County General Plan, Nevada County Emergency Operations Plan, Nevada County Local Hazard Mitigation Plan, and Nevada County Community Wildfire Protection Plan. (DEIR, pp. 4.13-9 to 4.13-14.)

Significance Thresholds

The DEIR includes standards of significance and methodology used to analyze and determine potential Project-specific impacts related to wildfire, consistent with Appendix G of the CEQA Guidelines. (DEIR, pp. 4.13-14 to 4.13-28.) For the purposes of the DEIR, a wildfire impact is considered significant if the Project would:

- Substantially impair an adopted emergency response plan or emergency evacuation plan (**Threshold WF-1**).
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire (**Threshold WF-2**).
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment (**Threshold**

WF-3).

- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes (**Threshold WF-4**).

The DEIR demonstrates that the Project, as mitigated, would not have significant wildfire impacts. The DEIR's analysis in relation to each of these thresholds is summarized below:

Threshold WF-1 (Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan)

The DEIR concludes that the Project would not substantially impair an adopted response plan or emergency evacuation plan, no mitigation is required, and any related Project impacts would be less than significant. (DEIR, p. 4.13-17.)

Nevada County's primary evacuation routes consist of major interstates, highways, and principal arterials identified on the Nevada County General Plan Land Use Map. (DEIR, p. 4.13-15.) Secondary evacuation routes, which provide egress from local neighborhood and communities, consist of routes designated on the General Plan Land Use Map as minor arterial or major collector routes. (DEIR, p. 4.13-15.) Brunswick Road, which is the public road applicable to the Project, is considered a minor arterial route, and thus is considered a secondary evacuation route—not a primary evacuation route—for the County. (DEIR, p. 4.13-15.)

The Project will include the hauling of engineered fill and barren rock by trucks within the Brunswick Industrial Site using only on-site private roads, from the Brunswick Industrial Site to the Centennial Industrial Site using Brunswick Road and Whispering Pines Lane, and/or from the Brunswick Industrial Site off-site to local and regional markets using Brunswick Road to State Route 20/49. (DEIR, pp. 4.13-15 to 4.13-16.) Over the life of the Project, up to 118 haul truck round trips would occur on Brunswick Road during the hours from 6 a.m. to 10 p.m., seven days per week, which equates to approximately 7.4 haul truck round trips per hour on Brunswick Road. (DEIR, p. 4.13-16.)

In the event of a wildfire or other emergency that requires evacuation, the incident command would direct the County Office of Emergency Services to issue an evacuation order and provide related notifications to residents. (DEIR, p. 4.13-16.) If an evacuation order occurs in the vicinity of the Project, such as an evacuation of residents off of Greenhorn Road, the mine would be contacted and asked to temporarily shut down the mine and cease all truck hauling operations. (DEIR, p. 4.13-17.) Ceasing haul truck operations during the emergency evacuation order, in addition to the temporary cessation of mine operations, would ensure that the Project would not have the potential to physically interfere with an emergency evacuation plan. (DEIR, p. 4.13-17.)

Therefore, the Project would not substantially impair an adopted response plan or emergency evacuation plan, no mitigation is required, and any related Project impacts would be less than significant. (DEIR, p. 4.13-17.)

Threshold WF-2 (Due to Slope, Prevailing Winds, and Other Factors, Exacerbate Wildfire Risks, and Thereby Expose Project Occupants to, Pollutant Concentrations from a Wildfire or the Uncontrolled Spread of a Wildfire)

The DEIR concludes that, with the implementation of Mitigation measure 4.13-2 (Vegetation Management Plan), the Project's potential wildlife impacts would be reduced from potentially significant to less than significant. (DEIR, p. 4.13-22.)

The Brunswick and Centennial Industrial Sites vary as to their topography, and although less than 7 acres of steep slopes (equal to or greater than 30%) occur on the Brunswick Site and approximately 4 acres of steep slopes occur on the Centennial Site, both sites do not contain any significant slopes, such as those in steep-walled canyons or mountainous valleys. (DEIR, p. 4.13-17.)

With respect to prevailing winds, the predominant wind direction at the Project site area is from the North-East and South-West directions, which suggests that a fire burning in the forest terrain southwest of the Project could burn through the Sites due to prevailing southwesterly winds. (DEIR, p. 4.13-17.)

Although the Project includes approximately 58 acres of forest land at the Brunswick Industrial Site and up to 10 acres of forest land at the Centennial Industrial Site, according to the Project's baseline, the Project proposes to remove approximately 6.5 acres of the 58 acres of forest land on the Centennial Industrial Site and 18.5 acres on the Brunswick Industrial Site. (DEIR, p. 4.13-18.) Thus, the proposed project would result in the removal of approximately 25 acres of forest land, in addition to the removal of other mid- to low-level vegetation. (DEIR, p. 4.13-18.) The DEIR concludes that a reduction in on-site vegetation would result in a concomitant reduction in fuel sources, and thus, a reduction in wildfire hazard. (DEIR, p. 4.13-18.)

Additionally, multiple ongoing and planned fuel treatment projects are located in the Project region, which would further reduce wildfire risk in the Project area. (DEIR, p. 4.13-18.)

The Project is also subject to a Fire Protection Plan (FPP), which among other things requires the implementation and maintenance of two defensible space zones around the proposed industrial buildings on the Brunswick Industrial Site, within the property boundaries, as shown in Figure 4.13-3 of the DEIR. (DEIR, p. 4.13-18.) The 30-foot Zone 1 defensible space would be paved with asphalt with the exception of two small areas adjacent to the covered conveyor and to the office and warehouse, resulting in no high fuel load areas present in Zone 1. (DEIR, p. 4.13-18.) All dead or dying vegetation would be removed from the Zone 1 area during grading and other construction activities, no dead tree or shrub branches would be present in proximity to planned buildings, no firewood piles are proposed at the Project site, and flammable vegetation or other items would be prohibited from being placed adjacent to buildings. (DEIR, p. 4.13-18.) The 100-foot Zone 2 defensible space would similarly be paved with asphalt, except for areas of existing vegetation in the perimeter of the area, and no high fuel load areas would be present in Zone 2. (DEIR, p. 4.13-20.) The Project would create horizontal and vertical spacing among shrubs and trees utilizing either or both of the Fuel Separation or Continuous Tree Canopy methods, in accordance with the State Board of Forestry and Fire Protection's applicable guidelines for defensible space. (DEIR, p. 4.13-20.) The Project site will not be allowed to exceed a maximum depth of three inches as to loose surface litter (e.g., fallen leaves or needles, twigs, bark, cones, small branches) and a maximum height of four inches as to annual grasses and forbs. (DEIR, p. 4.13-20.)

Given that the Brunswick Industrial Site is located within a Very High Fire Hazard Severity Zone, the proposed structures on the Site will comply with all applicable fire safety standards in Chapter 7A of the California Building Code, including but not limited to using ignition-resistant materials, fire-intrusion design of roofing and vents, and glazed exterior windows and doors, as well as complying with all fire code requirements set forth by the California Building Code and the California Fire Code, as determined by the County Fire Marshal at the building permit stage. (DEIR, p. 4.13-20.)

The Project will also include the installation of a fire flow system that would connect to the 18-inch Nevada Irrigation District water main in Brunswick Road, which would be reviewed by the County Fire Marshal to ensure that the fire flow system meets California Fire Code requirements. (DEIR, p. 4.13-20.)

Any use of explosives in connection with the Project would comply with applicable federal and state laws at all times, to help ensure that a significant hazard to the public or the environment through routine transport, storage, or use of explosives would not occur. (DEIR, p. 4.13-21.) Moreover, the storage and use of explosives would only occur underground at the Brunswick Industrial Site, and thus an unexpected explosive event would not be likely to exacerbate any above-ground wildfire risks. (DEIR, p. 4.13-21.)

The DEIR addresses public comments made during the Notice of Preparation review period concerning potential wildfire risks associated with the dewatering of the mine. (DEIR, p. 4.13-21.) Commenters suggested that the reduction of groundwater levels and associated drying of surface vegetation would exacerbate wildfire risk. (DEIR, p. 4.13-21.) However, the existing groundwater surface in the areas away from the creeks is below the typical depth of rooted vegetation and tap roots from trees, especially during the drier months. (DEIR, p. 4.13-21; please also see Master Response 33 – Groundwater Dependent Vegetation.) Further discharge of treated water to South Fork Wolf Creek would prevent the lowering of groundwater levels along the creek because the full dewatering volume would be discharged, whereas only a small fraction of the groundwater would come from the creek area. (DEIR, p. 4.13-21.) The potential increased recharge due to the enhanced base flow in South Fork Wolf Creek would more than offset any effects from dewatering in the area near the creek. (DEIR, p. 4.13-21.) The DEIR therefore concludes that the dewatering of the mine would not affect the available moisture for vegetation in the Project area and would not increase fire risk due to reduced groundwater levels. (DEIR, p. 4.13-21.)

Overall, with respect to this threshold, the DEIR concludes as follows:

> The Centennial and Brunswick Industrial Sites have limited steeply-sloping topography that is known to exacerbate wildfire risk and spread. Prevailing wind conditions within the surrounding area are from the North-East and South-West directions, both of which have forest lands. The incorporation of defensible space around proposed structures at the Brunswick Industrial Site, as well as designing buildings in conformance with Chapter 7A of the CBC, would help to slow the spread of wildfire moving through the area. In addition, proposed improvements at both Sites would reduce the vegetation fuel load in the area. Nevertheless, vegetation would remain on both Sites and would need to be managed on an ongoing basis. In addition, use of hydrocarbon-powered heavy-equipment on-site could exacerbate wildfire risk. Without implementation of a vegetation management plan, the proposed project could have a significant impact related to exacerbating wildfire risks, and thereby exposing project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. (DEIR, p. 4-13.22.)

Therefore, to mitigate against any significant wildfire impacts, the Project will be required to implement a comprehensive Vegetation Management Plan for both the Brunswick and Centennial Industrial Sites, for the duration of the Project. (DEIR, p. 4.13-20, Mitigation Measure 4.13-2 [DEIR, pp. 4.13-22 to 4.13-23].) Local fire agencies, including CAL FIRE, have concluded that ongoing implement of the Vegetation Management Plan would reduce wildfire risks to the Project to a less-than-significant level. (DEIR, p. 4.13-20.)

The result of implementing Mitigation Measure 4.13-2 (Vegetation Management Plan) is the reduction of the Project's potential wildfire impacts from potentially significant to less than significant. (DEIR, p. 4.13-22.)

Threshold WF-3 (Require Installation or Maintenance of Associated Infrastructure That May Exacerbate Fire Risk or Result in Temporary or Ongoing Environmental Impacts)

Although the proposed project would include installation of various infrastructure components, none of the improvements would be expected to exacerbate wildfire risk or otherwise result in significant environmental impacts. (DEIR, pp. 4.13-24 to 4.13-25.) In analyzing this significance threshold, the DEIR acknowledges that certain improvements generally may have the potential to exacerbate wildfire risk under certain conditions, such as the extension of the overheard power line along Brunswick Road if the line comes in contact with tree limbs or overhanging vegetation, or the installation of two, 12,000-gallon above-ground diesel fuel storage tanks on the Brunswick Industrial Site. (DEIR, p. 4.13-24.) However, given that the installation of these improvements would comply with all applicable laws and regulations, and taking into account the location of the storage tanks (e.g., the storage tanks at the Brunswick Industrial Site will be located in the industrial building complex, away from existing and proposed vegetation), the improvements would not be expected to exacerbate wildfire risks or result in significant environmental impacts. (DEIR, p. 4.13-24.)

Therefore, no mitigation is required as to this threshold, and any related Project impacts would be less than significant. (DEIR, p. 4.13-25.)

Threshold WF-4 (Expose People or Structures to Significant Risks, Including Downslope or Downstream Flooding or Landslides, as a Result of Runoff, Post-Fire Slope Instability, or Drainage Changes)

In evaluating this threshold, the DEIR analyzed data from the 2017 McCourtney Fire, which occurred approximately 3.5 miles south/southwest of the Project area and burned approximately 76 acres. (DEIR, pp. 4.13-25 to 4.13-26.) The post-fire debris-flow assessment performed by the U.S. Geological Service concluded that the potential for debris flow occurrence within on-site drainages is low, at 0-20 percent. (DEIR, p. 4.13-26.) The topography and vegetation of the region affected by the McCourtney Fire are generally similar to the Project region, and the DEIR reasonably concludes that one can apply these conclusions to the Brunswick and Centennial Industrial Sites given that they similarly lack substantial steep topography and include mildly incised drainages. (DEIR, p. 4.13-26.) Moreover, although the engineered fill pads would constitute the largest slopes on the Project sites, the proposed slopes would be relatively gradual at 3:1 (H:V), the fill material would comprise a flexible composite range of blast rock and sand tailings produced underground, and the inclusion of silt into the materials would provide additional cohesion and increase the friction angle of the fill. (DEIR, p. 4.13-26.) The Project also would include drainage facilities to capture runoff prior to entering the creeks, thus minimizing flooding potential downstream. (DEIR, p. 4.13-26.)

Therefore, the probability for post-fire debris flows at the Project Sites is low, no mitigation is required as to this threshold, and any related Project impacts would be less than significant. (DEIR, p. 4-13.26.)

Conclusion

As demonstrated in the DEIR, all potential wildfire impacts for the Project, as mitigated, would be less than significant and the Project will not substantially impact any adopted emergency response plan or emergency evacuation plan.

Master Response 7 - Location of Future Mining Areas

Comments

Several commenters state that the DEIR does not evaluate the project's proposed underground mining operations within the entire mineral rights area, and thus, the DEIR is inadequate. Common concerns related to this general assertion is that the DEIR's groundwater modelling is inadequate and the extent of vibrations associated with underground mining is underestimated

Discussion

Economic gold mineralization does not exist everywhere within the applicant's mineral rights area at 500 feet below surface, and is only in discrete areas; thus, mining would not occur everywhere within the mineral rights area. As such, analysis of mining the entire mineral rights area is not supported by the known geology and is speculative.

DEIR Adequately Evaluates Potential Groundwater Effects from Underground Mining

New underground mining excavations, used for the analysis of groundwater impacts, is based upon information provided by the applicant, as shown on Figures 5-1 of Appendix K.3 and Sheet 15 of Appendix K.2. As shown in these figures, assumed mining areas are based on the projected down-dip extensions to mineralized veins historically mined. The mining depths analyzed in the groundwater model were based on the applicant's intended mining plan, which is focused on the areas where gold mineralization was actually encountered, at depths deeper than 1,000 feet below the surface.

Itasca analyzed the impacts of variations in the location of future mine workings. Sensitivity Scenario 6 considered the significant expansion of mining in areas with potential for mineralization, as shown in Figure 5.10 of Appendix K.3. As shown in Figure 5-12, the major mining expansion studies in Scenario 6 did not result in a significant expansion in the simulated 5-foot drawdown contour versus the base case. As stated on page 31 of Appendix K.3, it is expected that the actual mining areas will change from the modeled mining areas due to vein geometry and discoveries, which will only be known after extensive underground exploration is completed in the future. Itasca recommends that the groundwater flow model be updated periodically after dewatering commences. Updated modeling would incorporate changes to the long-term mining plan, data from monitoring wells, and measured pumping rates. The DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the Project could result in a significant impact to groundwater supplies.

Nonetheless, to address public concerns regarding the scope of future mining within the mineral rights area, the applicant has agreed to an enforceable condition of approval that will limit the area of permitted underground mining to a smaller area within the mineral rights area (shown on maps A101, A201 and A202), and will also prohibit blasting closer than 500 feet below ground

surface except for construction of the service shaft. The condition of approval language is provided below:

> *Except for the construction of the proposed Service Shaft, all underground blasting for production, tunnelling, and raising would take place more than 500 feet below ground surface and no underground mining will take place outside of the area denoted on the maps included in Appendix A of the Final EIR.*

A Groundwater Monitoring Plan (GMP) is required for the Project under Mitigation Measure 4.8-2(a). Ongoing groundwater monitoring would be required, and groundwater-level information shall be obtained from the project groundwater monitoring wells and collected on a quarterly basis and submitted in report form to the Nevada County. Mitigation Measure 4.8-2(b) requires that if it is determined based on the GMP that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the Project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted, and if necessary, providing an immediate water supply until the source of the problem is determined and rectified. As stated in Mitigation Measure 4.8-2(a), groundwater monitoring is required on an ongoing basis. Therefore, changes in locations of mine workings, and the effect on groundwater levels at surface, would be observed by the GMP and replacement water would be required. The GMP is designed to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented.

DEIR Adequately Evaluates Potential Blasting Vibration and Noise from Underground Mining

Blasting vibration are analyzed in Section 4.10 of the DEIR. As discussed in the DEIR and in Appendix M, except for the construction of the proposed Service Shaft, all underground blasting for production, tunnelling, and raising would take place more than 500 feet below ground surface. A condition of approval for this blasting depth restriction has been included in the Final EIR, as discussed above. As discussed in section 4.10-4 of the DEIR and the PBS Technical Report, a maximum of 0.23 inches per second vibration is modelled where a longhole blast could occur directly beneath a receptor at 500 feet depth. Notwithstanding the rarity of this situation, such a blast might occur every three or four days between shift changes (7AM and 7PM) and would last for only seconds. At 500 feet depth and a horizontal offset of 1400 feet, such a longhole blast would be undetectable by blasting seismograph (PPV <0.05 in/sec). Regular drift round blasting, occurring approximately twice daily over several seconds, is modelled to result in a maximum of 0.14 inches per second vibration at a depth of 500 feet directly beneath a receptor. At 500 feet depth and a horizontal offset of 900 feet, a drift round blast would be undetectable by blasting seismograph (PPV <0.05 in/sec). Historic mining was completed to approximately 1600 feet depth and the majority of future mining is expected to be below the historic mine surface area. At this distance, regular drift round blasting and longhole blasts would be undetectable by blasting seismograph (PPV <0.05 in/sec) at receptor locations directly above the blast location. Several commenters have expressed concern about noise from blasting and the effect of this noise based on the location of mining underground. As opposed to vibration, audible noise from underground blasting can only propagate to surface from through the mine tunnels and shafts. Therefore, noise impacts from blasting are relative to a receptor's proximity to the shaft headframes at the Brunswick Site and not the location of the underground workings. As stated on page 4.10-44 of the DEIR, the noise from blasting is less than significant even for the closest receptors to the Brunswick shaft headframe.

Conclusion

The DEIR (Chapters 4.8 and 4.10) adequately evaluates the potential environmental effects that could result from the project's reasonably anticipated underground mining operations, including effects to groundwater and noise and vibration, and concludes that impacts would be less-than-significant with implementation of mitigation. Nonetheless, to address public concerns regarding the scope of future mining within the mineral rights area, the applicant has agreed to an enforceable condition of approval that will limit the area of permitted underground mining to a smaller area within the mineral rights area, as shown on maps A101, A201 and A202 in Appendix A to this Final EIR, and will also prohibit blasting closer than 500 feet below ground surface except for construction of the service shaft.

Master Response 8 - Mine Waste Characterization

Comments

The County received several comments asserting that the waste characterization conducted on samples from the Project site is inadequate and that further testing should be done before the project is approved, in an effort to ensure water quality impacts do not ensue from stormwater runoff at engineered fill sites.

Discussion

As discussed below, geochemical testing was already conducted on samples from the Project site to assess impacts to water quality. Moreover, the DEIR requires that a report of waste discharge (RoWD) be submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB), and approval of Waste Discharge Requirements (WDRs) prior to placement of any mine waste. Significant additional testing of rock material will be required as part of the process of obtaining WDRs from the CVRWQCB. Given the geochemical testing that has already been conducted to characterize the water quality impacts of engineered fill and cemented paste backfill placement, and the further waste characterization that will be required as part of the WDRs approval process, additional testing is not required for the purposes of CEQA.

Section 4.8.4 of the DEIR provides an analysis of the environmental impact from mine wastes produced by the proposed Idaho-Maryland Mine Project. The impact to water quality from mine waste is considered potentially significant for the purposes of the DEIR's analysis, and mitigation is necessary to reduce the impact to less than significant. (see DEIR, Impact 4.8-1; Mitigation Measures 4.8-1(a) to 4.8-1(e).) These mitigation measures (4.8-1(a) to 4.8-1(e)) require the applicant to submit a RoWD and receive an approved Waste Discharge Requirement (WDR) from the CVRWQCB prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)).

The Project would be subject to California mining waste regulations as discussed on pages 4.8-28 and 4.8-29 of the DEIR. Barren rock, sand tailings, and cemented paste backfill will be considered mining waste under California Water Code Section 13050(q)(1) and Title 27 of the California Code of Regulations (CCR), Sections 22470 et seq. and therefore subject to regulation and oversight by the CVRWQCB prior to placement of mine waste.

Section 4.4 of Appendix K.2 of the DEIR provides geochemical testwork conducted on tailings and barren rock samples from the project. Testwork included Acid Based Accounting (ABA), Total Metals, and California Waste Extraction Testing (WET). The Waste Extraction Test (WET) should be used to determine the amount of extractable substance in waste rock (CCR Title 22 Division 4.5, Chapter 11, Article 5, Appendix II). The overall purpose of the barren rock and tailings sampling and laboratory analysis was to identify the general characteristics of that specific

material type. As such, the results of the barren rock and tailings testing provide reliable and representative results for consideration in the DEIR and for assessment of the potential effects of the use of that material for engineered fill and cemented paste backfill.

The analysis and testwork used in the preparation of the DEIR is for the purposes of analyzing the water quality impacts of the project consistent with the California Environmental Quality Act (CEQA) but is not intended to be a RoWD. Further testing of material will be required prior to submittal of a RoWD; however, a RoWD is not required at this stage of the project. Some commenters requested that additional testwork be completed as part of the CEQA analysis similar to what will be required for the RoWD; however, the testwork already completed is sufficient to assess project impacts, and engineering level detail is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.) Based on the results of the testwork, the DEIR concludes that the effect of the proposed actions on water quality would be potentially significant. The mitigation measures, as confirmed in the April 4, 2022 comment letter from the Central Valley Water Board, identify the steps that must be taken to reduce the potential impacts to less than significant. The engineering details and intensive sampling described by many commenters would be developed and completed through the implementation of mitigation measures, and is not required to be completed as part of the CEQA process. The final determination of classification is done when the RoWD is submitted and an approved WDR is received from the CVRWQCB as required in Mitigation Measures 4.8-1(d) and 4.8-1(e). The RoWD would be prepared and submitted in compliance with CCR Title 27 Sections, 21710-21760. (CCR Title 27 Section 22470(a)). The WDR will incorporate the necessary construction, monitoring, and closure of the waste management unit, based on the waste characterization, in order to protect water quality.

As described in Section 3.7 of the DEIR, underground exploration would take place after mine dewatering is complete and throughout the life of the mine. Exploration would be done primarily with diamond core drilling throughout the mine area. Exploration would produce core samples that would be brought to the surface for analysis to determine future mining areas. Metallurgical testing would be conducted to create representative tailings samples and cemented paste backfill sample for WET testing.

The CVRWQCB requires that the sample material used for a waste characterization is representative of the entire range of mining waste discharged. Therefore, consistent with CVRWQCB requirements, a sampling plan that addresses representative sampling of the mining waste would be submitted to the CVRWQCB prior to sampling and the CVRWQCB will be notified when the samples are to be collected so that they may observe the process. (see CVRWQCB website Submitting a Report of Waste Discharge – CVRWQCB 2022). Collection of field samples and subsequent testing of the expected mining waste would be based on clearly defined objectives identified in a sampling plan, approved by the CVRWQCB, prepared by professional(s) registered to practice in California in the field of engineering or geological sciences (see appropriate professional CCR Title 27 Section 21710 (d).

Waste characterization testing that will be used in a RoWD must be performed by California certified labs. A California certified lab is a lab accredited by the California Environmental Laboratory Accreditation Program. (see CVRWQCB website Submitting a Report of Waste Discharge – CVRWQCB 2022). The WET would be used to determine the amount of extractable substances in waste rock and Acid Generation Potential testing must also be performed to determine whether the material has the potential to generate acid (see Tech Note Mining Waste Characterizations - CVRWQCB 2008).). Further analysis may be required using kinetic testing, which would help determine the mining waste potential for long term acid generation (see Tech

Note Mining Waste Characterizations - CVRWQCB 2008). The waste characterization would be done to the satisfaction of the CVRWQCB to allow them to approve the WDR.

Mining Waste is classified in accordance with CCR Title 27 Section 22480(b) as Group A, Group B, or Group C mining wastes based on an assessment of the potential risk of water quality degradation posed by each waste.

Group A

- Mining wastes of Group A are wastes that must be managed as hazardous waste pursuant to Chapter 11 of Division 4.5, of Title 22 of this code, provided the CVRWQCB finds that such mining wastes pose a significant threat to water quality.

Group B

- Mining wastes that consist of or contain hazardous wastes, that qualify for a variance under Chapter 11 of Division 4.5, of Title 22 of this code, provided that the CVRWQCB finds that such mining wastes pose a low risk to water quality; or
- Mining wastes that consist of or contain nonhazardous soluble pollutants of concentrations which exceed water quality objectives for, or could cause, degradation of waters of the state.

Group C

- Mining wastes from Group C are wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity.

The testwork conducted in connection with preparation of the DEIR demonstrates that the engineered fill and cement paste backfill will likely be considered Group C mining waste. However, the waste characterization conducted as part of the RoWD for the project will provide the basis for which features, operation plans for waste containment, precipitation and drainage controls, are required for the project in accordance with CCR Title 27 Section 22490. As part of the WDRs, the mine operator will also be required to conduct water quality monitoring in accordance with CCR Title 27 Section 22500 and closure and post closure maintenance plans in accordance with CCR Title 27 Section 22510.

CVRWQCB Permitting over 80-Year Use Permit Term

Several comments have been received on ongoing waste characterization requirements throughout the 80-year term of the Use Permit. In accordance with CCR Title 27 Section 21710(a)(4), once WDRs for a mining waste unit have been issued, the CVRWQCB must be notified of any material change in the types, quantities, or concentration of mining wastes discharged within a reasonable time before those changes are made effective. Therefore, as exploration and mine planning continue throughout the life of the mining operation any changed or updated information would be provided to the CVRWQCB and in some cases incorporated into the WDRs.

As discussed in Master Response 11 – Location of Future Mining Areas, the RoWD must also include a report on the physical and chemical characteristics of the waste, in compliance with Water Code section 13260(k), that could affect its potential to cause pollution or contamination as well as a report that evaluates the potential of the discharge of mining waste to produce, over the long term, acid mine drainage, the discharge or leaching of heavy metals, or the release of other hazardous substances. The WDR's will require continuous and routine characterization and



classification (Cal Code regs Title 27 section 22480(b)) of the mining waste to evaluate any possible changes in the geological or geochemical nature of the waste. The applicant will prepare and implement a Waste Characterization Plan (Characterization Plan) which will be incorporated into the approved WDR. The purpose of the Characterization Plan is to continually evaluate the different forms of mining wastes and to appropriately classify these wastes as Group A, Group B, or Group C based on an assessment of the potential risk of water quality degradation posed by each waste. Through the WDR these wastes will be required to be managed, treated, stored, or disposed of in a manner that is protective of water quality. The applicant shall not sell or utilize waste rock and tailings from the Project for construction aggregate or fill purposes offsite (i.e. sites other than the applicants Brunswick and Centennial sites) unless such material has been tested and confirmed to qualify as Group C mining waste under California Code of Regulations Section 22480 and the approved WDR. The specific methods, volumes and frequency of characterization will be established in the approved WDR. Mitigation Measure 4.8-1(e) has been revised in this Final EIR to more clearly reflect the above ongoing waste characterization requirements (please see Master Response 11 for more detail).

Finally, in accordance with CCR Title 27 Section 21720 (f), the discharger is required to maintain records of the volume and type of each waste discharged at each unit and the manner and location of the discharge. These records shall be available until the waste unit is closed and available for review by the CVRWQCB. Therefore, as mining waste is produced it would require continuous inventory and testing in accordance with the approved WDR. In accordance with CCR Title 27 Section 21720 (c), Unit classifications and WDRs for existing Units would be fully reviewed in accordance with schedules established by the CVRWQCB and specified in the WDR.

Conclusion

California Waste Extraction (WET) testing was performed on samples of mine materials and the results of these tests suggest the engineered fill (barren rock and sand tailings) will be a Group C mining waste. Nonetheless, the DEIR has concluded that the project may have a potentially significant impact on water quality and has identified Mitigation Measures 4.8-1(d) and 4.8-1(e) to address these potential impacts and reduce the impact to less than significant. The purpose of the Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board is to ensure the effluent from mine waste does not impact water quality. Further testing will be required as part of the RoWD and WDR process as required by Mitigation Measures 4.8-1(d) and 4.8-1(e) such that any impacts will be mitigated. WDRs for the Project will require ongoing waste characterization, monitoring, and reporting to ensure compliance.

References

Central Valley Regional Water Quality Control Board (CVRWQCB). (2022). *Submitting a Report of Waste Discharge. Accessed May 2022.*
https://www.waterboards.ca.gov/centralvalley/water_issues/mining/report_waste_discharge/index.html

Central Valley Regional Water Quality Control Board (CVRWQCB). (2008). *Tech Note Mining Waste Characterizations. Accessed May 2022.*
https://www.waterboards.ca.gov/centralvalley/water_issues/mining/mine_waste_technote.pdf

Master Response 9 - Historical Mine Waste at Centennial Site

Comments

Several commenters asserted that the chemical characteristics of the historic mine waste on the Centennial site that is being cleaned up as a separate project under the jurisdiction of DTSC, is

evidence that the waste rock from the Project will lead to water quality impacts and impacts to human health. Several commenters have also incorrectly asserted that the Centennial Site is either designated or under consideration to be listed as a "Superfund" site under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) by the USEPA.

Discussion

The Centennial Industrial Site was the location used for the storage of mine tailings by the historical mining operation. Detailed evaluations of these historical mine wastes are provided in the Preliminary Endangerment Assessment (PEA) and Draft Final Remedial Action Plan (RAP) for the Centennial M-1 Property. These reports were prepared pursuant to a Voluntary Cleanup Agreement (VCA) between Rise Grass Valley Inc. and the California Environmental Protection Agency Department of Toxics Substances Control (DTSC). These reports have been reviewed by and have received technical approval from the DTSC. The VCA project is a separate project from the Idaho-Maryland Mine Project. See Master Response 4, Cleanup Project is a Separate Project Under CEQA.

Elevated Metals in Historical Mine Waste

Elevated metal concentrations are present in certain areas of the historical mine waste, and these portions of the mine waste are to be consolidated and capped to reduce the potential for future routine contact and human health risk. The plan and objectives presented in the RAP are to excavate, consolidate, and cover these materials to eliminate these potential health risks. Figure 5, which is reproduced from the RAP, shows the areas (hatched in yellow) where the cleanup of materials with elevated metals is proposed. The historic rock dam contains the majority of the materials where elevated metals are present in historic mine waste. These excavation areas (ETP-E and WTP-N), total 118,000 cubic yards or 86% of the 138,000 cubic yards of material proposed to be remediated in the RAP and 26% of the total 534,000 yards of historical mine waste present in assessment areas of the site. Figure 6 shows a labeled historic aerial photograph of the tailings facility which is reproduced from the RAP. A rock berm was built (label 8) across the northern side of the property by the historical operator in order to contain the tailings produced by mineral processing. The construction of this rock berm commenced in 1920 and was constructed from waste rock produced from the underground mine before 1920. The operations report for 1920 discusses this and states "Tailings Impounding Dam: The waste rock from the mine is being utilized for the construction of this dam, the cost of which is nominal for the reason that the waste dump proper is now large, requiring long tracks and is constantly decreasing in height as the rill rises rapidly in the direction in which the dump is being extended. The dam completed will impound 1,400,000 cubic yards of tailings. The proposed dam, etc. has been submitted to the Debris Commission and accepted by them as satisfactory." (IMMC 1921)

During the historic era of mining virtually all exploration was done by tunneling in mineralized veins in order to locate ore shoots with economic gold values. Therefore, the waste rock produced in this era of mining, and used in the construction of the tailing's berm, is composed of mineralized material with low gold values but elevated metals due to the presence of sulfides (such as pyrite). Sheet 9 of Appendix K.2 of the DEIR shows the shallow historical mine workings and illustrates how almost all tunnelling was conducted in mineralized veins. As described in Section 3.7 of the DEIR, the proposed development tunnels, which will be used to provide access to gold-bearing veins, will be constructed in non-mineralized rock (barren rock) outside of mineralized zones. Gold mineralization would be located and delineated by exploration core drilling. Therefore, the great majority of waste rock produced by the proposed Idaho-Maryland Mine Project will be unmineralized barren rock rather than the mineralized waste rock produced by the historical mine.

Approximately 37.1 acres of the 56.4-acre Centennial Site are occupied by former tailings ponds, which are separated into two primary assessment areas: Eastern Tailings Pond (ETP) and Western Tailings Pond (WTP). The ETP is located closer to the historical off-site gold ore processing facility and was reportedly constructed first, during the early days of the mining operation when the mercury amalgamation process was used to recover gold. The WTP was reportedly constructed later, when the cyanide recovery process was used to recover gold (NV5 2021).

The majority of the historical mine tailings do not contain significantly elevated metals except for certain hot spots in the western and eastern tailing ponds. These excavation areas (Hot Spots), total 15,800 cubic yards or 11% of the 138,000 cubic yards of material proposed to be remediated in the RAP, 6% of the 263,000 yards of tailings contained in the western (WTP) and eastern tailings (ETP) pond assessment area, and 3% of the total 534,000 yards of historical mine waste present in assessment areas of the site. Figure 5 (included in this master response below), which is reproduced from the RAP, shows the hot spot locations (circles hatched in yellow) where the cleanup of tailings materials with elevated metals is proposed in the separate DTSC project.

One small area, TP19 Hot Spot, was proposed to be treated and neutralized by the addition of cement. The volume of TP19 was estimated at 4,200 cubic yards which is less than 1% of the total 534,000 yards of historical mine waste present in the assessment areas at the site (NV5 2021). CVRWQCB staff concurs with the proposed treatment of the TP19 Hot Spot material (CVRWQCB 2021).

The Western Tailings Pond (WTP) contains the sand tailings derived primarily from processing by ball milling and flotation processing, from 1936 to 1956. Table 2b of the RAP shows total metals concentrations from samples taken at the Centennial Site sorted by area. As shown in Table 2b of the RAP, despite the inclusion of sulfide minerals that would not be present with the proposed processing method, metal values from 41 samples of the historical tailings in the WTP are low. For example, arsenic values range from 1.8 to 28 ppm and average approximately 7 ppm.

During the CEQA process for the RAP, NV5 submitted 19 samples retained from the PEA sampling program to EMSL Analytical Inc. in San Leandro California for CARB 435 (Polarized Light Microscopy) PLM asbestos testing. These samples are distributed across the Centennial Site and represent approximately 37 acres or 2 acres per sample. All 19 samples were <0.25% asbestos by PLM. NV5 submitted 10 samples retained from the PEA sampling program to EMSL for TEM asbestos testing using method EPA 600/R-93/116. No asbestos structures were present in 7 samples from the western tailings area. Three samples from the eastern tailings area had detectable asbestos ranging from 8.1 x10^7 to 2.1 x10^8 structures per gram and <0.01% to 0.02% asbestos by weight.

Centennial Site is Not a Superfund Site

The Centennial Site has never been on the National Priorities List[1] (A "Superfund site"). The Centennial Site has never been proposed to be placed on the National Priorities List (NPL). The USEPA has prepared a Site Inspection Report in 2019 for the Centennial site but did not score the site using the Hazard Ranking System (HRS). The HRS is the primary method used to place sites on the NPL, and sites receiving a HRS site score of 28.50 or greater are eligible for placement on the NPL[2]. Even if the USEPA later decided to score the Centennial Site using the HRS, the site would not likely meet the criteria for placement on the NPL, as discussed below.

[1] https://www.epa.gov/superfund/superfund-national-priorities-list-npl
[2] https://www.epa.gov/superfund/about-superfund-cleanup-process#pasi

The HRS uses a structured analysis approach to scoring sites that assigns numerical values to factors that relate to risk based on conditions at the site. The factors are grouped into three categories: (1) likelihood that a site has released or has the potential to release hazardous substances into the environment; (2) characteristics of the waste (e.g., toxicity and waste quantity); and (3) people or sensitive environments (targets) affected by the release. In this case, the Centennial Site would not score highly on the HRS because: as to factor one, it has a limited likelihood of releasing hazardous substances into the environment given that the material has been in place for many decades; as to factor two, the waste at issue (arsenic) is naturally occurring in the region, and is not of a particularly high quantity or toxicity given its concentration; and as to factor three, the site is not used by people and is not a sensitive environment. As such, the Centennial Site is unlikely to be considered eligible for inclusion on the NPL. Moreover, the Centennial Site would need to be scored using the HRS and then go through subsequent processes before being selected for listing on the NPL. Given that the USEPA has not chosen to score the site using the HRS, it can be reasonably inferred that the USEPA also has concluded that the site would not likely score high enough to be placed on the NPL.

Project is Different than Historical Mining

Early mineral processing at the historical mine solely used stamp mills and mercury amalgamation to recover gold, and all tailings were placed into the Eastern Tailings Pond. In the mid 1930's a new processing plant was constructed which utilized a ball mill for grinding and flotation plant. The tailings produced from flotation were pumped to the tailings pond and sulfide concentrates produced by flotation were leached with cyanide to produce gold dore (bricks) with the residual material (sulfide concentrate) pumped to the tailings pond (Clark 2005). These historical (and less efficient) processing methods are believed to be the primary source of the hot spots in the tailings ponds. As described in Section 3.7 of the DEIR, mineral processing for the proposed Idaho-Maryland Mine Project uses a flotation plant to remove the majority of sulfide minerals which would be recovered in the sulfide mineral concentrate for shipment off-site. The Project does not use mercury or cyanide in gold processing. As disclosed in Appendix K.2 of the DEIR, sulfide sulfur recoveries to the flotation concentrate during testwork ranged from 92.9% to 96.3%.

The historical mine waste at the Centennial Site was derived from production from the period from 1920 -1956 and therefore is representative of a substantial portion of the historical mine's production. Unlike historical mining, the proposed Idaho-Maryland Mine Project would not produce large quantities of mineralized waste rock and would remove most sulfide minerals from the sand tailings before the sand tailings are placed as engineered fill. The proposed project is intended to produce mine waste with lower sulfide and metal content than those produced historically.

Given that the proposed future mine waste will by nature and by process design be less mineralized than the historical mine waste, the future mine waste will likely also be classified as Group C waste. Regardless of the future waste classification, the future placement of mine waste as engineered fill will be subject to regulation under the California Code of Regulations (CCR) Title 27, which sets forth requirements pertaining to the discharge of mine waste to land and requires the development of Waste Discharge Requirements (WDRs) by the CVRWQCB.

Prior to development of WDRs and placement of future mine waste as engineered fill, and pursuant to CCR Title 27 and the California Water Code, the CVRWQCB will require:

- A report on the physical and chemical characteristics of the waste and its potential to cause pollution or contamination;
- A report that evaluates the potential for acid mine drainage, discharge or leaching of

heavy metals or the release of other hazardous substances; and
- A detailed plan and management strategy for the placement of mine waste as engineered fill that prevents the pollution or contamination of the waters of the state.

The WDRs will include requirements for routine sampling and analysis of mine waste during operation of the mine to verify the mine waste characteristics and classification under CCR Title 27. Please refer to Master Response 8 – Mine Waste Characterization, for further discussion.

Furthermore, the DTSC will require that mine waste placed at the site be protective of human health by meeting the cleanup goals established in the RAP for the historical mine waste.

Conclusion

This master response demonstrates that the proposed project can be distinguished from historical mining in manner of process methods (e.g., no use of mercury or cyanide) and tunnelling methods (e.g., tunneling in barren rock as opposed to historical tunneling in mineralized veins with elevated metals), which supports the DEIR's conclusion that the project's potential water quality impacts (i.e., App. G X(a)) from generation and deposition of waste rock would be less-than-significant with implementation of mitigation measures.

References

Central Valley Regional Water Quality Control Board (CVRWQCB). (2021). *Review of Draft Final Remedial Action Plan Centennial M-1 Property, Nevada County.* Sacramento, California

Idaho Maryland Mines Company (IMMC). (1921). *Report of Operations of the Idaho Maryland Mines Company from January 1st 1920 to December 31st 1920.* Grass Valley, California

Jack Clark (Clark). (2005). *Gold in Quartz The Legendary Idaho Maryland Mine.* Grass Valley California

NV5 (NV5). (2021). *Draft Final Remedial Action Plan Centennial M-1 Property.* Grass Valley, California

Figure 5
Cleanup Areas from RAP

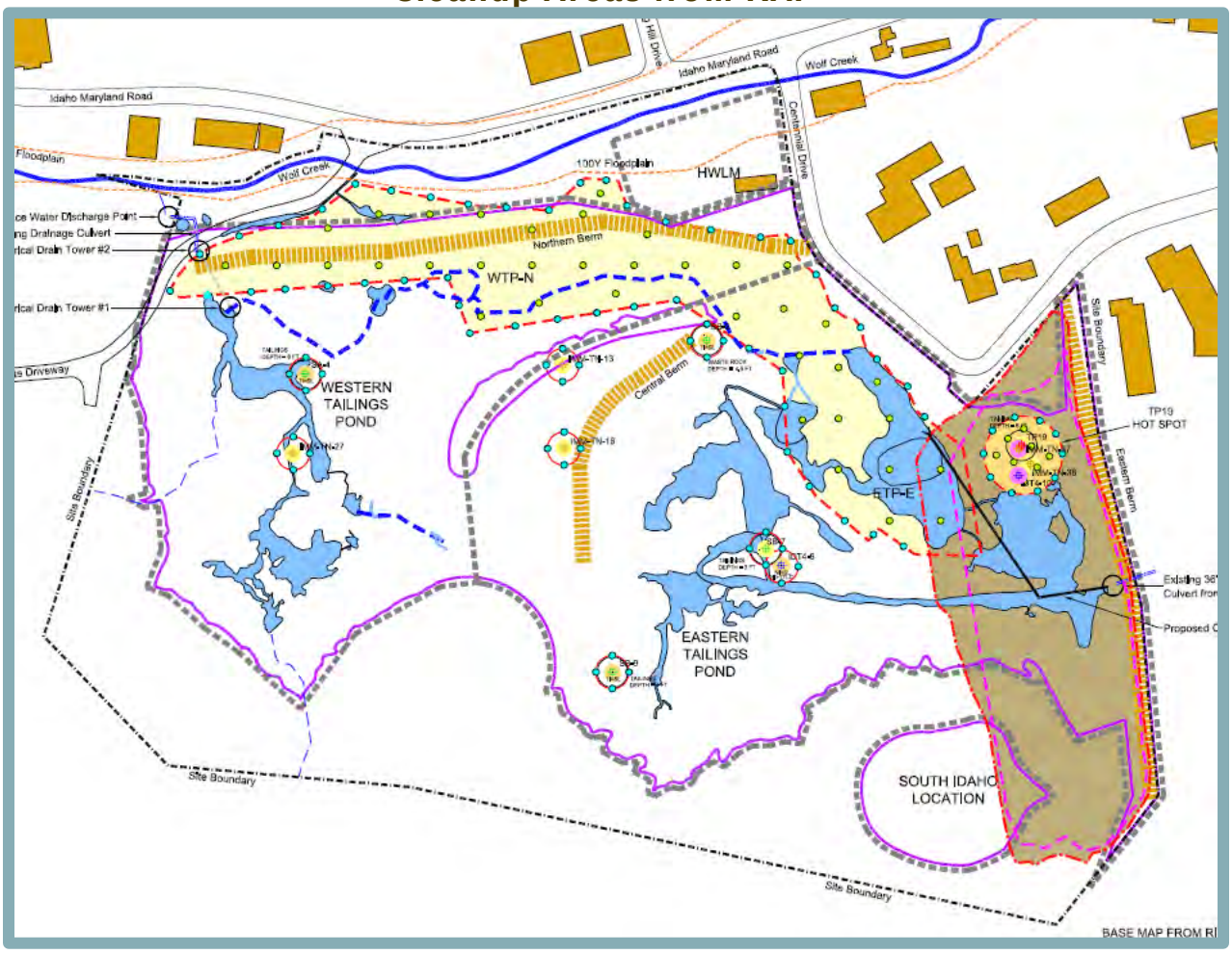
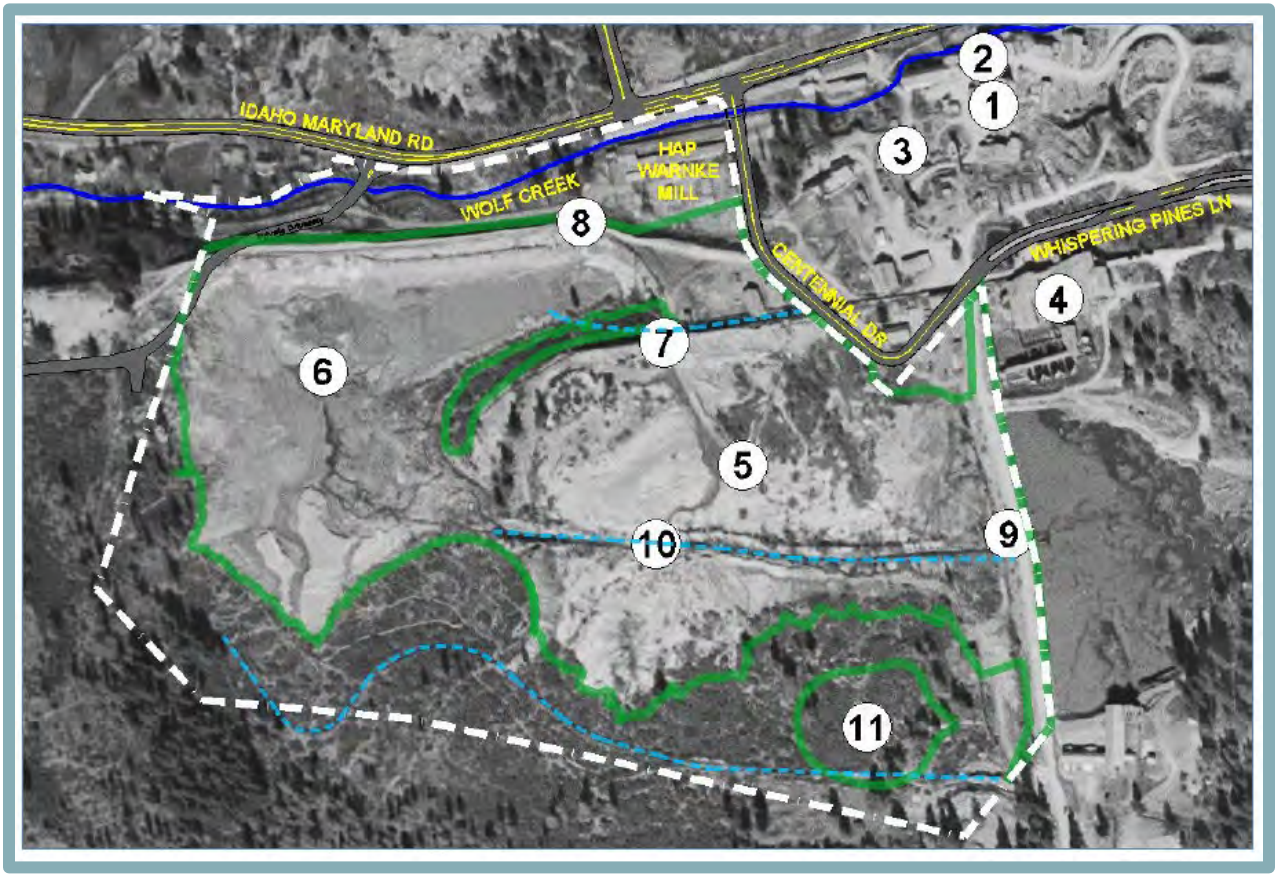


Figure 6
Historic Air Photo from RAP



1) Idaho Shaft headframe
2) Idaho Shaft hoist house
3) Old 20-stamp mill
4) New mill and cyanide plant
5) Eastern tailings pond
6) Western tailings pond
7) Northern ditch
8) Northern berm
9) Eastern berm
10) Central ditch
11) South Idaho Location

Figure 7
PLM Asbestos Samples (NV5)

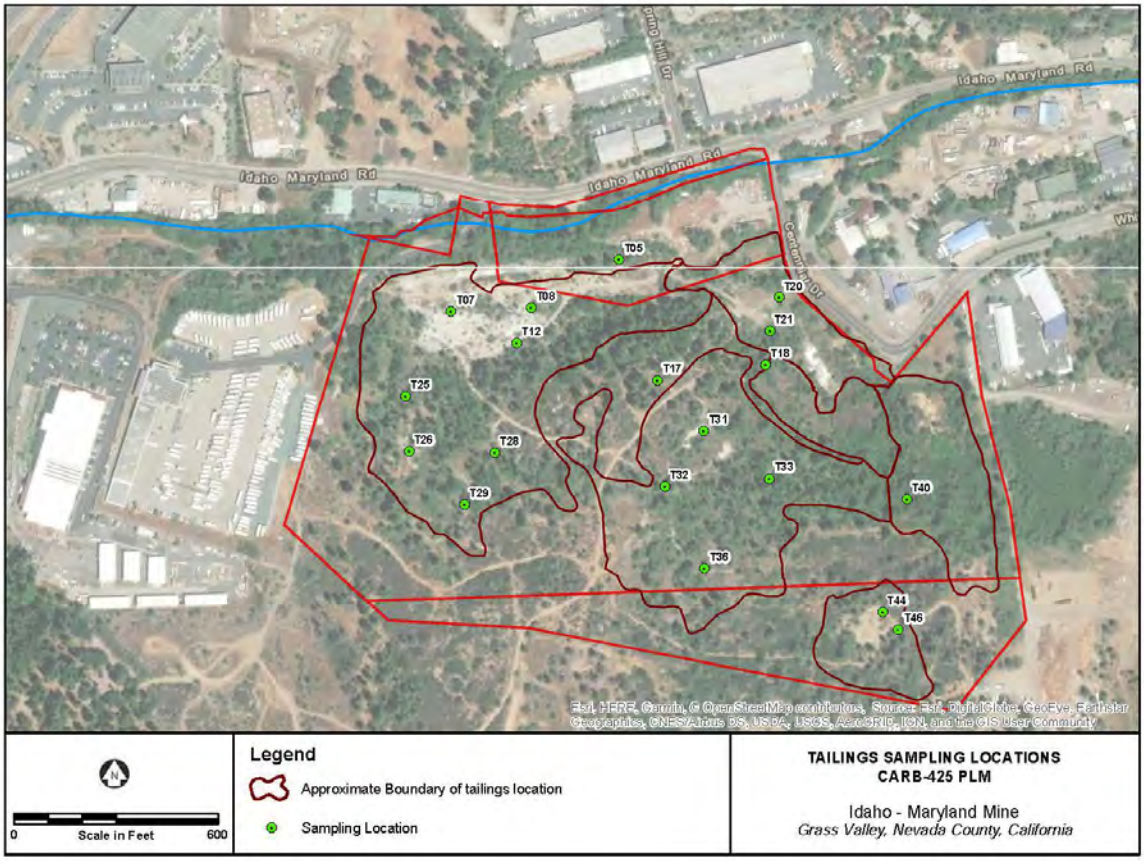
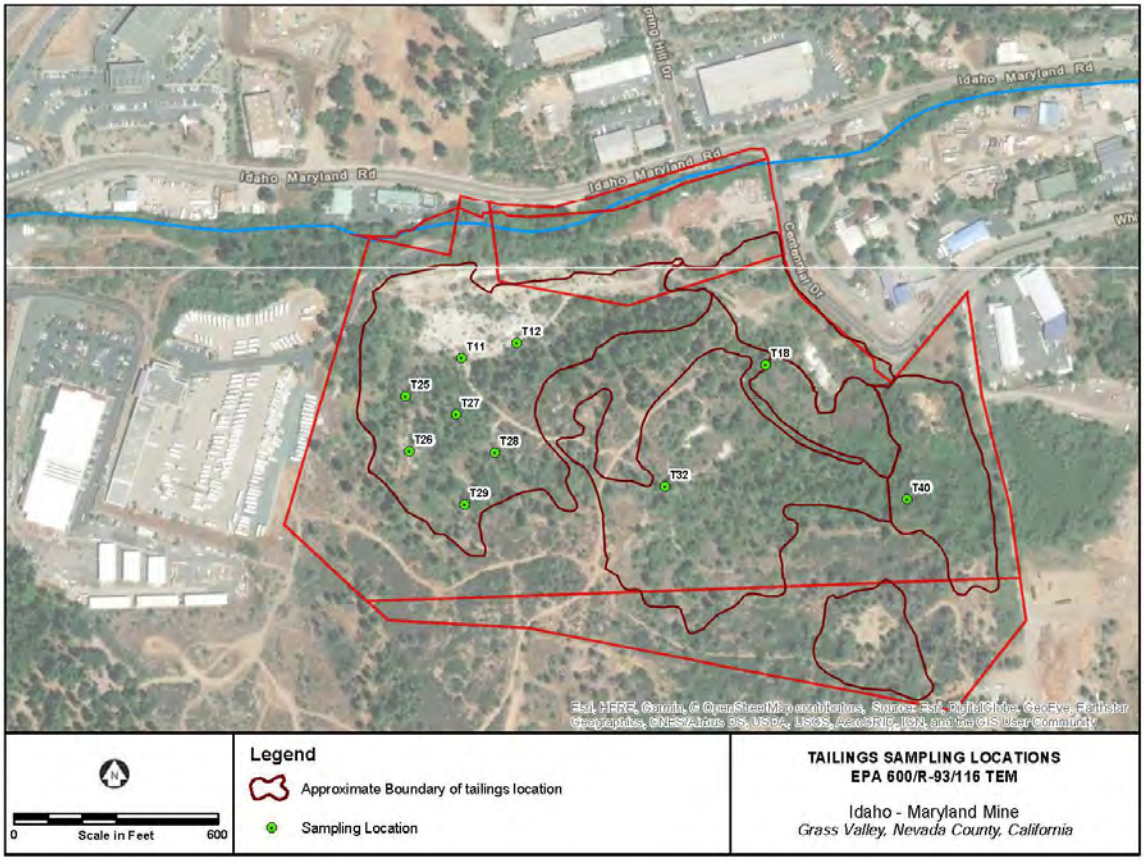


Figure 8
TEM Asbestos Samples (NV5)



Master Response 10 - Explosives, Reagents, and Brunswick Fill

Comments

Several commenters have expressed public hazard concerns related to routine explosives transport, water quality effects from reagents proposed to be used for mineral processing, and human health and water quality effects from historic mine waste at the Brunswick Site.

Discussion

Explosives

Several commenters asserts that the specific frequency of explosives deliveries and/or the Level of Service of intersections from the traffic analysis should be used in the DEIR to analyze the impact of explosives transport. As stated in the DEIR, explosives deliveries would take place from 1 to 3 weeks. (DEIR, p. 4-7.24.) The average of 2 weeks (15 days as calculated by the commenter) is implied from this range. As discussed on pages 14 and 15 of Appendix M of the DEIR, tunneling (drift) blasts would take place daily but production longhole blasting would take

place once every 3-4 days. At certain times explosives may be consumed immediately upon delivery underground when loading larger production longhole blasts. Therefore, explosives consumption is not uniform over every day. The Level of Service is a qualitative description of traffic flow from a vehicle driver's perspective based on factors such as speed, travel time, delay, and freedom to maneuver. As discussed in Section 4.7 of the DEIR, the transportation of explosives in the United States is highly regulated and has an excellent safety record. The analysis of explosives transport in Section 4.7 of the DEIR does not depend on the frequency of explosives delivery or the Level of Service to determine the significance of hazards. Therefore, an increase in delivery frequency or an intersection's level of service would not materially affect the DEIR's conclusion that a less than significant impact would result from explosives transport, storage, and use, after implementation of mitigation. As stated on page 4.7-24 of the DEIR, hauling of explosives would occur using Brunswick Road to State Routes (SR) 20/49. Explosives would be transported directly to the Brunswick Site by licensed explosive suppliers that possess the requisite permits, including a CHP hazardous materials transportation license and U.S. DOT hazardous materials permits. State Routes 20 and 49 are designated as explosive transport routes by the CHP[3]. Additionally, the explosives supplier would be required to have a sufficient insurance policy. Table 4.7-2 of the DEIR provides regulations for the transport of explosives. As shown in the table, insurance is regulated by 49 CFR 387. As per this regulation the minimum limit of insurance for freight vehicles of 10,001 pounds or greater transporting explosives is $5,000,000.

Therefore, the DEIR correctly concludes that the project's transport of explosives would have a less-than-significant impact after mitigation related to creating a significant hazard to the public or the environment.

Mineral Processing Reagents

The DEIR describes the proposed mineral processing reagents and their properties, including potential water quality effects (e.g., toxicity to aquatic organisms). Mineral processing reagent type and quantities are shown on page 297 of Appendix E.1. Subsequent to the release of the DEIR the proponent determined, based on additional metallurgical testwork, to eliminate Aeroflot 208 from the proposed reagents.

Reagent Type	**Quantity Used**		**Product**
Promoter	200	pounds per day	Aerophine 3418A
Frother	80	pounds per day	MIBC
Flocculant	80	pounds per day	Magnfloc 10

As stated on page 4.7-29 of the DEIR, the mineral processing reagents are added to the processing water and are soluble. The flotation promoter (Aerophine 3418A) attaches to the mineral particles and therefore the majority of the reagent is within the mineral concentrate, which is shipped offsite. There may be trace amounts of promoter and on the sand tailings and within moisture remaining in sand tailings. The frother (MIBC) will have a tendency to remain in water and therefore would remain in process water, which is recycled in the processing plant and not discharged to the environment. Some frother may be present in moisture remaining in sand

[3] See Map 6 of California Highway Patrol, *HPH 84.3 Explosive Material Shipments: Routes, Safe Stopping Places, and Safe Parking Places*. May 2021.

tailings after dewatering. Flocculant (Magnafloc) used for dewatering of sand tailings would generally remain in the sand tailings. Aerophine 3418 promoter is a unique, phosphine-based collector, which has no odor, is biodegradable and is not harmful to fish, aquatic invertebrates or plants. MIBC (methyl isobutyl carbinol) is unlikely to persist in the environment. The compound is readily biodegradable and completely removed from water and soil environments. MISC is practically nontoxic to fish and other aquatic organisms on an acute basis. The MSDS for Aerophine 3418A and MIBC have been attached to the Final EIR as Appendix B. As stated on page 4.7-29 of the DEIR, Magnafloc is not expected to bioaccumulate in organisms, its chemical family (polyacrylamide) is relatively non-toxic, and it is not readily biodegradable into more environmentally problematic chemicals. The mineral process plant is a closed system and no process water would be in the mine water discharge from the site. As discussed above, any residue of these reagents remaining in sand tailings do not present a risk to the terrestrial and aquatic environments. Any monitoring requirements by the Central Valley Regional Water Quality Control Board for flotation reagents would be determined in the Waste Discharge Requirement process (see Master Response 8 – Mine Waste Characterization).

As demonstrated above, the proposed reagents that would be used during mineral processing would not adversely affect water quality in the surrounding environment.

Existing Mine Waste Fill at the Brunswick Industrial Site

Several commenters state that the number of samples for arsenic in existing rock and tailings at the Brunswick site is insufficient and that half of the Brunswick Site was not sampled for toxic metals. Figure 4.7-1 of the DEIR shows sampling locations conducted by NV5 inside the estimated boundary of historic waste rock fill as delineated on the figure. Areas outside of the sampled area of the Brunswick Site either would not be disturbed by the Project or are not potentially contaminated with historic mine waste rock. Therefore, the sampling of these areas of the Brunswick Site is not necessary. As discussed on page 15 of the Phase I-II ESA (Appendix J of the DEIR), the mine waste rock reportedly originated primarily from the New Brunswick Mine portion of the Idaho-Maryland Mine, which is known to have low arsenic concentrations, and also from the Empire Mine, which is known to contain elevated arsenic concentrations (see page 15 of Appendix J of the DEIR). As discussed on page 38 of the ESA, the mixed soil and rock fill beneath the southeastern paved area contain total and soluble arsenic concentrations that exceed regulatory benchmarks. Based on the higher arsenic concentrations and anomalous acid Based Accounting (ABA) results for this material, the geotextile fabric incorporated into the fill, and historical aerial photographs that suggest the grading was performed after mining operations were suspended, the material was likely imported to the site and did not originate from mining operations at the New Brunswick Shaft. As such, the DEIR's conclusion is based on evidence, not on mere speculation. Commenters also state that high concentrations of arsenic are associated with nearby mining sites, and conclude that rock from the Project will also have high arsenic concentrations. However, the Idaho-Maryland Mine is a different gold deposit and hosted in different rock types than the Empire-Northstar and Lava Cap Mines. Arsenic levels from samples taken in various rock types at the Idaho-Maryland Mine Project are low. (see Section 4.4 of Appendix K.2 of the DEIR.)

As a result, the level of Brunswick fill analysis conducted for the DEIR is sufficient to determine potential water quality and human health effects from historic contamination. The DEIR concludes that impacts would be less-than-significant with implementation of mitigation (DEIR, pg. 4.7-35, Mitigation Measure 4.7-2(a)).

Conclusion

The transportation of explosives in the United States is highly regulated and has an excellent safety record. Hauling of explosives for the project would occur using Brunswick Road to State Routes (SR) 20/49, which are designated as explosive transport routes by the CHP. The DEIR correctly concludes that the project's routine transport of explosives would result in a less-than-significant impact after implementation of mitigation.

This master response also demonstrates that the DEIR correctly concludes that proposed reagents in the project's mineral processing are not highly toxic to aquatic organisms and would not impact environmental water quality due to the closed system of the processing plant.

As shown in this master response, the DEIR adequately evaluated the Brunswick fill and includes sufficient mitigation to ensure that significant impacts to human health and water quality would not occur from Brunswick fill.

References

https://www.risegoldcorp.com/uploads/news_item/article/ARTICLE_91.pdf

Master Response 11 - Engineered Fill Utilized in Local and Regional Construction Markets

Comments

Several commenters questioned whether there is a market for the barren rock and sand tailings material that will be sold after the engineered fill pads at the Brunswick and Centennial Sites are filled. Market demand per se is not a CEQA issue. However, many commenters expressed concerns about indirect effects of insufficient market demand for the project's engineered fill, such as the resultant need to stockpile barren rock and sand tailings on-site. Concerns have been expressed that the DEIR does not evaluate on-site stockpiles of overburden and the potential water quality impacts that could result if the material is contaminated.

In the event that there is market demand for engineered fill at off-site locations, several commenters expressed concern about the potential water quality impacts that could occur if project engineered fill (barren rock and sand tailings) is hauled to off-site locations and is contaminated.

Discussion

As described in Section 3.0 of the DEIR, after full placement of fill at the Centennial and Brunswick Industrial Sites to the pad design elevations, hauling of engineered fill (barren rock and sand tailings) would shift entirely to be utilized in local and regional construction markets.

As stated on page 4.8-50 of the DEIR, testwork completed on mine materials indicates that mine materials will likely be classified as Group C mine waste for the purpose of placement of engineered fill on the Centennial and Brunswick Sites. The proposed project would produce mine waste with lower sulfide and metal content than those produced historically, and the historic mine waste has been determined to be Group C mining waste from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity. Please see Master Response 9 - Historical Mine Waste at Centennial Site. The barren rock and sand tailings would undergo testing as part of obtaining WDRs for use in the engineered fill pads, and compliance with water quality objectives will need to be demonstrated

to the CVRWQCB prior to that placement (see Master Response 8 - Mine Waste Characterization).

Barren rock and sand tailings which are utilized in local and regional construction markets would be a mining product and not considered mining waste in the DEIR, except for purposes of formal characterization (Group A, B, or C), as required by the CVRWQCB, pursuant to Title 27 of the California Code of Regulations. [4] Nonetheless, as noted by the CVRWQCB in its April 4, 2022 comment letter on the DEIR, Rise would be required to include testing of the material to be sold for offsite use in the Characterization Plan that the CVRWQCB will require as part of the Report of Waste Discharge for the Project to ensure that such material would not pose a threat to water quality. While the material to be sold offsite would not be considered a mining waste, the CVRWQCB's requirement for testing to ensure no threat to water quality is analogous to the requirements for material to be considered Class C mining waste. Given the results of the testwork completed for the Project, which shows material is likely to meet requirements for Class C mining waste (i.e., no threat to water quality), any discharge related to use of barren rock and sand tailings for construction purposes is expected to be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity. Further, through the WDR process for placement of engineered fill, including the Characterization Plan that will require testing of material to be sold offsite, the barren rock and sand tailings will be thoroughly tested sufficient to determine its suitability for use as construction aggregate, and such testing will be under the authority of the CVRWQCB.

Prior to mining in any underground area, as part of mine planning, samples would be collected through underground core drilling and would then be tested for gold content and evaluated for chemical composition to confirm that it is similar in chemical composition to other material that has already been shown to meet Class C mining waste standards. Rock types that are significantly different than those previously shown to meet Class C mining waste standards would not be mined until mine waste characterization has been performed to ensure the rock will be suitable for offsite sale. Rock types that are not suitable for offsite sale would likely not be mined, and if mined, the waste rock would be placed underground. Waste rock and sand tailings from rock types found unsuitable for construction aggregate use due to water quality impacts would not be sold as construction aggregate. Mitigation Measure 4.8-1(e) has been modified in the FEIR to state that only mining products previously classified as Group C mining waste will be utilized for local and regional construction projects. As stated in the comment letter from the Central Valley Regional Water Quality Control Board, mining waste that is characterized and classified as Group C (i.e., discharge of the wastes that would be in compliance with water quality objectives other than turbidity) could be used as engineered fill with limited regulatory restrictions. The revised language of Mitigation Measure 4.8-1(e) is set forth below (additions in <u>double underline</u>, deletions in ~~strikeout~~):

> The applicant shall submit a RoWD and obtain WDRs from the Central Valley RWQCB for construction of the engineered fill areas. The WDR permit shall be received by the applicant prior to initiating any engineered fill placement activities at the Centennial or Brunswick Industrial Sites. Proof of coverage shall be provided to the Nevada County Public Works

[4] Barren rock (with no gold values and not processed) is differentiated from mineralized rock (with gold values which is processed) in the DEIR to facilitate an understanding of the proposed project. Barren rock is also proposed to be sold in some cases and therefore would be a mineral product and not waste rock. The tailings particles are primarily of sand size gradation (DEIR, Appx. H.1, p. 14.) and therefore sand tailings is an appropriate description in the DEIR. Barren rock and sand tailings are compacted in lifts to engineering standards in order to provide a useful surface appropriate for construction of future buildings on the sites and is therefore described as engineered fill. "Waste rock" is generally used in the DEIR to refer to rock removed from the mine, but not used for engineered fill purposes.

Department. As part of this process, the RWQCB will determine the appropriate mining waste classification for the proposed engineered fill, and will consider the following factors: (1) whether the waste contains hazardous constituents only at low concentrations; (2) whether the waste has no or low acid generating potential; and (3) whether, because of its intrinsic properties, the waste is readily containable by less stringent measures. The engineered fill areas shall be constructed in accordance with the Title 27 specifications, pursuant to the mining waste classification determined by the RWQCB. The applicant shall submit to the Nevada County Planning Department a copy of the RoWD and evidence of the applicant's receipt of WDRs prior to the placement of fill or fill site preparation disturbance at the Brunswick Industrial Site and Centennial Industrial Site. The RoWD must also include a report on the physical and chemical characteristics of the waste, in compliance with Water Code section 13260(k), that could affect its potential to cause pollution or contamination as well as a report that evaluates the potential of the discharge of mining waste to produce, over the long term, acid mine drainage, the discharge or leaching of heavy metals, or the release of other hazardous substances. The WDR's will require continuous and routine characterization and classification (Cal Code regs Title 27 section 22480(b)) of the mining waste to evaluate any possible changes in the geological or geochemical nature of the waste. The applicant shall prepare and implement a Waste Characterization Plan (Characterization Plan) which shall be incorporated into the approved WDR. The purpose of the Characterization Plan is to continually evaluate the different forms of mining wastes and to appropriately classify these wastes as Group A, Group B, or Group C based on an assessment of the potential risk of water quality degradation posed by each waste. Through the WDR these wastes shall be required to be managed, treated, stored, or disposed of in a manner that is protective of water quality. The applicant shall not sell or utilize waste rock and tailings from the Project for construction aggregate or fill purposes offsite (i.e., sites other than the applicants Brunswick and Centennial sites) unless such material has been tested and confirmed to qualify as Group C mining waste under California Code of Regulations Section 22480 and the approved WDR. The specific methods, volumes and frequency of characterization shall be established in the approved WDR.

The above changes to Mitigation Measure 4.8-1(e) are for clarification purposes and do not alter the conclusions of the DEIR. See also Response to Comment Agcy 5-4 (CVRWQCB Letter).

Evidence for Market Demand

The DEIR assumed that trucking of rock and sand would occur up to 60 miles, one way, from the Project site. This distance allows access to a large market area including most of Nevada County, and the Sacramento-Roseville region. These areas have demand for aggregate of over 25 million tons per year according to the California geological Survey,[5] as summarized in Table 2 below. The Project would produce approximately 182,500 tons of rock and 182,500 tons of sand per year, which is less than 2% of the yearly market demand for this area. Importantly, the Sacramento County aggregate production-consumption area has less than 50% of its 50-year aggregate demand currently permitted, which means there is a long-term shortage of construction aggregate and therefore a long-term market for the barren rock and sand tailings produced by the Project in that region. (see California Department of Conservation Mapsheet 52, 2018.) Specifically, Sacramento County had 327 million tons permitted of the anticipated 724 million ton 50-year demand as of the publication of Mapsheet 52 in 2018 by the California Department of Conservation.

[5] https://www.conservation.ca.gov/cgs/Documents/Publications/Map-Sheets/MS_052_California_Aggregates_Map_201807.pdf

Table 2
Aggregate Demand within range of IMM Project

Nevada County	820,000
Yuba City-Marysville	6,880,000
Placer County	3,760,000
Sacramento County	14,480,000
Total	**25,940,000**

No large-scale temporary rock or sand storage facilities/stockpiles are proposed for the Project. The only storage of barren rock or sand tailings would be the temporary storage of materials at the Brunswick Shaft, inside the process plant, and at the Brunswick and Centennial Sites where material would be dropped by trucks and later graded and compacted during weekday daylight hours. If the Project's proposed engineered fill sites and the Brunswick and Centennial Industrial Sites were complete and there was low demand for barren rock or sand tailings, or the material was unsuitable for construction use, the operation would by necessity reduce or halt generation of these materials until an appropriate market, such as fill material or other use of rock material for which the material met appropriate specifications, could be identified. However, an adequate market for sale of the barren rock and sand tailings is expected, given the location of the Project site in proximity to the Sacramento market, which has an undersupply of construction aggregate.

Conclusion

This master response demonstrates that there is sufficient market demand for engineered fill (barren rock and sand tailings) after full utilization of the Centennial and Brunswick Sites engineered fill piles, thus, eliminating the need for on-site aboveground stockpiles. This response also demonstrates that the DEIR correctly concludes that the use of engineered fill at off-site locations would not result in adverse effects to water quality due to compliance with applicable State regulations, as required in DEIR Mitigation Measure 4.8-1(e).

Master Response 12 - Chemical Dust Stabilizers

Comments

Several commenters have raised concerns about the generation of dust from project construction and operations and resultant air quality effects. Select commenters have also asked for details on the composition and environmental effects of chemical dust stabilizers proposed to be used for the reduction of dust on unpaved haulage roads for the Project.

Discussion

The Project would use industry standard polymers as a chemical stabilizer to reduce haul road dust. This control type is highly efficient (74% to 94% dust control efficiency) with application approximately bi-weekly (see Table 11.1 of NIOSH 2nd edition Dust Control Handbook for Industrial Minerals Mining and Processing)[6]. These chemicals are not toxic air contaminants and therefore do not require evaluation in the Health Risk Assessment. Research by the US EPA has shown that these types of dust suppressant products have minimal to no adverse impacts on water quality and aquatic life relative to the use of water alone[7].

[6] https://www.cdc.gov/niosh/mining/UserFiles/works/pdfs/2019-124.pdf
[7] https://19january2017snapshot.epa.gov/www3/region9/air/dust/DustSuppressants-sept2008.pdf

Applicant Proposed Measure (APM) AQ-2 requires that during construction, all on-site roadways shall be paved as soon as possible after grading and any unpaved gravel roads shall be treated with chemical stabilizers in order to control fugitive dust (see page 4.3-65 of the DEIR). This measure will be required as a mandatory condition of approval for the Project. The air quality model presented in Appendix E.1 of the DEIR assumes the use of chemical stabilizers for reduction of dust by 80% for vehicle traffic on certain unpaved roads during construction (see page 300 of Appendix E.1). Notably, chemical dust stabilizers are not assumed for emissions reductions from unpaved roads during operations in the DEIR. This is a conservative assumption as dust emissions from vehicle traffic on unpaved access roads are estimated at 18.7 pounds per day (see page 303 of Appendix E.1) with the use of water for dust suppression (55% dust control efficiency). If chemical stabilizers are used for unpaved access roads during operations a substantial reduction in dust may be achieved versus the assumed emissions for the analysis in the DEIR.

From a health perspective, the Health Risk Assessment (HRA) prepared for the proposed project ((included in Appendix B of Appendix E.1 of the EIR) evaluated fugitive dust as PM_{10}. The HRA concluded that a significant health hazard to the public would not occur as a result of fugitive dust after implementation of mitigation (see DEIR, p. 4.3-82). For more detail, please refer to Master Response 20 – Conservatism Used for Metals in Dust, Master Response 21 – Silica Health Risk, and Master Response 22 – Conservatism Used for Asbestos Assessment.

Conclusion

This master response confirms that the proposed project will use chemical dust stabilizers that are not considered toxic air contaminants, nor do they have adverse effects on water quality or aquatic life. This response also demonstrates that, after implementation of mitigation, the project's construction and operations would not expose sensitive receptors to substantial concentrations of fugitive dust such that a human health effect would occur (Appendix G, III(c)).

Master Response 13 - Historic Hydrogeologic Assessments

Comments

Several commenters have questioned why the hydrogeologic analysis in the Rise Gold DEIR is different than that used in the prior 1995 and 2008 EIRs produced for the Emperor Gold and Emgold projects; and specifically questioned why the area of potential dewatering impact is different (i.e., reduced) in the current analysis. As discussed below, the 1995 and 2008 EIRs relied on less sophisticated groundwater models that did not account for regional groundwater flow or the impact of streams, which resulted in a less accurate analysis and slightly different conclusions regarding the area of dewatering impacts.

Discussion

The Idaho-Maryland mine has been the subject of two previous environmental impact reports in 1995 and 2007 by Emperor Gold and Emgold, respectively. The current applicant, Rise Grass Valley, is not affiliated with the previous applicant.

The Groundwater Model (2020) prepared by Itasca (Appendix K.3 of the EIR) is a groundwater flow model that was constructed to solve 3-D groundwater flow problems using the finite-element method. The model simulates hydrostratigraphic units, rivers and creeks, precipitation and recharge, underground workings, and historic mining. The groundwater model was calibrated on historic groundwater inflows into the mine, the current and historical water level in the Union Hill Mine, the current water level in the New Brunswick Shaft, ground measured water levels in domestic water wells in the area and base flow rates of Wolf Creek and South Fork Wolf Creek.

Previous hydrogeological assessments did not use groundwater models and relied on less sophisticated analytical solutions to estimate impacts to domestic water wells. Consequently, the prediction of ground water drawdown is much more in-depth, robust and reliable than previous assessments. Nevertheless, despite the simplified analytical solutions used by previous assessments, these assessments came to similar conclusions regarding the potential area of impact to domestic water wells as the current analysis.

In the 1995 EIR, Sierra-Pacific Groundwater Consultants, prepared a hydrogeological assessment of the potential impact of mine dewatering on domestic wells. In that assessment, an analysis was conducted involving the distance from the bottom of the well to the nearest underground mine working and estimates of inflow and outflow of groundwater (Q) at each well location. An unconventional method was used in the determination of each component of the Darcy equation which was used to estimate inflow and outflow for each well. Notwithstanding the unconventional application of data to Darcy's Law, the results of the analysis indicated that wells closest to the workings were at greatest potential risk for dewatering impacts. (pages 18-19, Todd 2007). In the 1995 Emgold Final EIR, 15 wells were considered High Risk, with partial and complete dewatering highly probable, and 2 wells Moderate Risk with partial dewatering of wells probable and complete dewatering of wells possible. Other wells in the Study Area were categorized as low or very low risk wells with partial dewatering of wells improbable and complete dewatering of wells highly improbable. The Study Area and wells from the 1995 Final EIR are shown in Figure 9 through Figure 14 below. As shown on Figure 9 and Figure 10, the majority of the wells considered High or Moderate Risk for dewatering impacts in the 1995 EIR are in the E. Bennett Road area, in which the current project proposes to connect to the NID potable water system. The 1995 EIR also found five wells south of E. Bennett Road and nearby South Fork Wolf Creek (Wells #128, 240,113,233,236)[8] to have dewatering impacts; however, these wells were not found to have the potential for significant dewatering under the Itasca model used in the DEIR. The 1995 hydrologic assessment does not model the regional groundwater flow and simulations of streams, which is why these five additional wells were found to have dewatering impacts in 1995. Conversely, by using a comprehensive Groundwater Model, rather than simplistic analytical methods used in 1995, Itasca determined that the influence of a shallow groundwater table and recharge from South Fork Wolf Creek limits groundwater drawdown in the valley bottom south of E. Bennett Road, resulting in no significant dewatering impact to these 5 wells south of E. Bennett Road and nearby South Fork Wolf Creek. Please see Master Response 33 – Groundwater Dependent Vegetation.

In connection with the 2008 EIR for Emgold, Todd Engineers prepared a hydrogeologic analysis that estimated an impact area using an analytical equation which assumed the mine workings would behave as a pumping well within the groundwater system. Todd estimated that a cone of depression would form and declines in the groundwater system could be anticipated in a zone of approximately 710 feet around the mine workings. Todd used the formula $r^2 = 0.3Tt/S$, where r= distance to the point of zero drawdown, T = transmissivity, t = time for the cone of depression to reach steady state, S = storativity of the aquifer. Todd uses a T value of 84 gpd/ft, S value of 0.01, and t of 200 days to calculate a radius of 700 feet. A conservative and simplifying assumption is made that the zone of impact will expand equally away from the outer edge of all the workings regardless of depth of extent of workings. As such, the calculated radius of influence was applied to all areas of the workings, no matter how deep or small in volume the workings may be in some areas. Eighteen wells were considered to have the highest potential risk of impacts from

[8] Note that Figure 1 shows Well #205 as a high risk well but this well is not present in the high and moderate risk tables and is an error in the historic figure. This well is in the very low risk table of the 1995 Final EIR.

dewatering and Todd concluded that actual impacts will likely be less than predicted due to the conservative nature of the analysis. (pages 20-22, Todd 2007).

As shown in Figure 15, the area of potential impact in the 2007 Todd report included the E. Bennett Road area and extended approximately 0.5-mile east of Brunswick Road. As noted previously, the radius estimated by Todd was to the point of zero drawdown and no attempt was made to quantify whether an insignificant amount of drawdown would actually impair the use of a domestic water well. Todd conducted a sensitivity analysis by increasing pumping time from 200 days to 730 days to illustrate how increased pumping would impact the analysis with a resulting radius of influence increased to 1,356 feet. (see page 23 of Todd 2007). This sensitivity scenario was used in the 2008 Emgold DEIR which categorized 18 wells as high-risk wells and 18 wells as moderate risk wells. (see page 4.7-33 and Figure 4.7-3 of ESA 2008). Figure 16 below shows the Areas of Potential Impacts from the 2008 DEIR. The extended area of impact, to the point of zero drawdown, used in the 2008 DEIR is similar the 2-foot drawdown contour predicted by the Groundwater model for the current Rise Gold DEIR (see Sheet 12 of Appendix K.2).

Notably, Todd Engineers submitted a comment letter on the 2008 DEIR and disagreed with the 2008 EIR preparers use of its sensitivity scenario by ESA to categorize risks to wells and stated "Based on the analyses in our 2007 report and in this memorandum, it is not technically defensible to expand the zone where the highest level of mitigation would be required. We recommend that the 710-foot zone, in addition to the area of the workings footprint, be maintained as the area with the highest level of mitigation for a permanent surface water supply." In other words, Todd's opinion was that the 2008 EIR inappropriately expanded the likely area of dewatering and associated groundwater impact based on a mischaracterization of its report.

Todd also stated that the lone drift (underground tunnel) at the 1,100-foot below surface level that extends east of Brunswick Road would not likely contribute to water level decline during dewatering. (see page 5 of Todd comment letter – Todd 2008). In its comment letter, Todd provided a revised figure, shown as Figure 17 below, which shows the high and moderate risk areas recommended for a permanent water supply, generally confined to the E. Bennett Road area. This is a very similar result to the conclusions of both the 1995 hydrogeologic study and the current DEIR.

Conclusion

The conclusions of the hydrogeologic analyses used in the 1995 and 2008 EIRs are substantially the same as the conclusions in the Rise Gold EIR, and there are only minor differences in the overall conclusions, which are explained by the different modelling methods. In general, the practical result of these differences is that the previous hydrogeologic assessments predicted more wells would be impacted by dewatering as compared to the current DEIR's findings. However, as shown above, the number of impacted wells is not substantially greater than that which is predicted in the current DEIR, and said DEIR includes mitigation measures (MMs 4.8-2(a-c)) to ensure that impacts to groundwater wells (Appendix G, X(b)) are reduced to a less-than-significant level.

Figure 9
Map of Well Study Area from 1995 Final EIR

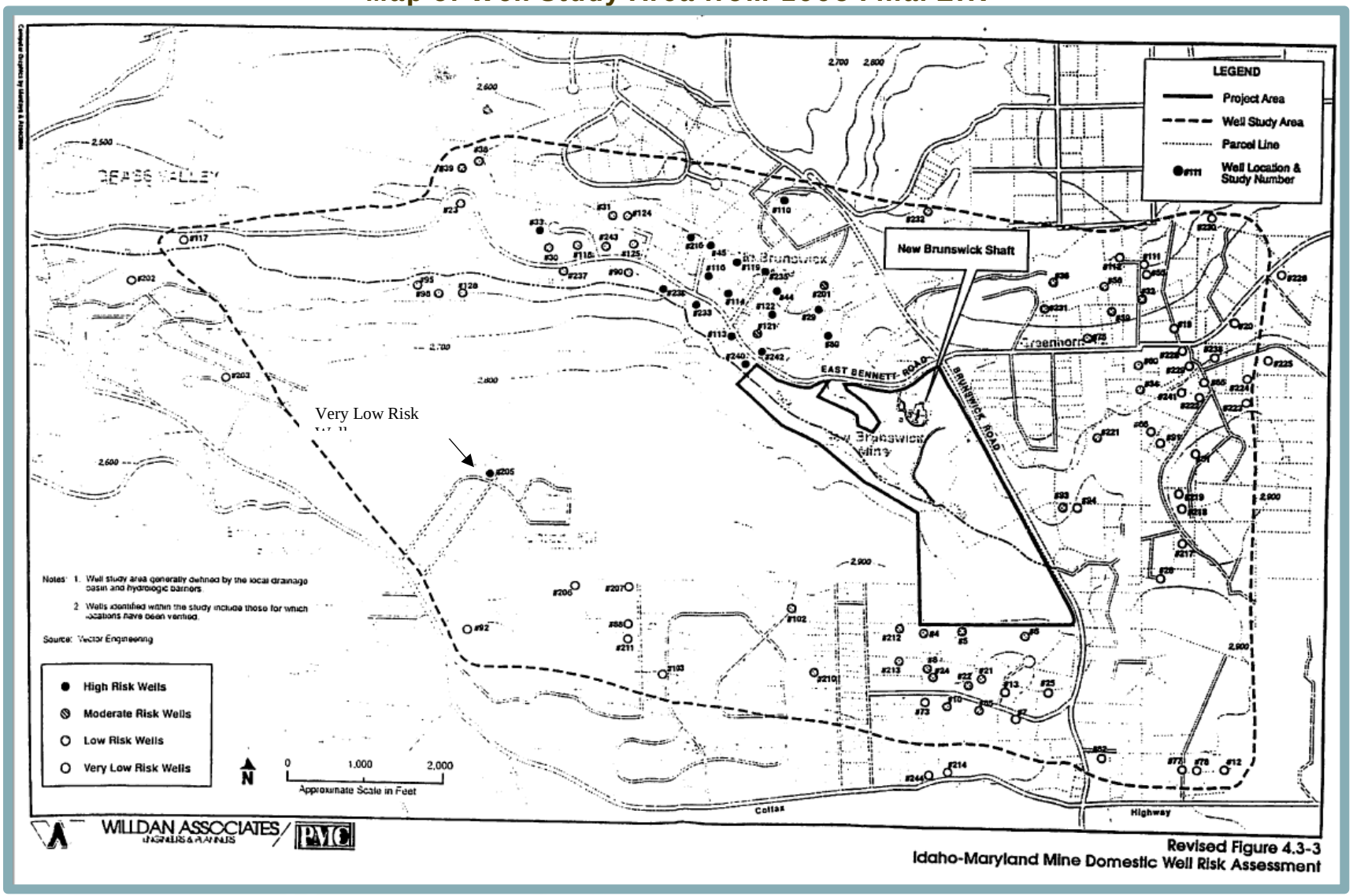


Figure 10
High and Moderate Risk Wells from 1995 Final EIR

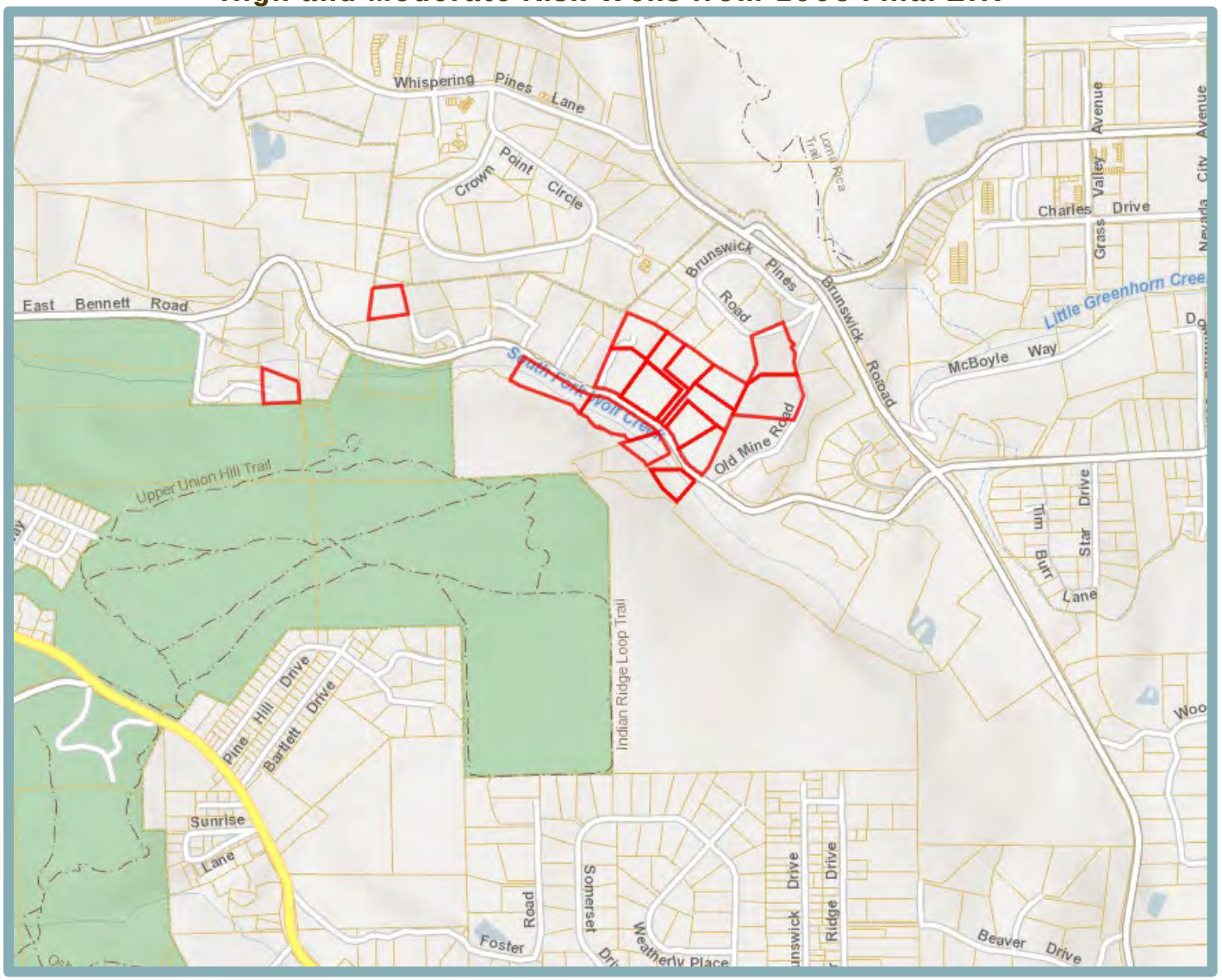


Figure 11
Table of High-Risk Wells from 1995 DEIR

TABLE 4.3-1
Idaho-Maryland Mine Well Risk Assessment
High Risk Group of Wells
(Partial or Complete Dewatering of Wells Highly Probable)

Assessors' Parcel Number	Wells's Study Number	Est. Change GPD Q_i-Q_o	Well to Mine Vertical Distance (ft)
09-320-03	128	(0.74)	730
09-590-09	33	(6,132.89)	836
09-600-17	116	(799,059.99)	635
09-600-16	45	(174,968.92)	618
09-581-34	113	(11,044.74)	413
09-600-04	114	(89,983.97)	645
09-600-12	119	(146,769.70)	548
09-600-15	122	(15,326.33)	263
09-600-14	44	(26,845.32)	318
09-581-17	29	(1,506,504.28)	186
09-581-13	80	(686,882.03)	503

Figure 12
Table of additional High-Risk Wells from 1995 Final EIR

TABLE 4.3.1
PART II

IDAHO-MARYLAND MINE WELL RISK ASSESSMENT
HIGH RISK GROUP OF WELLS
(PARTIAL AND COMPLETE DEWATERING OF WELLS IS HIGHLY PROBABLE)

Assessors' Parcel Number	Wells' Study Number	Change GPD Q_i-Q_o	Well to Mine Vertical Distance (ft)
09-581-47	233	(74,455)	693
09-600-13	235	(163,892)	518
09-581-49	236	(22,408)	576
09-581-30	240	(8,307)	271
09-600-11	242	(56,168)	363

Figure 13
Table of Moderate-Risk Wells from 1995 DEIR

TABLE 4.3-2
Idaho-Maryland Mine Well Risk Assessment
Moderate Risk Group of Wells
(Partial Dewatering of Wells Probable)
(Complete Dewatering of Wells Possible)

Assessors' Parcel Number	Well's Study Number	Est. Change GPD Q_r-Q_o	Well to Mine Vertical Distance (ft)
09-600-10	121	18,958.59	358
NA	UH	18,686.82	123

Figure 14
Table of additional Moderate-Risk Wells from 1995 Final EIR

TABLE 4.3.2
PART II

IDAHO-MARYLAND MINE WELL RISK ASSESSMENT
MODERATE RISK GROUP OF WELLS
(PARTIAL DEWATERING OF WELLS PROBABLE)
(COMPLETE DEWATERING OF WELLS POSSIBLE)

Assessors' Parcel Number	Wells' Study Number	Change GPD Q_r-Q_o	Well to Mine Vertical Distance (ft)
09-581-19	201	18,841.5	285

Figure 15
Area of Potential Impact from 2007 Todd Engineers

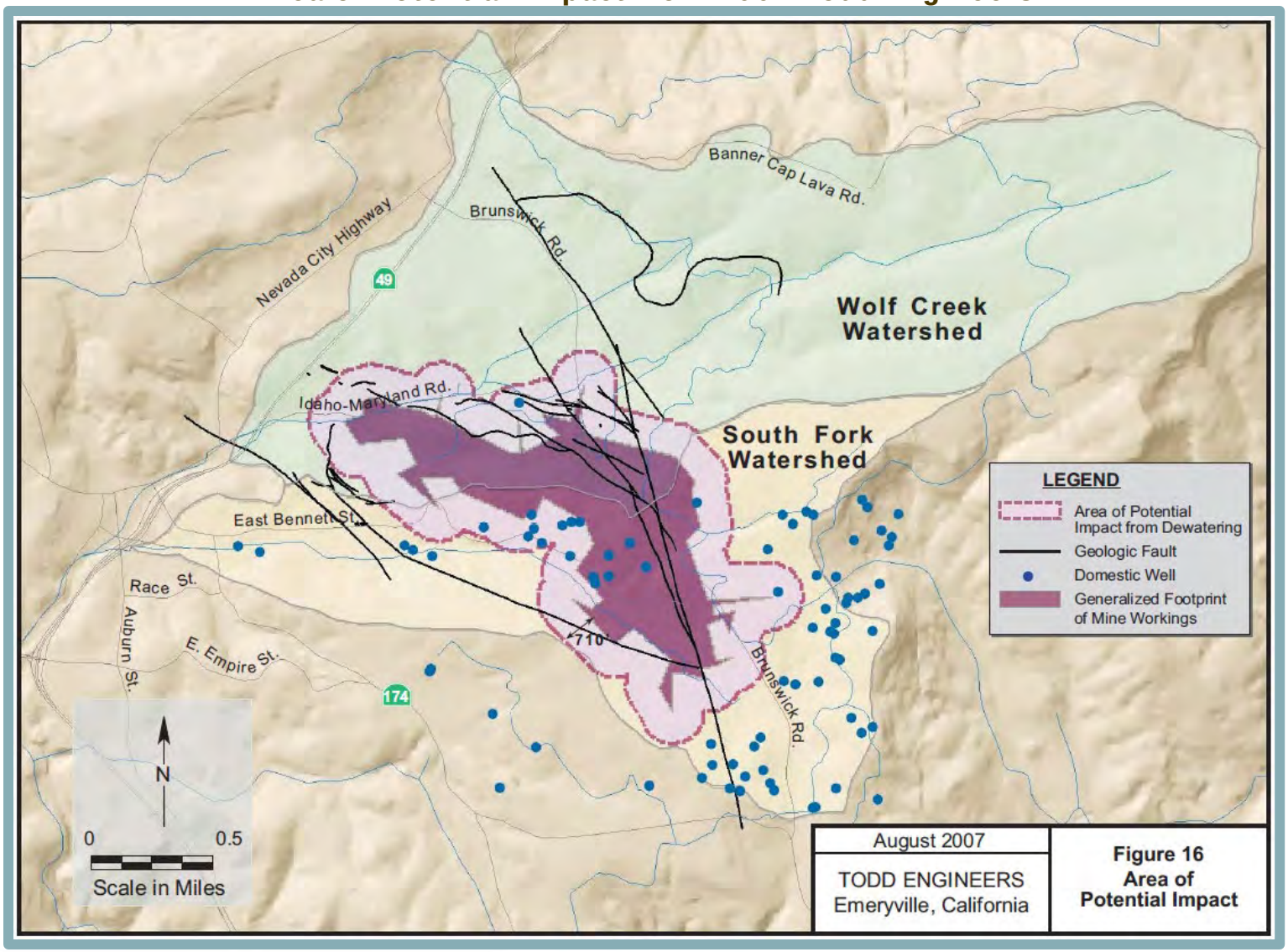
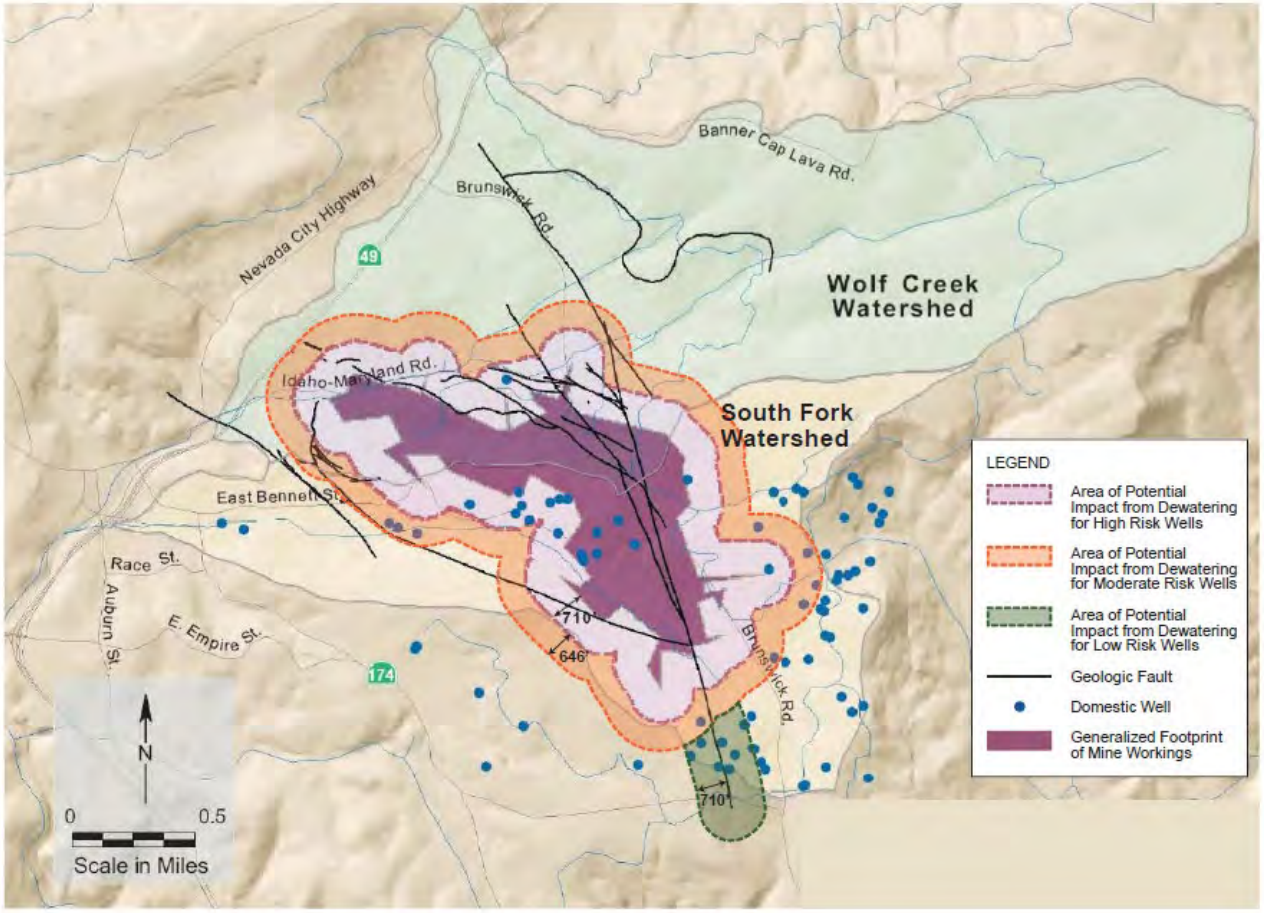


Figure 16
Areas of Potential Impacts from 2008 DEIR



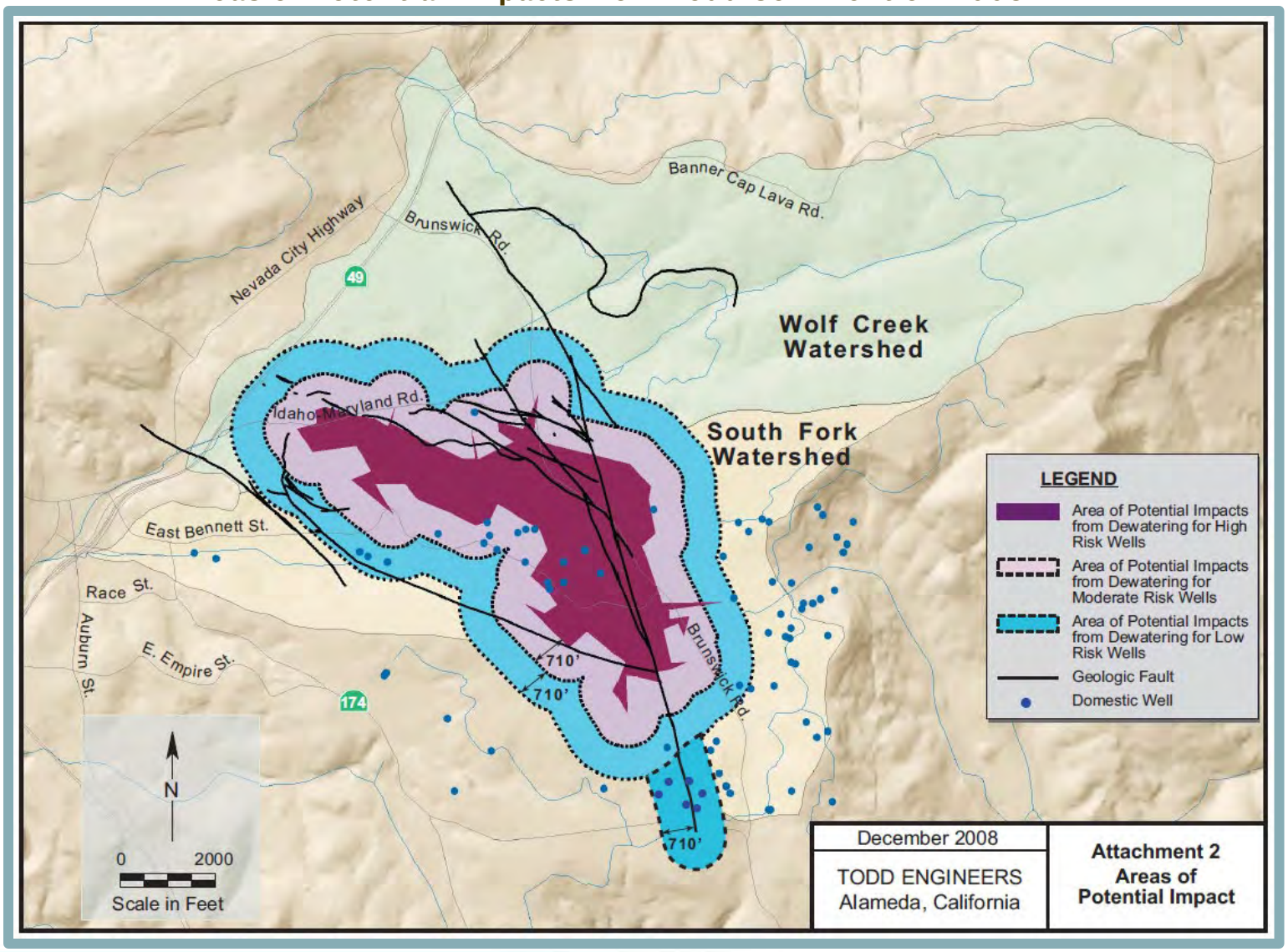
SOURCE: Todd Engineers, 2007; and ESA, 2008

NOTE: The Area of Potential Impact from dewatering for Very Low Risk Wells is outside the areas defined for the High Risk, Moderate Risk, and Low Risk Wells Areas of Potential Impact.

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Figure 4.7-3
Areas of Potential Impacts from Dewatering

Figure 17
Areas of Potential Impacts from Todd Comment on 2008 DEIR



References

ESA (Environmental Science Associates). (2008). *Draft Idaho-Maryland Mine Project Environmental Impact Report* San Francisco, California.

Todd (Todd Engineers). (2007). *Final Hydrogeologic Assessment Idaho-Maryland Mine* Emeryville, California.

Todd (Todd Engineers). (2008). *Comments on Proposed Mitigation Measures for Dewatering Impacts Draft Environmental Impact report Idaho Maryland Mine Project.* Emeryville, California.

Wildan (Wildan Associates/PMC). (1995). *Final Environmental Impact Report Idaho-Maryland Gold Mine Dewatering and Exploration Project* Sacramento, California.

Master Response 14 - Adequacy of Groundwater Model

Comments

Several commenters disagree with the methods and conclusions of the groundwater model, asserting such things as the model is not appropriate for use in fractured rock, the data from private wells is old and not sufficient for modelling purposes, and the modelling period does not represent the full 80-year operational life of the mine. This master response demonstrates that the groundwater model (MINEDW) used to predict the project's potential impacts to groundwater (Appendix G, X(b)) is a robust model that has a long history of use with accurate results, and is appropriate for use in evaluating the dewatering effects of the proposed project.

Discussion

As stated in Section 4.0 of Appendix K.3 of the DEIR, the groundwater flow model that was constructed for this investigation utilizes the numerical code MINEDW, which was developed by Itasca (2012) to solve 3-D groundwater flow problems with an unconfined (or phreatic) surface using the finite-element method. MINEDW is a commercial software that was thoroughly reviewed by Sandia National Laboratories (Corbet et al. 1998). MINEDW has been used at more than 100 mine sites located throughout the world and in diverse hydrogeologic and climatic conditions. MINEDW has been in use for approximately 30 years, and its predictions have been validated by field data collected over many years (see Appendix A of Appendix K.3 of the DEIR) and recognized as valid by the Nevada Division of Environmental Protection for use in permitting applications.

MINEDW Model is Acceptable Industry Practice for Use in Fractured Rock

Several commenters have stated that the model is not appropriate for use in a fractured rock. The conceptual model proposed by Itasca, in simple concepts, is that the shallow bedrock is significantly fractured so that it behaves hydraulically like a porous media. This is consistent with analysis of well data (see Section 3.3 of Appendix K.2 of the DEIR). Below the shallow, fractured bedrock is the intact bedrock whose fractures are closed due to the vertical stresses caused by the overlying bedrock. The intact bedrock also behaves as a porous media in that groundwater flow is primarily through the extremely small pores in the rock. Itasca assigned low hydraulic conductivities and storage coefficients to the intact bedrock in which mining will occur. The application of a continuum (porous media) approximation is applicable to mining projects in that it is used generally to estimate flows from the mine and drawdowns in water levels due to dewatering, a situation similar to predicting well yields. Please see Reponses to Individual Letter 232 for an in-depth discussion on this topic.

The MINEDW for the DEIR was calibrated on historic groundwater inflows into the mine, the current and historical water level in the Union Hill Mine, the current water level in the New Brunswick Shaft, ground water levels measured in domestic water wells in the area, and base flow rates of Wolf Creek and South Fork Wolf Creek. As described in Section 4.6 of the Groundwater Model Report (Appendix K.3 of the DEIR), Itasca conducted transient model calibrations by matching the change of groundwater levels at the Union Hill Mine and groundwater inflows to the historical mines. The simulated and measured ground water levels from domestic water wells in the area and the measured water level in the New Brunswick shaft were compared. The simulated groundwater levels were within the ranges of measured water levels for domestic water wells in the area and the simulated mine-water level is essentially the same as the measured water level in the New Brunswick shaft. The hydraulic conductivity (K) values derived from the groundwater flow model calibration for different geologic units were found to be within the ranges of the estimated K values and literature values.

Private Well Data Used in Model

Several commenters state that data from private wells is old and is limited to a few years without usage data provide. Contrary to the commenters' assertions, water level data has been collected for many years over a period spanning two decades. As stated on page 26 of Appendix K.2, monitoring of water level in wells for up to 79 wells was undertaken from 1995-2001 and 2003-2007. As noted in the report, no long-term increasing or decreasing trends are observed in the data. Therefore, the age of the sample data does not limit the usefulness of this data. Nevertheless, no groundwater level measurements have been completed since 2007, which creates some uncertainty to the predicted impact to percentage of water column in domestic wells. Uncertainty in predicted impacts is addressed through the various sensitivity scenarios discussed in Appendix K.3, the application of a 100% factor of safety (see page 4.8-58 of the DEIR), and the proposed connection of all 30 properties, including properties where no significant impact is predicted, in the E. Bennett area to NID potable water (see page 4.8-66 of the DEIR). Despite this, the analysis in Chapter 4.8 of DEIR has determined that the Project could result in a significant impact to groundwater supplies without implementation of a groundwater monitoring program and well mitigation plan. Mitigation Measure 4.8-2(a) requires that a minimum of 12 months of water-level monitoring data is collected before commencement of dewatering. Impacts to domestic water wells will be measured against those current baseline measurements and not historic water levels. Mitigation Measure 4.8-2(b) requires well mitigation if, based the groundwater monitoring plan, a 10 percent reduction in the water column of a well is determined. Therefore, the determination of impact would be based on current water level data and any impacts to domestic wells would be mitigated through the proposed mitigation measures. As stated on page 4.8-67 of the DEIR, implementation of Mitigation Measures 4.8-2(a), (b), and (c) would reduce the project's groundwater impacts to a less-than-significant level.

Model Calibration

Several commenters believe that more flow measurements from the mine drains are required for calibration of the groundwater model. However, the current flow rate of mine water from the drains was not used for the calibration of the groundwater model. The current flow rate of mine water from the drains was not used for the calibration of the groundwater model because the preferential pipe flow in the mine workings is not simulated in the model and the purpose of the model is to calibrate to "current" groundwater levels, based on measurements taken from 1994 through 2007, and the current water level in the mine which is controlled by the drain outlet elevations. Additionally, there could be additional preferential recharge from surface runoff through mine workings reporting to the drains. This extra recharge, not related to groundwater flow, is not quantifiable and could result in inaccurate calibration of the groundwater model. Accordingly, the

commenters' requests for inflow/outflow data is not relevant to the groundwater model and the assessment of groundwater impacts.

Modelling the Project's Long-Term Mining Effects

Several commenters assert that the groundwater model should be run for an 80-year period rather than 65 years. The groundwater model was based on the expected mining plan during year one to year 25, and then Sensitivity Scenario 6 considered the significant expansion of mining in areas with potential for mineralization as shown in Figure 5.10 of Appendix K.3 of the DEIR for an additional 40 years of mining. As shown in Figure 5-12, and discussed on page 29 of the report, the 5-ft drawdown contour extent of Scenario 6 at the end of potential additional mining (to Year 65) relative to the 2019 water level expands less than 500 ft from that of the Base-Case Scenario. The drawdown contour of the Base-Case Scenario is at the end of the original planned future mining (Year 25) relative to the 2019 water level. The comparison of drawdown contours between Scenario 6 and the Base-Case Scenario confirm that the added potential mining (beyond the 65 years modeled) will not lead to significant incremental drawdowns as the mining progresses because the mining activities occur in deep, low hydraulic conductivity rocks. The decrease in fractures and hydraulic conductivity with depth is well documented. As stated on page 4.8-8 of the DEIR, the U.S. Geological Survey (Page et al., 1984) conducted a study covering a 148-square mile area of southwestern Nevada County, including the segment of the Wolf Creek watershed from Grass Valley to the Bear River. The underlying bedrock consisted of similar rock types to those encountered at the project site, including hard, dense metavolcanic and igneous rocks of pre-Tertiary age. The study results found that the degree of fracturing in the bedrock, and thus the well yield, decreases with depth, with most of the available groundwater occurring above a depth of 215 feet below the ground surface (bgs). At depths shallower than 215 feet bgs, 70 percent of the wells evaluated produced more than five gallons per minute (gpm). However, at depths deeper than 215 feet bgs, 75 percent of the wells produced five gpm or less. As stated on page 4.8-16 of the DEIR, EMKO reviewed 38 well completion reports within a 1- to 2-mile vicinity of the Project, which contained information regarding the total drawdown that occurred and the pumping rate achieved during initial testing of the wells immediately after they were drilled. A clear correlation exists between pumping rate and depth. The maximum pumping rate achieved was 125 gpm in a well with a total depth of 123 feet bgs. In contrast, at depths of 200 feet or deeper, the maximum reported pumping rate is 50 gpm. Below a depth of 300 feet, the maximum pumping rate reported was 10 gpm, and below a depth of 450 feet, the maximum pumping rate reported was only four gpm. Similarly, Todd Engineers (2007) developed a relationship between the hydraulic conductivity and depth based on information from approximately 300 driller reports. Todd Engineers (2007) found that the hydraulic conductivity of the fractured bedrock penetrated by the domestic supply wells in their study area varied significantly with depth, with greater values at shallower depths where more fractures are prevalent, and with much lower values at deeper depths, where fractures may be either less common or have smaller aperture (open) widths.

Thus, the DEIR and the associated groundwater modelling for the proposed project adequately addresses the full potential extent of the project's groundwater impacts as required in Appendix G, X(b).

Conclusion

As stated on page 4.8-41 of the DEIR, the County's independent expert West Yost found that the groundwater model was acceptably calibrated pursuant to industry practices, and adequately represented the Project's expected impacts. Accordingly, the DEIR contains concurrence of multiple experts on the suitability of the groundwater model and as such, constitutes substantial evidence of the significance determination that, after implementation of mitigation, the proposed

project would result in a less-than-significant impact related to substantially decreasing groundwater supplies (Appendix G, X(b)).

Master Response 15 - Adequacy of Groundwater Monitoring Wells

Comments

Several commenters have questioned the adequacy of the Groundwater Monitoring and Mitigation Plans required for the Project. The majority of concerns focus on 1) the use of a groundwater monitoring well network in the potential area of drawdown, rather than direct monitoring of domestic wells in the area; and 2) lack of monitoring throughout the entire mineral rights area. The alleged implication of the above concerns is that the groundwater monitoring required for the proposed project is inadequate, and thus, will not detect the full extent of wells that will be impacted by the project's dewatering.

Discussion

The analysis in the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation (see page 4.8-66 of the DEIR).

Groundwater Monitoring Plan

A rigorous groundwater monitoring plan (GMP) will be implemented by the applicant to assess how the hydrogeologic system responds to mining. This response to dewatering cannot be measured until mine dewatering commences; however, Mitigation Measure 4.8-2(a) requires that the monitoring wells be installed prior to dewatering. Mitigation Measure 4.8-2(b) requires that if it is determined, based on the GMP, that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the Project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted, and if necessary, providing an immediate water supply until the source of the problem is determined and rectified. Mitigation measures are achievable, enforceable, and capable of reducing the Project's impacts. The GMP along with the requirement that the applicant provide water to 30 parcels and provide water to any other parcels with wells that are impacted by the Project ensures that the mitigation is enforceable by the County, achievable through water supply replacement requirements, and capable of reducing the Project's impacts.

Several commenters assert that groundwater monitoring networks need to be installed prior to dewatering. This is already required at least 12 months in advance per Mitigation Measure 4.8-2(a). This water level monitoring will provide the baseline levels prior to dewatering. The collection of 12 months of baseline data allows for the seasonal change in water levels at each location to be captured. As described in Section 3.3.2.2 of Appendix K.2 of the DEIR, the water levels in the private domestic wells have seasonal fluctuations between wet and dry times of the year but have remained relatively consistent from year to year within each individual well. No groundwater level measurements have been completed since 2007. However, impacts to domestic water wells will be measured against the current measurements of water levels, collected in the 12-month period, and not historic water levels.

The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. The collection of water quality information, as discussed in Section 8.0 of Appendix K.8, from the proposed monitoring wells would also be completed and would be representative of the baseline

water quality in domestic water wells in the area. Hydraulic testing of monitoring wells would be conducted as described in Section 6.0 of Appendix K.8.

As previously noted, a GMP is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Monitoring wells will be specifically designed and constructed for monitoring purposes. Use of monitoring wells is preferable to monitoring of domestic wells because of uncertainties in the design, construction and operating conditions in domestic wells (pages 2-3 of the GMP, Appendix K.8 of the DEIR). The monitoring wells will be representative of the surrounding domestic water wells because they will be constructed at representative locations and depths.

As stated in Section 3.0 of the GMP, the drawdown caused by Project dewatering will propagate outward over time. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. As discussed in the GMP, 30 groundwater monitoring wells will be installed at 15 locations. The locations of the monitoring wells are strategically placed between the mining zone and domestic wells to monitor the potential drawdown extent as the result of mining and assess the potential impacts on domestic wells. As stated in Section 7.0 of Appendix K.8, each monitoring well will be equipped with a downhole submersible data logger that will record water levels over time. The data logger will be programmed to collect water-level information on a periodic basis, such as once every 1 to 4 hours. As stated on page 10 of Appendix K.8, drilling and well installation activities will be performed under the supervision of a California-Registered Geologist. Qualified hydrogeologists would evaluate the data from groundwater monitoring.

Groundwater drawdown will be measured at the proposed monitoring wells and then used, in conjunction with data collected by the Domestic Well Monitoring Program (see below), to predict an impact to a domestic water well before any well production impact from dewatering could occur. The impact will be determined using the threshold set forth in the Well Mitigation Plan.

Water Quality Monitoring

Several commenters have raised concerns that their well could be contaminated by mine dewatering through the outward flow of alleged contaminated groundwater within underground mine workings. As stated on page 4.8-48 of the DEIR, the, dewatering causes a low-pressure area around the underground workings such that groundwater inflow is toward the mine, not away from the mine toward the domestic wells. Blasting or backfilling with CPB would be conducted exclusively within the underground mine workings. Thus, any water that contacts those components would be present only within the mine workings and would be then pumped out of the mine workings by the dewatering system and into the clay-lined pond for further water treatment. As a result, that water would not have the potential to flow into the fractured bedrock and flow toward any domestic supply wells. The primary residual components of the ammonium nitrate-fuel oil (ANFO) used for blasting, ammonia and nitrate, are very soluble and mobile in water. This means that any blasting residuals would be continually removed from the mine over time through the dewatering system. Thus, when the mine is allowed to flood again following the completion of mining, there is no reasonable potential that residuals from former blasting activities would cause a violation of any water quality standards or waste discharge requirements or



otherwise substantially degrade surface or groundwater quality. As stated on page 4.8-51 of the DEIR, the proposed mining areas would primarily be at equivalent or deeper depths than the existing underground mine workings, while the potential future expansion areas all involve mining at greater depths, typically more than 1,000 feet below the surface and deeper. At those greater depths, the hydraulic conductivity is several orders of magnitude lower than it is at the depths of the domestic supply wells, due primarily to the lack of open fractures as a result of the large pressures exerted by the overlying rock mass (i.e., the lithostatic pressure). Given that the new mining activity would occur at equivalent or greater depths than the proposed mining, there is little or no potential for the proposed mining and mining in the future expansion areas to affect the quality of the groundwater in the domestic supply wells that are completed at much shallower depths.

Notwithstanding the above, as noted below in this master response, to provide property owners additional assurance regarding impacts of mine dewatering, a condition of approval will be imposed on the Project requiring that monitoring of domestic water wells will be conducted upon request for property owners within or nearby the predicted 1-ft drawdown isopleth of the Project. These 378 properties are listed in Table 3 and shown in Figure 18 below. Included in this Domestic Well Monitoring Program is water quality sampling to monitor potential changes in water quality over time.

Well Water Quality Would Not be Impacted from Changes in Groundwater Flow Paths

Several commenters expressed a concern with the potential water quality degradation in domestic wells that may be caused by lowering of the water table and associated changes in groundwater flow paths. In response, Itasca prepared several figures of the modelled water levels at three time periods (attached to the FEIR as Appendix C); Pre-mining (before any historical mining activity), 2019 (the present/baseline condition), end of future mining (after 25 years of mining). The water levels are shown at a larger scale using 50-foot contours. However, the figures demonstrate that the drawdown during mining only has a minor effect on a few of the contours, and at a very local scale. The overall regional groundwater flow paths are not altered. As such, there would not be sufficient changes in actual groundwater levels in wells to cause groundwater with naturally-occurring arsenic to be pulled to different locations. As demonstrated by the figures attached as Appendix C to the FEIR, water quality impacts to domestic wells due to changes in water quality flow direction would only occur if the mining changed the actual groundwater levels by hundreds of feet. There is no evidence or precedent for an effect of that magnitude. Rather, the model predicted drawdown of 10 ft is localized well within the Rise mining boundary. As such, water quality impacts to domestic wells are speculative impacts that do not require analysis under CEQA.

Well Mitigation Plan

Mitigation Measure 4.8-2(b) requires that if it is determined, based on the GMP, that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the Project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted, and if necessary, providing an immediate water supply until the source of the problem is determined and rectified. As discussed in the Well Mitigation Plan, if a dewatering impact to an area outside of the East Bennett area were projected during operations, pre-emptive action would be taken as necessary to ensure immediate water supply and compensation. The 10% drawdown threshold of significance is extremely conservative and, in most cases, would not lower the water level below the casing of the domestic well.



Therefore, well mitigation may not be required after inspection. If reduction of the water column was great enough to reduce the well's yield, a simple adjustment to the pumping system may only be required. For example, by installing or increasing the size of a pressure or holding tank and pumping at a lessor rate over a longer duration, if necessary. The Well Mitigation Plan has been edited to clarify the range of actions and procedures that would be taken under the Well Mitigation Plan and the performance standards required for Well Mitigation. The revised Well Mitigation Plan is attached to the Final EIR as Appendix D.

Analysis of Dewatering Effects Outside East Bennett Area

Several commenters have stated that the water supply for wells outside of the E. Bennet area must be analyzed in the DEIR. The analysis provided in Section 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. No significant impacts to domestic water wells are predicted in other areas based on technical analyses. The predictions include the use of a 100% safety factor, multiple sensitivity scenarios, and have been peer reviewed by the County's independent expert consultant. The future mitigation of wells outside the East Bennett area, if any, and method of mitigation are speculative as the DEIR does not predict any significant impact in these areas, and CEQA does not require the analysis of speculative impacts. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." Therefore, as an impact of water supply to wells outside of the East Bennett area is not predicted, such analysis is speculative and need not be analyzed in the DEIR.

Water Supply Compensation to Impacted Property Owners

Several commenters state that the applicant should pay for water for any parcel connected to NID water supply for the life of the mine, even after the parcel is sold or annexed into the City of Grass Valley. The Well Mitigation Plan (Appendix K.9 of the DEIR) takes a conservative approach and presumes that an owner who decides to connect to the NID system has been impacted by and at the fault of the mining operation, even if no impact to groundwater well supply has occurred. As such, the Well Mitigation Plan was designed to be even more conservative than Nevada County General Plan Policy 17.12, which requires an impact as a prerequisite to the obligation to pay for water, which policy states "if it is determined that the operator is at fault, impacted owners shall be compensated by the operator." A new homeowner would not be impacted because the impact would have previous occurred, and the cost of purchasing water from NID for that new homeowner would be the same as buying any other home connected to NID's water supply. The provision of free water as a selling feature to a new buyer is not contemplated by the policy. If a property was annexed into the City of Grass Valley, it would be subject to the ordinances of the City, which allows water wells to be used for irrigation purposes only (Grass Valley General Ordinance Section 13.16.020) and would therefore require a property owner to connect to the potable water supply and pay for their water use. As annexation of a home into the City would already require connection to NID water supply and purchase of NID water, continuation of payment for water by the applicant after annexation would be a windfall to the property owner rather than mitigation of an impact, and is not required by CEQA or County policy.

Domestic Well Monitoring Program

A number of property owners in the area surrounding the Idaho-Maryland Mine Project have expressed concerns about the Project's impact on their domestic wells, both in terms of drying up their well(s) and adversely affecting well water quality.

To provide property owners additional assurance regarding impacts of mine dewatering, a condition of approval will be imposed on the Project requiring that monitoring of domestic water wells will be conducted upon request for property owners within or nearby the predicted 1-ft drawdown isopleth of the Project. These 378 properties are listed in Table 3 and shown in Figure 18 below. Some of these properties do not have a domestic water well but to ensure that well owners are not excluded all owners will be contacted by the Company. Certain areas, including the City of Grass Valley, Loma Rica Industrial Area, Tim Burr Lane / Star Drive, Cedar Ridge, The Cedars, New Brunswick Court, and Brunswick Pines are known to already be serviced by NID potable water as shown in Figure 19. Property owners in these areas will not be contacted. Please see Appendix E to this Final EIR for the Domestic Well Monitoring Program.

The following measures have been added to the Domestic Well Monitoring Program, and shall be included as a condition of approval for the Project:

1) Property owner's shown in Table 3 will be contacted at least three months prior to commencement of the required 12-month groundwater monitoring period and the company will request permission to inspect and install monitoring equipment at the well.
2) Property owners who respond and grant permission for well monitoring will be added to the Domestic Well Monitoring Program.
3) The well will be inspected to determine the characteristics of the well, including location, well depth, casing and screen depth, static water level, and well yield. A water quality sample will be taken during the inspection.
4) Instrumentation will be installed to measure water level on a periodic basis (such as 1 or 4 hours) and pumping rates (to correlate water level with the wells use). Data from the instruments will be transmitted by telemetry.
5) Water level data will be collected for at least 12 months prior to the commencement of mine dewatering and will continue throughout the period of initial mine dewatering (dewatering of the historic mine workings) and for at least the first 5 years of operations.
6) All data collected and reports generated will be provided to the property owner and to Nevada County.
7) All costs of well monitoring will be paid by the company and well monitoring equipment will remain the property of the company. A property owner may terminate well monitoring upon request and the company will remove any installed monitoring equipment.
8) For any well that is monitored under the Domestic Well Monitoring Program, monitoring results will be used to supplement the analysis from the Groundwater Monitoring Plan to determine whether an individual groundwater well is expected to be impacted or has been impacted by dewatering operations, using the threshold set forth in the Well Mitigation Plan.

Figure 18
Properties Eligible for Domestic Well Monitoring

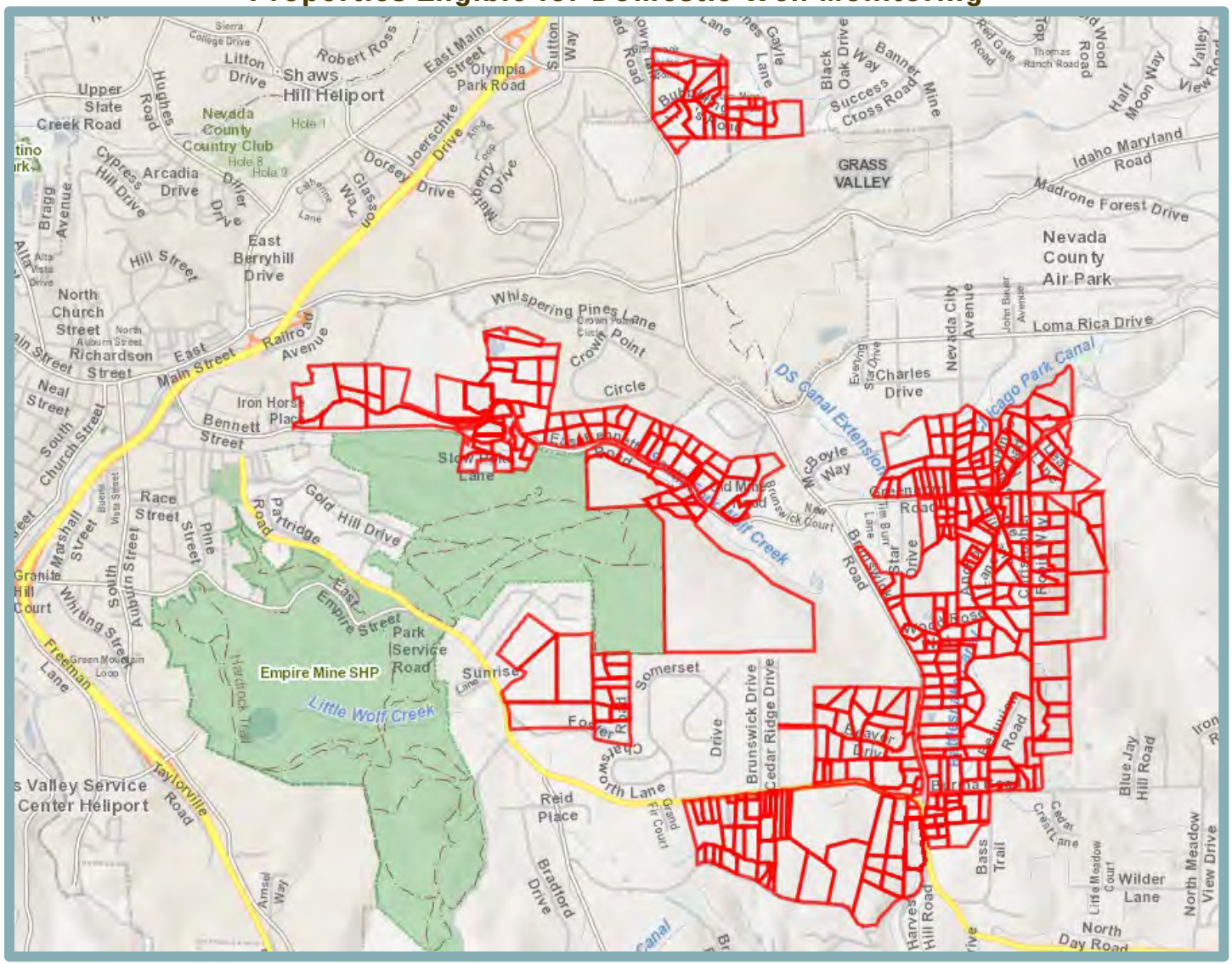


Figure 19
Areas Known to be Supplied by NID Potable Water

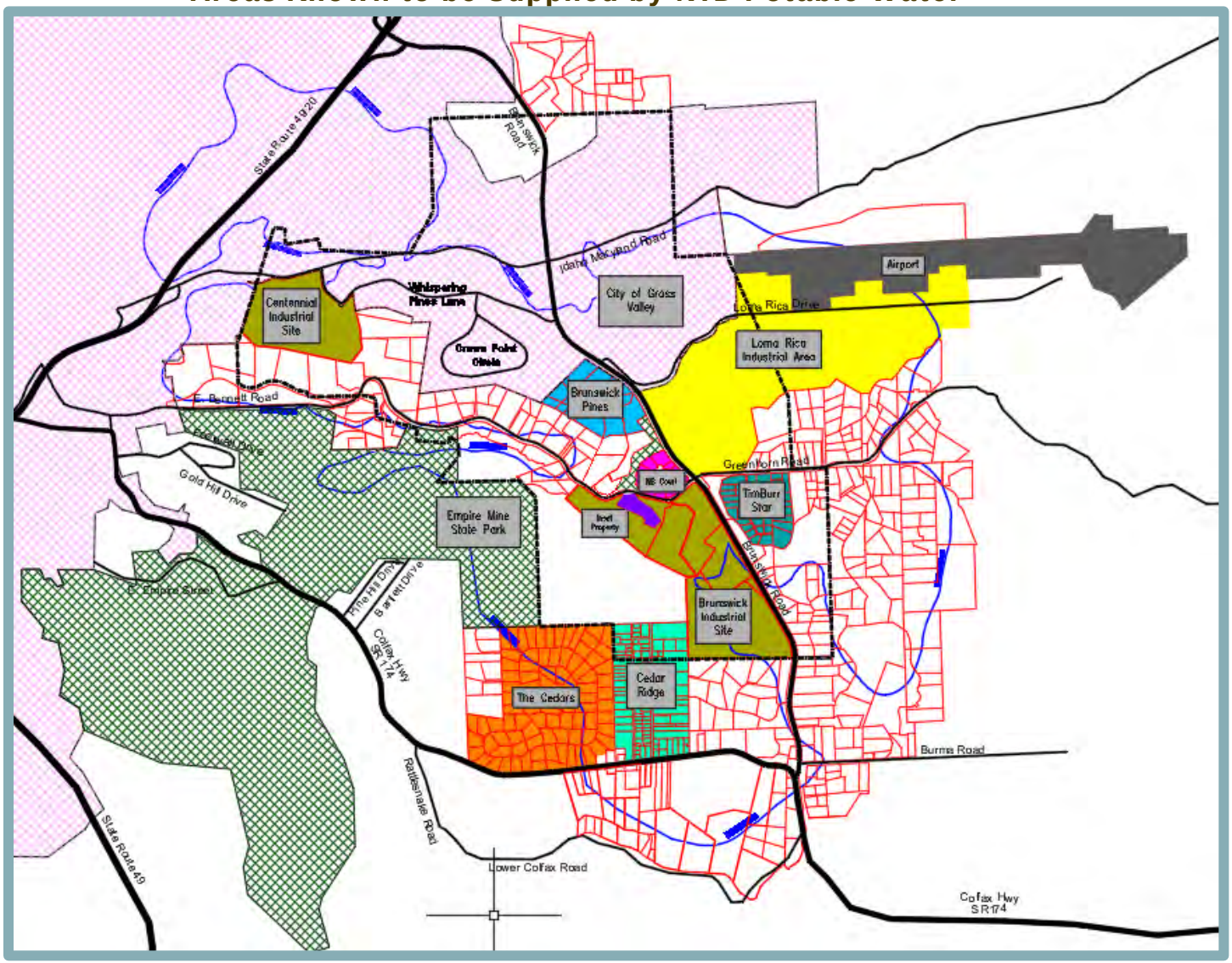


Table 3
Properties Eligible for Domestic Well Monitoring

APN	Site Address
006-391-005	12803 MCBOYLE WAY
006-391-006	13935 DOWNWIND COURT
006-391-007	13993 DOWNWIND COURT
006-391-008	14020 DOWNWIND COURT
006-391-009	13936 DOWNWIND COURT
006-391-012	12966 GREENHORN ROAD
006-391-013	12990 GREENHORN ROAD
006-391-014	13010 GREENHORN ROAD
006-391-015	13034 GREENHORN ROAD
006-391-016	13058 GREENHORN ROAD
006-391-022	12920 GREENHORN ROAD
006-391-023	12890 GREENHORN ROAD
006-391-025	13072 GREENHORN ROAD
006-391-032	12894 GREENHORN ROAD
006-391-033	12900 GREENHORN ROAD
006-441-008	13352 LOWER ANCHOR LANE
006-441-009	14149 CHRISTOPHER ROBIN WAY
006-441-010	13289 LOWER ANCHOR LANE
006-441-011	14095 CHRISTOPHER ROBIN WAY
006-441-012	14107 CHRISTOPHER ROBIN WAY
006-441-013	14027 CHRISTOPHER ROBIN WAY
006-441-014	13186 OMEGA COURT
006-441-015	13173 OMEGA COURT
006-441-016	13883 CHRISTOPHER ROBIN WAY
006-441-017	13831 CHRISTOPHER ROBIN WAY
006-441-018	13793 CHRISTOPHER ROBIN WAY
006-441-020	12748 THE HOLLOW
006-441-021	13224 OMEGA COURT
006-441-022	13217 OMEGA COURT
006-441-023	13907 CHRISTOPHER ROBIN WAY
006-441-033	12440 THE HOLLOW
006-461-038	13420 WOOD ROSE WAY
006-461-040	10996 SUNDOWN PLACE
006-461-041	11026 SUNDOWN PLACE
006-461-042	11030 SUNDOWN PLACE
006-461-043	11102 SUNDOWN PLACE
006-461-047	11202 SUNDOWN PLACE

006-471-001	12904 BRUNSWICK ROAD
006-471-003	12942 BRUNSWICK ROAD
006-471-004	12972 BRUNSWICK ROAD
006-471-005	15033 TOWLE LANE
006-471-006	12628 TOWLE COURT
006-471-007	12635 TOWLE COURT
006-471-008	12629 TOWLE COURT
006-471-009	13018 BRUNSWICK ROAD
006-471-010	13064 BRUNSWICK ROAD
006-471-011	11026 BEAUVIEW ROAD
006-471-012	14911 TOWLE LANE
006-471-013	12606 TOWLE COURT
006-481-001	13110 BRUNSWICK ROAD
006-481-002	13148 BRUNSWICK ROAD
006-481-003	13152 BRUNSWICK ROAD
006-481-004	13192 BRUNSWICK ROAD
006-481-005	12524 BURMA ROAD
006-481-006	12552 BURMA ROAD
006-481-007	12590 BURMA ROAD
006-481-008	12666 BURMA ROAD
006-481-009	11316 BEAUVIEW ROAD
006-481-010	11306 BEAUVIEW ROAD
006-481-011	11246 BEAUVIEW ROAD
006-481-012	11124 BEAUVIEW ROAD
006-481-013	11147 BEAUVIEW ROAD
006-481-014	11311 BEAUVIEW ROAD
006-481-015	11321 BEAUVIEW ROAD
006-481-016	12728 BURMA ROAD
006-481-017	12764 BURMA ROAD
006-481-018	12832 BURMA OAKS ROAD
006-481-019	12856 BURMA OAKS ROAD
006-481-020	12886 BURMA OAKS ROAD
006-481-021	13207 BURMA OAKS ROAD
006-700-040	14285 HOLLYDALE ROAD
006-700-071	12604 BRUNSWICK ROAD
006-700-072	12608 BRUNSWICK ROAD
006-720-033	12967 GREENHORN ROAD
006-720-034	13009 GREENHORN ROAD
006-720-035	13023 GREENHORN ROAD
006-720-036	13049 GREENHORN ROAD

006-720-037	13015 GREENHORN ROAD
006-720-038	14240 HOLLYDALE ROAD
006-720-039	14254 HOLLYDALE ROAD
006-720-040	13030 HOLLY BRANCH COURT
006-720-041	13025 HOLLY BRANCH COURT
006-720-042	13033 HOLLY BRANCH COURT
006-720-043	14278 HOLLYDALE ROAD
006-790-001	13103 GREENHORN ROAD
006-790-002	14277 HOLLYDALE ROAD
006-790-003	13139 GREENHORN ROAD
006-790-005	13140 LOWER ANCHOR LANE
006-790-008	14440 ANCHOR LANE
006-790-017	14458 ANCHOR LANE
006-790-020	14384 ANCHOR LANE
006-790-021	14232 ANCHOR LANE
006-790-022	13203 GREENHORN ROAD
006-790-023	14327 LITTLE HILL LANE
006-790-025	14592 LITTLE HILL LANE
006-790-026	14551 LITTLE HILL LANE
006-790-027	14554 LITTLE HILL LANE
006-790-030	14471 ANCHOR LANE
006-790-032	14325 ANCHOR LANE
006-790-034	14550 ANCHOR LANE
006-790-036	14395 LITTLE HILL LANE
006-790-037	14451 LITTLE HILL LANE
006-790-038	14581 ANCHOR LANE
006-790-039	14619 ANCHOR LANE
006-790-040	14528 LITTLE HILL LANE
006-790-041	14478 LITTLE HILL LANE
006-790-042	14349 ANCHOR LANE
006-790-043	14367 ANCHOR LANE
006-790-045	14346 ANCHOR LANE
006-790-046	13193 LOWER ANCHOR LANE
006-790-047	13231 LOWER ANCHOR LANE
006-790-048	14285 ANCHOR LANE
006-790-050	14330 ANCHOR LANE
006-790-051	14418 ANCHOR LANE
006-790-053	14482 ANCHOR LANE
006-800-001	12616 BRUNSWICK ROAD
006-800-002	12684 BRUNSWICK ROAD

006-800-003	12730 BRUNSWICK ROAD
006-800-005	14744 TOWLE LANE
006-800-006	14794 TOWLE LANE
006-800-007	14793 TOWLE LANE
006-800-008	14749 TOWLE LANE
006-800-009	14719 TOWLE LANE
006-800-010	14689 TOWLE LANE
006-800-011	12980 WOOD ROSE WAY
006-800-016	13183 WOOD ROSE WAY
006-800-017	13320 WOOD ROSE WAY
006-800-018	13326 WOOD ROSE WAY
006-800-022	12768 BRUNSWICK ROAD
006-800-023	14712 TOWLE LANE
006-800-024	12999 WOOD ROSE WAY
006-800-026	13041 WOOD ROSE WAY
006-800-027	13052 WOOD ROSE WAY
006-800-028	13034 WOOD ROSE WAY
006-800-029	13018 WOOD ROSE WAY
006-800-030	13120 WOOD ROSE WAY
006-800-031	13129 WOOD ROSE WAY
006-800-032	13171 WOOD ROSE WAY
006-800-033	13259 WOOD ROSE WAY
006-800-034	10830 LANTANA LANE
006-800-035	10856 LANTANA LANE
006-820-004	14093 GLENN PINES ROAD
006-820-005	14138 GLENN PINES ROAD
006-820-006	13399 NEVADA CITY AVENUE
006-820-007	13966 LIQUIDAMBAR LANE
006-820-008	14006 LIQUIDAMBAR LANE
006-820-009	14054 LIQUIDAMBAR LANE
006-820-010	14096 LIQUIDAMBAR LANE
006-820-011	14130 LIQUIDAMBAR LANE
006-820-012	14168 LIQUIDAMBAR LANE
006-820-013	13198 GREENHORN ROAD
006-820-014	14137 LIQUIDAMBAR LANE
006-820-015	14107 LIQUIDAMBAR LANE
006-820-016	14087 LIQUIDAMBAR LANE
006-820-017	14119 LIQUIDAMBAR LANE
006-820-019	14076 GLENN PINES ROAD
006-820-020	14046 GLENN PINES ROAD

006-820-022	13935 GLENN PINES ROAD
006-820-023	13448 GREENHORN ROAD
006-820-024	13530 GREENHORN ROAD
006-820-029	13549 GREENHORN ROAD
006-820-030	13505 GREENHORN ROAD
006-820-034	13413 GREENHORN ROAD
006-820-035	13315 GREENHORN ROAD
006-820-036	13226 GREENHORN ROAD
006-820-037	13227 GREENHORN ROAD
006-820-039	13203 GREENHORN ROAD
006-820-042	13974 GLENN PINES ROAD
006-820-043	13955 GLENN PINES ROAD
006-820-045	14108 YAMA WAY
006-820-046	12681 LEAF LANE
006-820-047	12719 LEAF LANE
006-820-048	12757 LEAF LANE
006-820-049	12975 LEAF LANE
006-820-052	14065 GLENN PINES ROAD
006-820-053	14023 GLENN PINES ROAD
006-820-056	13564 GREENHORN ROAD
006-820-057	13949 LIQUIDAMBAR LANE
006-820-059	14027 LIQUIDAMBAR LANE
006-830-068	12469 THE HOLLOW
006-890-001	12933 ELK LANE
006-890-002	12955 ELK LANE
006-890-003	12966 MINK COURT
006-890-004	12940 MINK COURT
006-890-005	12951 MINK COURT
006-890-006	12702 BEAVER DRIVE
006-890-007	12372 BEAVER DRIVE
006-890-008	12436 BEAVER DRIVE
006-890-009	13010 MINK COURT
006-890-010	12975 MINK COURT
006-890-011	12540 BEAVER DRIVE
006-890-012	12640 BEAVER DRIVE
006-890-013	12353 BEAVER DRIVE
006-890-014	12405 BEAVER DRIVE
006-890-015	12467 BEAVER DRIVE
006-890-016	12545 BEAVER DRIVE
006-890-017	12645 BEAVER DRIVE

006-890-018	12998 STATE HIGHWAY 174
006-890-019	13024 STATE HIGHWAY 174
006-890-020	13064 STATE HIGHWAY 174
006-890-021	13136 STATE HIGHWAY 174
006-890-022	13194 STATE HIGHWAY 174
006-890-023	13177 BRUNSWICK ROAD
006-890-024	13215 BRUNSWICK ROAD
006-890-025	13253 BRUNSWICK ROAD
006-890-026	13270 STATE HIGHWAY 174
006-920-013	13634 VINCENT COURT
006-920-014	13636 VINCENT COURT
009-320-001	11431 EAST BENNETT ROAD
009-320-003	11889 SLOW POKE LANE
009-320-012	11497 EAST BENNETT ROAD
009-320-013	11343 LAVA ROCK AVENUE
009-320-024	11273 LAVA ROCK AVENUE
009-320-025	11773 SLOW POKE LANE
009-320-027	11565 EAST BENNETT ROAD
009-320-028	11613 EAST BENNETT ROAD
009-320-029	11527 EAST BENNETT ROAD
009-320-030	10423 EAST BENNETT ROAD
009-320-031	11337 EAST BENNETT ROAD
009-320-032	11317 EAST BENNETT ROAD
009-320-033	11269 EAST BENNETT ROAD
009-320-035	11752 EAST BENNETT ROAD
009-560-004	10662 EAST BENNETT ROAD
009-560-005	10780 EAST BENNETT ROAD
009-560-010	10966 EAST BENNETT ROAD
009-560-013	11612 EAST BENNETT ROAD
009-560-014	11542 EAST BENNETT ROAD
009-560-016	11452 EAST BENNETT ROAD
009-560-018	N/A
009-560-019	N/A
009-560-029	N/A
009-560-030	N/A
009-560-032	N/A
009-560-033	N/A
009-560-034	N/A
009-560-035	N/A
009-560-037	N/A

009-560-038	N/A
009-560-039	N/A
009-560-045	11454 EAST BENNETT ROAD
009-560-046	11336 EAST BENNETT ROAD
009-560-047	11352 EAST BENNETT ROAD
009-581-016	12477 OLD MINE ROAD
009-581-017	12401 OLD MINE ROAD
009-581-045	12504 OLD MINE ROAD
009-581-053	12448 OLD MINE ROAD
009-590-005	11918 EAST BENNETT ROAD
009-590-006	11882 AMETHYST COURT
009-590-007	12047 AMETHYST COURT
009-590-008	11866 EAST BENNETT ROAD
009-590-009	12052 CORDELL COURT
009-590-010	12034 CORDELL COURT
009-590-011	12051 CORDELL COURT
009-590-012	11780 EAST BENNETT ROAD
009-590-013	11828 EAST BENNETT ROAD
009-590-014	11818 EAST BENNETT ROAD
009-600-004	12108 EAST BENNETT ROAD
009-600-008	11966 EAST BENNETT ROAD
009-600-009	12002 EAST BENNETT ROAD
009-600-010	12176 EAST BENNETT ROAD
009-600-011	12228 EAST BENNETT ROAD
009-600-012	14070 DIAMOND COURT
009-600-013	14036 DIAMOND COURT
009-600-014	14035 DIAMOND COURT
009-600-015	14069 DIAMOND COURT
009-600-016	13997 EMERALD COURT
009-600-017	12040 EAST BENNETT ROAD
009-600-018	11948 EAST BENNETT ROAD
009-600-019	11948 EAST BENNETT ROAD
009-600-024	11753 EAST BENNETT ROAD
009-600-026	12093 EAST BENNETT ROAD
009-600-027	12161 EAST BENNETT ROAD
009-600-028	12261 EAST BENNETT ROAD
009-600-029	12261 EAST BENNETT ROAD
009-600-030	12195 EAST BENNETT ROAD
009-600-031	12233 EAST BENNETT ROAD
009-600-032	N/A

009-600-033	11903 EAST BENNETT ROAD
009-630-008	10879 BARTLETT DRIVE
009-630-040	N/A
009-640-001	12716 FOSTER ROAD
009-640-002	12782 FOSTER ROAD
009-640-003	12764 FOSTER ROAD
009-640-005	12802 FOSTER ROAD
009-640-006	12866 FOSTER ROAD
009-640-007	12852 FOSTER ROAD
009-640-008	12870 FOSTER ROAD
009-640-009	12904 FOSTER ROAD
009-640-010	12960 FOSTER ROAD
009-640-019	11690 STATE HIGHWAY 174
009-640-020	11782 STATE HIGHWAY 174
009-640-028	11744 STATE HIGHWAY 174
009-680-051	N/A
009-680-052	N/A
012-010-004	11922 LOWER COLFAX ROAD
012-010-032	13460 NOEL LANE
012-010-034	11946 LOWER COLFAX ROAD
012-010-035	11938 LOWER COLFAX ROAD
012-010-036	13376 NOEL LANE
012-010-037	13377 NOEL LANE
012-010-038	13434 NOEL LANE
012-010-039	13435 NOEL LANE
012-010-042	13189 NOEL LANE
012-010-047	11900 LOWER COLFAX ROAD
012-010-048	11910 LOWER COLFAX ROAD
012-010-057	13196 NOEL LANE
012-010-059	13299 NOEL LANE
012-010-060	13071 STATE HIGHWAY 174
012-010-061	12018 LOWER COLFAX ROAD
012-010-062	12114 LOWER COLFAX ROAD
012-010-063	12218 LOWER COLFAX ROAD
012-010-066	12795 STATE HIGHWAY 174
012-010-067	12817 STATE HIGHWAY 174
012-010-068	12851 STATE HIGHWAY 174
012-010-069	12873 STATE HIGHWAY 174
012-010-070	12887 STATE HIGHWAY 174
012-010-071	12837 STATE HIGHWAY 174

012-020-003	12535 STATE HIGHWAY 174
012-020-005	12621 STATE HIGHWAY 174
012-020-007	13240 IRISH ACRES CIRCLE
012-020-009	12757 STATE HIGHWAY 174
012-020-010	12779 STATE HIGHWAY 174
012-020-011	13270 IRISH ACRES CIRCLE
012-020-017	11856 LOWER COLFAX ROAD
012-020-018	11810 LOWER COLFAX ROAD
012-020-019	11740 LOWER COLFAX ROAD
012-020-030	12685 STATE HIGHWAY 174
012-020-032	12647 STATE HIGHWAY 174
012-020-036	13350 HOBART LANE
012-020-037	13322 HOBART LANE
012-020-038	13288 HOBART LANE
012-020-041	12719 STATE HIGHWAY 174
012-020-042	12573 STATE HIGHWAY 174
012-020-043	12555 STATE HIGHWAY 174
012-020-044	11718 LOWER COLFAX ROAD
012-020-045	11696 LOWER COLFAX ROAD
012-040-004	12637 BURMA ROAD
012-040-005	12689 BURMA ROAD
012-040-015	13460 STATE HIGHWAY 174
012-040-019	13383 STATE HIGHWAY 174
012-040-020	13345 STATE HIGHWAY 174
012-040-024	12577 CEDAR CREST COURT
012-040-029	12615 CEDAR CREST COURT
012-040-030	12599 CEDAR CREST COURT
012-040-033	13420 STATE HIGHWAY 174
012-040-034	12560 LOS CEDROS LANE
012-040-035	12509 BURMA ROAD
012-040-036	12588 CEDAR CREST COURT
012-040-037	13328 BRUNSWICK ROAD
012-040-038	13458 STATE HIGHWAY 174
012-040-039	12567 LOS CEDROS LANE
012-040-060	13255 BRUNSWICK ROAD
012-040-065	13623 LAWS RANCH CROSS ROAD
012-040-067	13453 STATE HIGHWAY 174
012-040-082	13332 BASS TRAIL
035-430-021	10728 GLENBROOK ESTATES COURT
035-460-004	12125 CRYSTAL SPRINGS ROAD

035-460-017	N/A
035-460-018	12134 CRYSTAL SPRINGS ROAD
035-550-001	10833 BUBBLING WELLS ROAD
035-550-002	10871 BUBBLING WELLS ROAD
035-550-008	10682 BUBBLING WELLS ROAD
035-550-010	10750 BUBBLING WELLS ROAD
035-550-011	10706 BUBBLING WELLS ROAD
035-550-012	10826 BUBBLING WELLS ROAD
035-550-013	12178 BOREHAM MINE ROAD
035-550-014	10794 BUBBLING WELLS ROAD
035-550-016	10651 BUBBLING WELLS ROAD
035-550-017	10923 BUBBLING WELLS ROAD
035-550-018	10938 BUBBLING WELLS ROAD
035-550-019	10985 BUBBLING WELLS ROAD
035-550-020	11000 BUBBLING WELLS ROAD
035-550-021	11052 BUBBLING WELLS ROAD
035-550-022	11068 BUBBLING WELLS ROAD
035-550-023	10730 GLENBROOK ESTATES COURT
035-550-024	10763 BUBBLING WELLS ROAD
035-550-025	10741 BUBBLING WELLS ROAD
035-550-026	UNKNOWN ADDRESS

Conclusion

The DEIR (Mitigation Measure 4.8-2(a)) requires a groundwater monitoring plan that includes installation and monitoring of numerous groundwater monitoring wells to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(b) requires the applicant to be responsible for replacing water for any impacted wells (i.e., a 10 percent or greater reduction of the water column of any well) beyond the expected drawdown impact area, pursuant to Nevada County General Plan Policy 17.12. While the GMP is adequate to ensure early detection of potential well impacts (both quantity and quality), the applicant has agreed to implement a Domestic Well Monitoring Program, that would work in concert with the GMP to ensure early detection of potentially significant well impacts beyond the anticipated drawdown area, such that well mitigation measures can be implemented.

Master Response 16 - Drought and Climate Change

Comments

Several commenters have stated that droughts induced by climate change are not considered in the analysis of the DEIR or that the Project will contribute to the effects of drought on water users.

Discussion

As disclosed in Section 3.3.2.2 of Appendix K.2 of the DEIR, the water levels in the private domestic wells have seasonal fluctuations that may range from 10 feet to 50 feet between wet

and dry times of the year but remain relatively consistent from year to year within each individual well. During the monitoring period, several years with below normal rainfall occurred (2001, 2004, and 2007), multiple years with above normal rainfall occurred (1995-1998 and 2006), and several years of near-normal rainfall occurred (1999, 2000, 2002, 2003, 2005). Despite large variations in annual rainfall from year to year, the seasonal water level cycles in individual wells remain consistent over time and the overall water levels shown on the hydrographs for each well do not fluctuate based on wet or dry climatic cycles. Based on the lack of changes in the individual well hydrographs between wet and dry climatic cycles, the amount of recharge, as described in Section 3.2, appears to be consistent from year to year and is not affected substantially by drought or wet cycles. It is noted that no groundwater level measurements have been completed since 2007 which creates some uncertainty to the predicted impact to percentage of water column in domestic wells. Uncertainty in predicted impacts is addressed through the various sensitivity scenarios discussed in Appendix K.3, the application of a 100% factor of safety (see page 4.8-58 of the DEIR), and the proposed connection of 30 properties, including properties where no significant impact is predicted in the E. Bennett area, to NID potable water (see page 4.8-66 of the DEIR). Nevertheless, the analysis in Section 4.8 of DEIR has determined that the Project could result in a significant impact to groundwater supplies without implementation of a groundwater monitoring program and well mitigation plan. Mitigation Measure 4.8-2(a) requires that a minimum of 12 months of water-level monitoring data is collected before commencement of dewatering. Impacts to domestic water wells will be measured against those current baseline measurements of monitoring wells and not historic water levels. Mitigation Measure 4.8-2(b) requires well mitigation if, based the groundwater monitoring plan, a 10 percent reduction in the water column of a well is determined. Therefore, the determination of impact would be based on current water level data and any impacts to domestic wells would be mitigated through the proposed mitigation measures.

Climate models predict that mean annual temperatures in the western United States will increase 1–2 °C during the first half of this century and the warmer temperatures will likely result in a reduction in mountain snowpack and a winter-ward shift in springtime peak streamflows of about one month by 2050. These effects are reported to have already been observed in the Sierra Nevada. However, current understanding of groundwater recharge and storage in mountain watersheds is insufficient to predict with reasonable confidence the manner and rate at which discharge from mountain aquifers will respond to changes in climate (Earman 2012). Reduced mountain snowpacks could potentially lead to reduced mountain groundwater recharge, even if total precipitation remains nearly the same, due to a potential increase in evapotranspiration associated with warmer temperatures. However, it is also possible that mountain recharge rates will remain unchanged or increase in response to climate change. For example, fractured-rock aquifers underlying mountain watersheds are typically permeability-limited rather than recharge-limited, so a reduction in snowmelt may have little influence on recharge rates (Earman 2012). Further, earlier snowmelt periods may cause more infiltration to occur early in the spring when evapotranspiration rates are low, leading to an increase in recharge. (Earman 2012.) As such, an assumption that climate change will result in reduced recharge and groundwater availability in the Project area is speculative and need not be analyzed in an EIR.

Nonetheless, Itasca performed an analysis of the impacts of changing recharge (to reflect changes in precipitation) on predicted inflows to the mine and the resulting impacts to drawdowns in shallow groundwater. These sensitivity scenarios (Scenarios 4 and 5) are discussed in Section 5.4 of Appendix K.3 of the DEIR. The results are that increasing or decreasing recharge by 50% (a very extreme case, that is beyond what can reasonably be expected) only changes the predicted inflows to the mine by +/- 3% compared to the base case. The small changes in

predicted inflows are due to the low *K*s of the deeper geologic units where the mining will occur. Higher recharge reduces the area of drawdown. If the recharge rate in the model domain is decreased by 50%, the extent of the 5-ft drawdown isopleth is larger than in the Base-Case Scenario, as decreased recharge impacts the shallow water-bearing zones more than the deep zone. The 5-ft drawdown isopleth is generally still within the mineral-rights boundary.

As shown on Figure 5-9 of Appendix K.3, the simulated 5-foot drawdown contour for Scenario 5 is very similar to the other sensitivity scenarios except for an expansion of the 5-ft drawdown to the south-east towards the greenhorn area by approximately 1500 feet. As further discussed on page 8 of Appendix K.3 of the DEIR, the consistent annual recharge may be due to the limitations of recharge in fractured bedrock, where the annual rainfall amount may be greater than the capacity of the fractures to accept additional flow. In this situation, increases or decreases in the annual rainfall due to climatic cycles do not have appreciable effects on the amount of water that can be recharged because the capacity of the fractures to transmit water in the subsurface is near its maximum. Thus, there may not be a substantial variation in recharge to the water-bearing geologic materials in the Project area. Nevertheless, the sensitivity of the model to changes in recharge has been evaluated, and even an extreme scenario of 50% recharge reduction, which is not expected to occur, did not significantly change the analysis.

The future effects of climate change on groundwater recharge are unknown due to the factors discussed above, and CEQA does not require the analysis of speculative impacts. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As the impact of climate change on recharge is speculative, this impact need not be analyzed in an EIR.

However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the Project could result in a significant impact to groundwater supplies. An increase in drawdown caused by the Project due to reduced groundwater recharge combined with the Project dewatering would be detected in the required well monitoring and well mitigation plans. A Groundwater Monitoring Plan (GMP) is required for the Project under Mitigation Measure 4.8-2(a). Ongoing groundwater monitoring would be required, and groundwater-level information shall be obtained from the Project groundwater monitoring wells and collected on a quarterly basis and submitted in report form to Nevada County. Mitigation Measure 4.8-2(b) requires that if it is determined based on the GMP that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the Project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted, and if necessary, providing an immediate water supply until the source of the problem is determined and rectified.

Water Balance - Groundwater and Surface Water Interaction

Several commenters assert that the water supply assessment and groundwater analysis in the DEIR is flawed and is based on inaccurate assumptions because it ignores the link between groundwater and surface water. However, the groundwater model and hydrologic analysis discuss in detail the linkage between surface water and groundwater, which is fundamental to the analysis. As shown in Figure 4-5 of Appendix K.3, the regional groundwater flows westerly past the Project site. The analysis determined that the groundwater that inflows into the mine workings originates from the entirety of the approximately 4,000 ft vertical thickness of the rock mass. The groundwater flow from the shallower rock unit to the mine workings could lower the water level of

the shallow groundwater system in the vicinity of the mining zone. However, the groundwater flow from the deeper rock units to the mine workings will not impact the shallow groundwater level. All the inflow to the mine workings will be pumped to surface, treated and discharged into South Fork Wolf Creek where it would then flow to Wolf Creek and then to the Bear River. As predicted in the groundwater flow model, the maximum reduction of the baseflow in Wolf Creek is approximately 0.85 cfs. The Project plans to discharge 1.9 cfs treated water to Wolf Creek. The Project produces water that has a beneficial use at surface (rather than flowing underground) but does not change the overall water balance.

As stated on page 2 of the Water Supply Assessment for the Project (Appendix N), the projected potable and non-potable water demand for building of the proposed project totals approximately 121 acre-feet per year. The Project is expected to be a net producer of water through its discharge of approximately 1,371 acre-feet per year of treated mine water to the South Fork of Wolf Creek. The Nevada Irrigation District (NID) could adjust its flows upstream to use the extra water available downstream if it desired to. As discussed on page 4.8-65 of the DEIR and page 25 of Appendix K.3, the groundwater model indicates that base flows in South Fork Wolf Creek and Wolf Creek would be reduced from mine dewatering by approximately 1 cfs, which is approximately 724 acre-feet per year, not counting the Project's addition of 1,371 acre-feet per year of treated mine water to the South Fork of Wolf Creek. Therefore, the net addition of water available for beneficial use on the surface is approximately 500 acre-feet/year. Portion of this additional water originates from the storage of the deeper rock units that have little hydraulic connection with the shallow groundwater system. As shown in Table 6-5 of Appendix N to the DEIR, a single dry year water supply for NID is estimated at 91,800 acre-feet per year. Although the quantity of water discharged from the proposed mine is small in comparison to the overall amount of NID water supply, the Project would provide additional water to NID customers during times of drought and therefore diversify water supplies available to the community and increase drought resiliency. This additional water would not likely influence measures of the NID Drought Plan (see Section 6.5 of the NID 2020 Urban Water Management Plan). However, it should be noted that stages 1 through 5 of the NID Drought Plan only impose restrictions to outdoor irrigation on treated water customers and stage 6 of the NID Drought plan maintains health and safety use of water for treated water customers. Therefore, properties in the E. Bennett area which are connected to NID water supply under the Project's Well Mitigation Plan (Appendix K.9) would be assured water delivery for necessary use by NID even during the most severe droughts. As discussed in Appendix K.9, property owners may also choose to retain and continue using their water wells in addition to the NID potable water if they desire.

Conclusion

The future effects of climate change on groundwater recharge are unknown due to the factors discussed above, and CEQA does not require the analysis of speculative impacts (Section 15384). As the impact of climate change on recharge is speculative, this impact need not be analyzed in an EIR. Nevertheless, the DEIR includes an analysis of the effects of changing recharge (to reflect changes in precipitation) on predicted inflows to the mine and the resulting impacts to drawdowns in shallow groundwater. The results are that increasing or decreasing recharge by 50% (a very extreme case, that is beyond what can reasonably be expected) only changes the predicted inflows to the mine by +/- 3% compared to the base case. In addition, there is consistent annual recharge which may be due to the limitations of recharge in fractured bedrock, where the annual rainfall amount may be greater than the capacity of the fractures to accept additional flow. In this situation, increases or decreases in the annual rainfall due to climatic cycles do not have appreciable effects on the amount of water that can be recharged because the capacity of the fractures to transmit water in the subsurface is near its maximum. Therefore, while



speculative, climate change is not anticipated to significantly effect groundwater recharge, and the DEIR's groundwater analysis adequately evaluates the project's potential to substantially deplete groundwater supplies (Appendix G, X(b)).

References

Earman (Journal of Hydrology. 2012. *Evolution of Groundwater Age in a Mountain Watershed over a Period of Thirteen Years.* Available at: (PDF) Evolution of groundwater age in a mountain watershed over a period of thirteen years | Sam Earman - Academia.edu

Master Response 17 - Meteorological Data Used in HRA

Comments

Several commenters assert that the Health Risk Assessment (HRA) performed for the project did not use appropriate meteorological data for the Grass Valley Area.[9]

Discussion

The dispersion model in the Health Risk Assessment used the most appropriate data for the analysis. AERMOD requires pre-processed met data, which is only available from specific sites. Dudek analyzed the available data compared to actual data at the closest weather station to the project site and Blue Canyon was most representative. There is no AERMOD pre-processed met data from Grass Valley or the Nevada County Airport.

As stated on page 12 of the Health Risk Assessment (Appendix E.1 of the EIR), the nearest stations with processed meteorological data for use in AERMOD are Blue Canyon (17 miles away), Auburn (18 miles away), and Beale (22 miles away). The predominant wind direction at the project site is from the North-East and South-West direction as shown in Figure 20 below[10]. The Blue Canyon met station has a predominant wind direction from the North-East and South (Figure 21); the Auburn met station from the East (Figure 22); and the Beale met station from the South-East and North-West[11] (Figure 23). Blue Canyon was selected since it is the closest station and is the most representative of the project site.

As stated on page 27 of the Health Risk Assessment (Appendix E.1 of the EIR), the maximally exposed receptor (MER) would be the nearest existing residence to the north of the Brunswick Industrial Site. The predominant wind direction used for dispersion modelling is from the south (see Figure 20 of the Health Risk Assessment). Project emissions from construction activities at the Brunswick Site, shaft, process plant, and truck traffic are generally to the south and in proximity to the MER. (see Figure 3.3 of the DEIR and/or the more detailed map that was also submitted with the Use Permit application)[12]. As such, with the predominant wind direction blowing directly towards the nearest sensitive receptor, the Health Risk Assessment for the project presented a conservative analysis.

Furthermore, Dudek contacted the Northern Sierra Air Quality Management District (NSAQMD) to discuss recommended meteorological stations for the Health Risk Assessment prior to

[9] The results of the HRA are incorporated into Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, to address Appendix G, III(c) regarding whether the project would expose sensitive receptors to substantial pollutant concentrations.

[10] Meteoblue. 2020. Climate Grass Valley. Accessed September 2020. https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/grass-valley_united-states-of-america_5353775.

[11] CARB. 2020. HARP AERMOD Meteorological Files. Accessed September 2020. https://ww2.arb.ca.gov/resources/documents/harp-aermod-meteorological-files.

[12] https://www.nevadacountyca.gov/DocumentCenter/View/30404/Brunswick-Site-Plan---Infrastructure

commencing the analysis; however, the NSAQMD did not provide a recommendation as to the most representative meteorological data for the project site. The NSAQMD reviewed the Health Risk Assessment four times (three times prior to public review of the DEIR, April 20, 2020, February 10, 2021, and June 4, 2021) and did not suggest using different meteorological data for the Health Risk Assessment. The NSAQMD is the air quality authority for the County and the project site and did not object to the use of the Blue Canyon meteorological station as representative of the meteorological conditions at the Project site.

Conclusion

The use of meteorological data from the Blue Canyon area represents the best available processed data for use in the HRA and is adequate for purposes of CEQA.

Master Response 18 - Air Quality Thresholds

Comments

Several commenters have questioned the thresholds utilized in the DEIR to identify potential Project impacts associated with emissions of criteria pollutants and toxic air contaminants.

Discussion

As stated on page 4.3-42 of the DEIR, use of the Northern Sierra Air Quality Management District's (NSAQMD) cancer and noncancer thresholds to assess health risk significance for CEQA is consistent with AB 2588 risk assessment procedures. The threshold of significance for health risk is an increased cancer risk of >10 cases per million persons and a hazard index of >1 for increased non-cancer risk. The Health Risk Assessment ("HRA") prepared for the Project concludes that the health risk to the most sensitive receptor will be below these thresholds. The threshold of significance for exposure to toxic air contaminants is based on an incremental increase in cancer and non-cancer risk associated with a project. As such, the baseline concentration does not factor into this impact determination.

Several commenters have stated that the American Lung Association gives Nevada County an "F" for ozone levels and therefore the threshold for the Project's emissions, as discussed in the DEIR, are not valid. Ozone is a reactive gas formed as a result of a complex chemical reaction between reactive organic gases (ROG) and oxides of Nitrogen (NO_x) in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from any sources. The Project's emissions of ROG and NO_x are considered criteria air pollutants. As discussed on page 4.3-41 of the DEIR, the NSAQMD established thresholds of significance for criteria air pollutants for CEQA purposes to achieve and maintain the National and California Ambient Air Quality Standards (AAQS). Because AAQS are based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, a project that complies with the thresholds established by a local air district, such as the NSAQMD, would not result in adverse effects to human health related to criteria pollutant emissions. Therefore, the NSAQMD thresholds are the correct thresholds.

Figure 20
Wind Rose from Nevada County Airport Meteorological Station

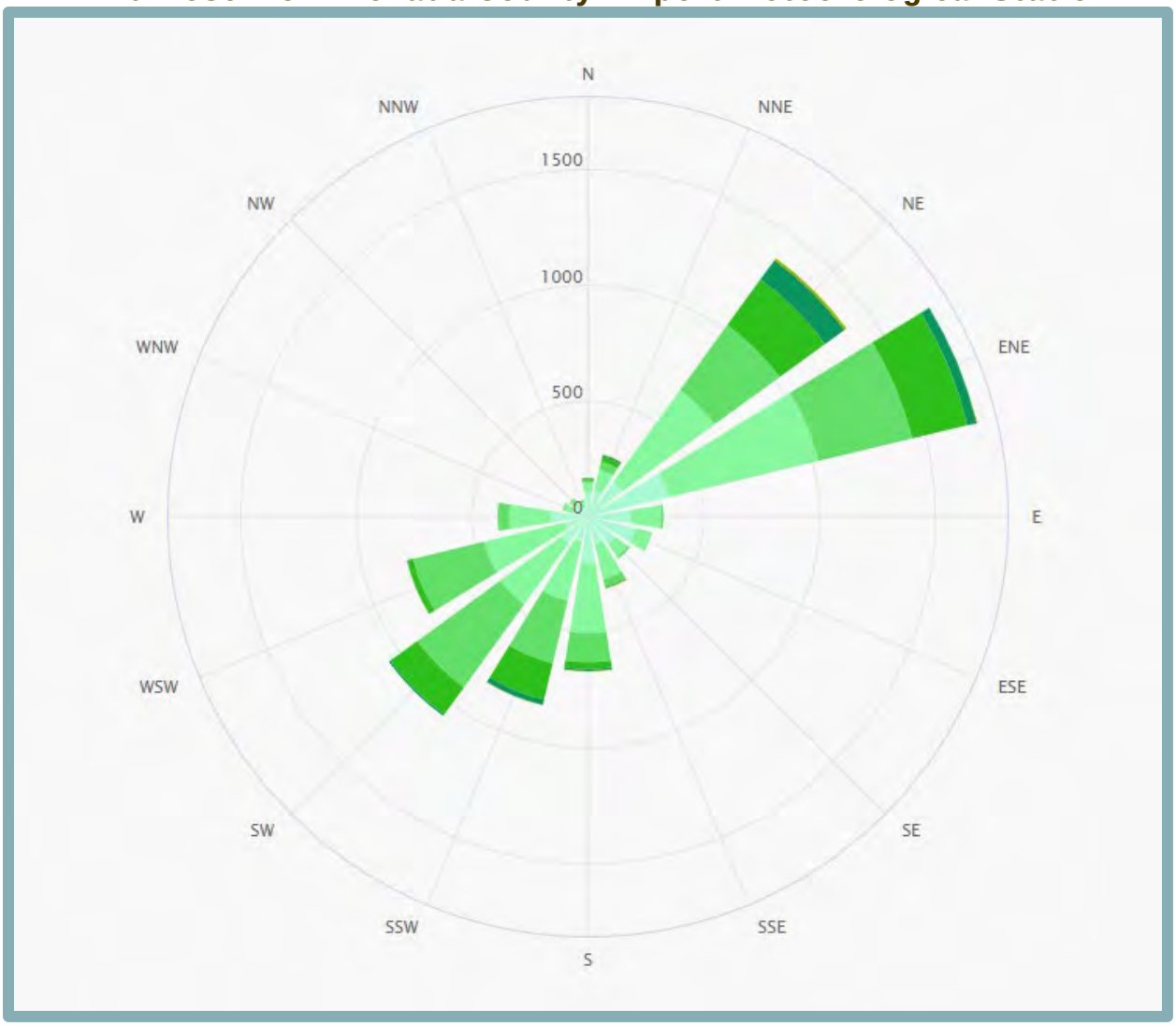


Figure 21
Wind Rose from the Blue Canyon Meteorological Station

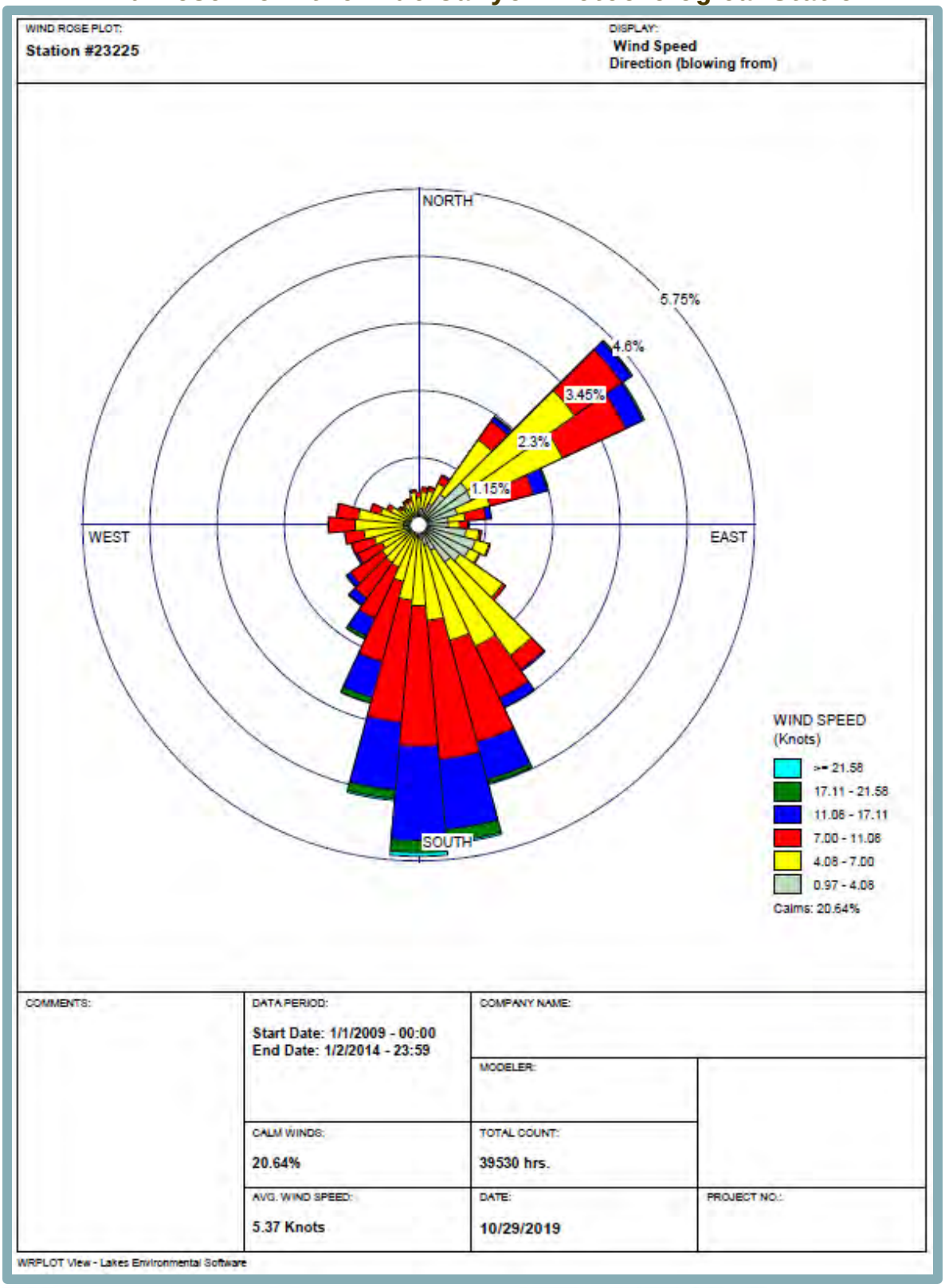


Figure 22
Wind Rose from the Auburn Meteorological Station

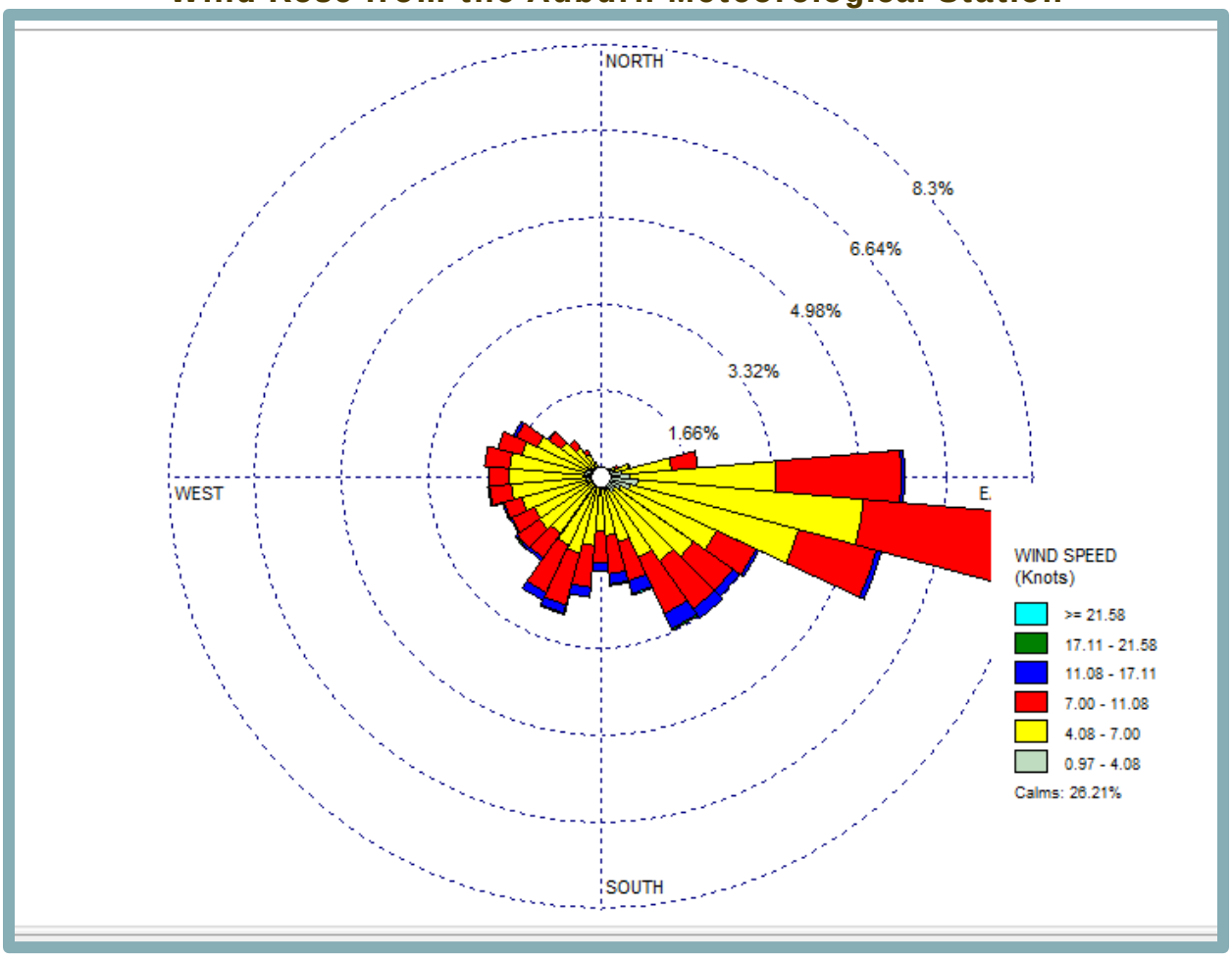
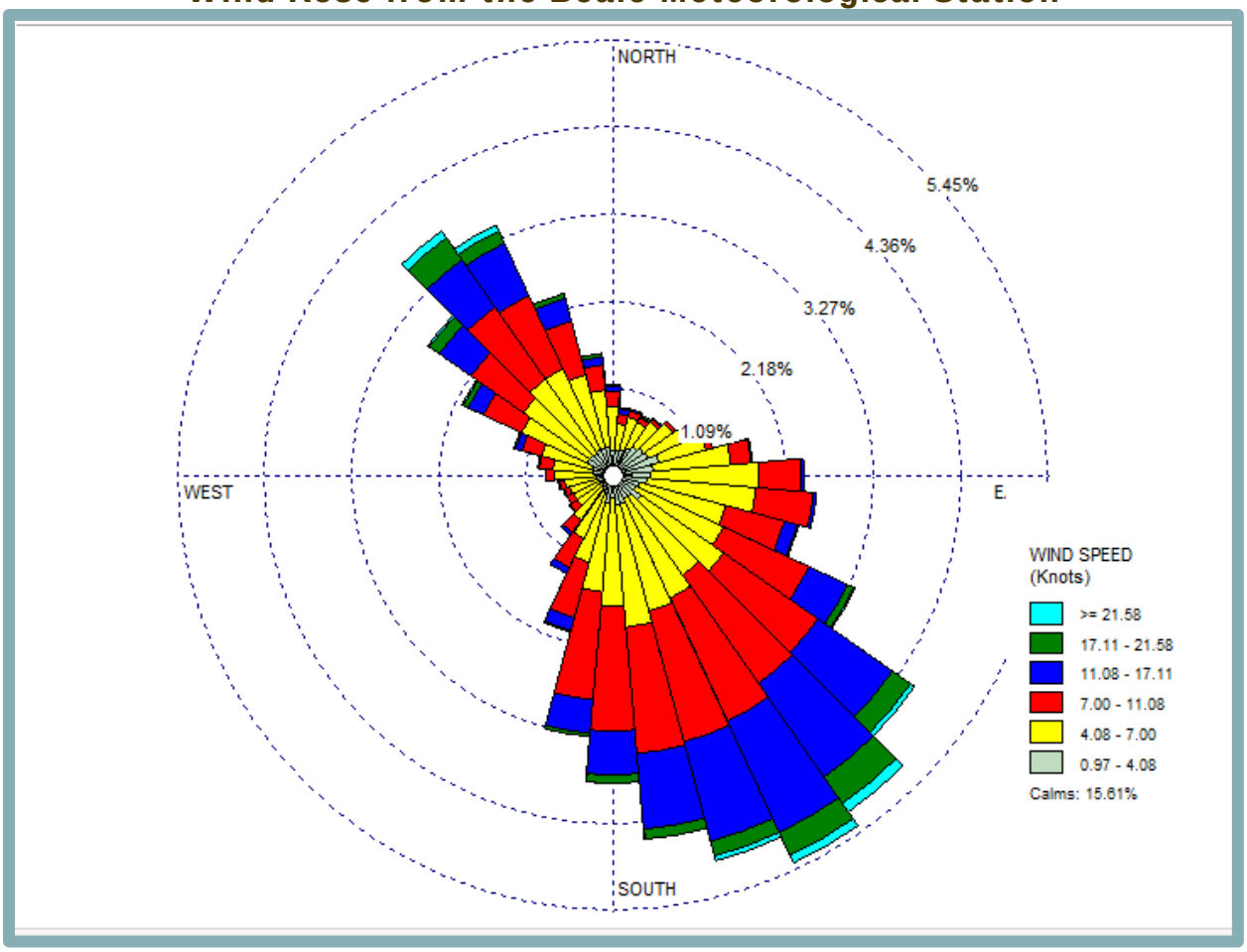


Figure 23
Wind Rose from the Beale Meteorological Station



Several commenters request that the demographics of the community, including age and specific illness rates be considered in the health risk analysis. Health risk assessments do not account for County-specific illness rates. However, as discussed in Section 2.1 of the HRA for the Project, implementing the State OEHHA Guidance, as was done for the Project, reflects conservative, health-protective methodologies to assess health impacts to adults, as well as infants, children, and other sensitive subpopulations. For example, the reference exposure levels (RELs) used in the evaluation of non-cancer risk are designed to protect the most sensitive individuals in the population, including infants and children, by selecting appropriate toxicological data and including margins of safety. Accordingly, the evaluation methods are assumed to protect children and other sensitive subpopulations (groups of more highly susceptible individuals) from adverse health effects in the event of exposure. A similar approach was taken for cancer risk, which accounts for the higher sensitivity of infants and children by applying age-specific daily breathing rates and age-sensitivity factors (ASFs), as well as conservative exposure period, fraction of time at home, and cancer potency factors as recommended by OEHHA. Less sensitive receptors, including facilities at a further distance than receptors around the sites, would have less exposure and consequently less potential health risk than the MEIR. Therefore, the HRA used State Mandated Guidance.

The HRA prepared for the Project uses a 30-year exposure timeframe, and several commenters have asked what health impacts will occur after that 30-year period. As stated on page 26 of the HRA (Appendix E.1 of the DEIR), OEHHA describes cancer risk evaluations for 9-, 30-, and 70-year exposure durations in the 2015 OEHHA Guidelines and identifies that the 9- and 30-year durations correspond to the average and high-end of residency time recommended by the EPA, with the 30-year exposure duration recommended for use as the basis for estimating cancer risk at the maximally exposed individual resident in all HRAs. OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the maximum exposed individual resident (MEIR) in the Hot Spots Program. This exposure duration represents the time of residency for 90 to 95% of Californians at a single location and should provide adequate public health protection against individual risk. (Section 8.1 OEHHA 2015 Air Toxics Hot Spots Program Manual). As standard practice, the duration of exposure is based on 30-year sensitive receptor residency rather than the life of a project.

Conclusion

This master response demonstrates that the thresholds used in the DEIR to identify potential project impacts associated with emissions of criteria pollutants and toxic air contaminants are consistent with the local air district's (NSAQMD) guidance and protective of human health.

Master Response 19 - NSAQMD Criteria Pollutant Thresholds During Operations

Comments

Several commenters asserted that mitigation is not incorporated for criteria air pollutants for the operational phase of the Project.

Discussion

Contrary to the comments, the Project incorporates the mandatory mitigation of criteria pollutants required by the Northern Sierra Air Quality Management District (NSAQMD) in both construction and operations. Moreover, the Project incorporates applicant proposed measures (APMs) that serve to reduce project emissions of criteria air pollutants (DEIR, p. 4.3-65). The APMs will be mandatory conditions of approval and included in the mitigation monitoring and reporting program.

As an example, the project includes the use of Tier4F engines to reduce emissions, which is not a mandatory measure required by NSAQMD. Tier 4F standards require that emissions of PM and NOx be reduced by about 90% versus Tier 1-3 standards[13]. The use of Tier 4F engines reduces the project's emissions of criteria air pollutants and decreases health risk from the project through the reduction of diesel particulate emissions.

As discussed on page 4.3-41 of the DEIR, Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to determine whether the project would have a significant impact on air quality.

The NSAQMD has developed a tiered approach to significance levels. The tiered thresholds for Levels A, B, and C are applicable for a particular project based on that project's estimated emissions of criteria pollutants in pounds per day. A project with emissions qualifying for Level A thresholds (i.e., all projects with emissions greater than zero, but less than level B requires the most basic mitigation. Projects that qualify for Level B require more extensive mitigation, and projects that qualify for Level C require the most extensive application of mitigation.

Mitigation Measure 4.3-1(a) requires the mitigation measures identified in the NSAQMD's *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects* for significance levels A and B thresholds during project construction. However, these measures are already addressed in the design during operations (Year 2022 and later), as follows:

1) The project would not burn vegetative material. Processing of vegetation before placement of engineered fill would be done by chipping.
2) Grid power is already used to the maximum extent feasible. The entire underground mine and process plant are powered by electricity.
3) No temporary traffic control is needed during operations.
4) The employee work schedule is designed to result in the majority of employee traffic to occur during off-peak hours (268 of 312 employees – see Table 3-8 of the DEIR)

Burning of vegetative material will be prohibited in a condition of approval, which is included in the Mitigation Monitoring and Reporting Program (MMRP) (Chapter 4 of this Final EIR). In addition to the mandatory mitigations required by the NSAQMD, the project proposes to utilize Tier4F engines for offroad equipment.

Utilize Tier 4F Engines

During construction, the off-road equipment used will likely be owned by contractors who may or may not utilize equipment with Tier 4 Final engines. The unmitigated emissions presented in the Air Quality Analysis of the DEIR assumes the use of lower tier equipment. Mitigation Measure 4-3-1(b) requires a Construction Exhaust Emissions Minimization Plan and the use of Tier 4 Final engines or alternative sources of power. The mitigated emissions presented in the Air Quality Analysis of the DEIR reflect the lower emissions that would be achieved by this mitigation measure.

During operations, the off-road surface equipment used will be owned or contracted to the applicant. This equipment is specified to have Tier4F engines (see page 131 of pdf Appendix E.1). All underground equipment will be powered by electricity. Therefore, for the years after construction (2022-2026, 2027-2032, 2033-2102, and 2103) the unmitigated and mitigated emissions presented in the Air Quality Analysis of the DEIR are identical. The use of electric and

[13] https://www.transportpolicy.net/standard/us-nonroad-emissions/

Tier4F engines diesel engines has been incorporated into the design of the project during operations and therefore a mitigation measure for their use during operations is not required in the DEIR.

The NSAQMD recommended mitigation measures are incorporated in the Project design. The applicant has included multiple APMs in order to reduce the level of emissions as part of the project design, which will be conditions of approval for the project, and which are included in the MMRP. Chapter 4 of the FEIR, Mitigation Monitoring and Reporting Program, includes these APMs. These APMs, which go above and beyond the measures suggested in the NSAQMD *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects* (such as Tier4F surface equipment and all electric equipment underground) were already incorporated into the assessment and, therefore, do not result in additional reductions under the mitigated scenario, nonetheless the APMs do reduce emissions of criteria air pollutants compared to the Project if it did not incorporate these emission reducing features. With these APMs and mitigations applied to the project, criteria air pollutant emissions levels would not be above the NSAQMD threshold level C, and therefore, the project would not result in significant emissions of criteria air pollutants. Notably, the DEIR's application of the NSAQMD CEQA thresholds is consistent with Nevada County's use of these thresholds for other Projects in the County, such as the Lake Wildwood Tennis Facility Lighting Expansion Project, the Auburn Ski Club Project, and the Rincon Del Rio Project, for which use of the mandatory NSAQMD mitigation is deemed to reduce emissions of criteria pollutants (at a NSAQMD A or B threshold level) below a level of significance.[14]

Conclusion

The Project requires the mandatory NSAQMD mitigation but also goes beyond that with the APMs; as such, the DEIR appropriately deems the Project's impact associated with emissions of criteria pollutants as less than significant after implementation of mitigation (DEIR, p. 4.3-73).

Master Response 20 - Conservatism of Metals Assumptions

Comments

The County received several comments asserting that the Health Risk Assessment (HRA) underestimated health impacts from metal content in fugitive dust. Consequently, these commenters requested that the HRA be revised.

Discussion

The HRA (included in Appendix B of Appendix E.1 of the DEIR) considered the metal content of fugitive dust emitted by the project activities in determining the potential health risk of the project. Arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium have approved risk assessment health values for use in the Assembly Bill (AB) 2588 Air Toxics "Hot Spots" Program and the health risk from these metals are therefore included in the HRA for the project. Arsenic, beryllium, cadmium, lead, and nickel have cancer potency factors, while copper, manganese, mercury, vanadium, and selenium have acute and/or chronic relative exposure levels (RELs).

The HRA for the project assumes metal proportions for mined materials from exploration sampling presented in Section X of the Hydrology Report (Appendix K.2 of the DEIR) in order to analyze

[14] https://www.nevadacountyca.gov/DocumentCenter/View/44636/Lake-Wildwood-Tennis-Facility-Lights-Notice-of-Availability-and-Initial-Study-PLN22-0008-AAP22-0001-VAR22-0004-EIS22-0008-, pp. 14-15; https://www.nevadacountyca.gov/DocumentCenter/View/44519/Auburn-Ski-Club-Notice-of-Availability-and-Initial-Study-PLN22-0092-AAP22-0002-EIS22-0007-VAR22-0003, pp. 16-18; https://www.nevadacountyca.gov/DocumentCenter/View/12692/33-Air-Quality-Draft-PDF, p. 3.3-20-23.

the health risk from fugitive dust. These specific assumptions are provided in Appendix B of Appendix E.1. For conservatism, the metal values of the altered meta-andesite sample, which had the highest toxic metal content of any mineral type sampled from the project site, were used to represent the metal content of all barren and mineralized rock in the underground mine. This sample has significantly increased arsenic (35 parts per million [ppm]) and lead (23 ppm) versus the barren rock composited samples with 3 ppm arsenic and 3 ppm lead, and to a lesser extent, increased cadmium (0.35 ppm versus 0.34 ppm). As a consequence, the HRA conservatively assumes that all materials, including the 500 tons per day of barren rock mined (which generally has much lower metal content), have the same metal content as the meta-andesite sample for purposes modeling dust emissions from the underground mine. This approach overstates the metal content of the average rock mined at the project site to provide a conservative analysis of impacts.

The same approach was taken for the mineral process plant where all rock and sand tailings were assigned with the higher mineralized metal values from the meta-andesite sample rather than the values of the unmineralized barren rock and sand tailings (sulphide minerals containing metals will have been removed from sand tailings). Engineered Fill is composed of 50 percent barren rock and 50 percent sand tailings. The metal values for these materials were averaged and then doubled to include conservatism for dust emissions from the placement and compaction of engineered fill. Dust emissions from the moving of soil were also assigned the same values.

The HRA for the project also makes the conservative assumption that all metals are 100 percent bioavailable. Cancer potency factors are based on metallic metals; however, the metals in rock dust are in mineral forms such pyrite (FeS_2), arsenopyrite (FeAsS) and galena (PbS), which do not have 100 percent bioavailability. The California Department of Toxics Substances Control (DTSC) has conducted research into the bioavailability of arsenic in historic Empire Gold Mine materials and concluded that using the customary default of 100 percent relative bioavailability leads to an overestimation of risk. The bioavailability ranged depending on the sample and method of determination with mean bioavailability ranging up to 15.9 percent. (DTSC 2015 p. 8, Table 2).

Conclusion

Given that the overall metal content in the rock to be mined at the project site is based on the high-metal-content altered meta-andesite sample and is therefore likely overstated, and that the assumed 100 percent bioavailability of the metals is also a likely exaggerated, the HRA provides a conservative analysis of health impacts from metal content in fugitive dust. As such, the commenters' requested revision to the Health Risk assessment is not required, because the DEIR adequately analyzed the impacts and properly relied on conservative assumptions.

References

DTSC (Department of Toxic Substances Control). 2015. *Final Technical Report Arsenic Characterization/Bioavailability on Mine-Scarred Lands.* Available at: https://dtsc.ca.gov/wp-content/uploads/sites/31/2017/06/Arsenic_Study-2.pdf

Master Response 21 - Conservatism of Silica Assumptions

Comments

Several commenters raised concerns regarding health risks associated with silica exposure, asserted that the Health Risk Assessment (HRA) underestimated health risk from silica exposure, and requested additional sampling of rock for silica content and revision to the HRA.

Discussion

As explained below, the HRA used numerous conservative assumptions at every stage in the analysis, which together tend to overstate rather than underestimate the likely health impacts from silica exposure. Therefore, the DEIR properly analyzed health impacts from silica exposure and concluded that health risks as a result of the project would be less than significant after implementation of mitigation (DEIR, p. 4.3-82).

The Office of Environmental Health Hazard Assessment (OEHHA) adopted a chronic Reference Exposure Level (REL) for silica (crystalline, respirable) on February 10th 2005. (see https://oehha.ca.gov/air/document/adoption-chronic-reference-exposure-levels-silica-crystalline-respirable .) A chronic REL is an airborne level of a chemical at or below which no adverse health effects are anticipated in individuals indefinitely exposed to that level. (Id.) The chronic REL for silica is 3 micrograms per cubic meter ($\mu g/m^3$). (OEHHA Chronic Toxicity Summary, Silica, p. 1.) No acute REL has been established for crystalline silica. (Id.)

The REL for silica is meant to be applied only to particles of crystalline silica (quartz, cristobalite, tridymite) of respirable size which has a 50 percent cut-point at 4 micrometer (um) particle aerodynamic diameter. This occupational definition of "respirable" differs from the environmental definition of "respirable," which is known as PM_{10} (particles of 10-micron diameter or less) (OEHHA Chronic Toxicity Summary, Silica, p. 1).

The emission of dust from the project was modeled in the HRA (included in Appendix B of Appendix E.1 of the DEIR) as $PM_{10,}$ and the health risk analysis used a conservative assumption that 60 percent of PM_{10} is respirable crystalline silica for the purpose of quantifying silica exposure to receptors. This is useful as a screening method because if the silica concentration in PM_{10} modeled at a receptor is less than the REL (3 $\mu g/m^3$), respirable silica (50 percent cut-point at 4 micrometer (um) particle aerodynamic diameter) will also be less than 3 $\mu g/m^3$, so a project would not pose a risk due to silica at that receptor. However, the use of PM_{10} overestimates the relevant exposure in any situation, as it includes silica particles that would not be considered "respirable" under the OEHHA definition. (OEHHA Chronic Toxicity Summary, Silica, p. 37)

As stated above, the HRA for the project assumes a generalized 60 percent silica content for all dust, and assumes all this silica is crystalline quartz, to calculate exposure of receptors to silica, which is a conservative assumption. Quartz (crystalline silica) is composed of silica (SiO_2). Silica is also found in the amorphous (non-crystalline) state. The majority of barren rock that will be mined by the proposed project is metamorphosed andesite (meta-andesite). Andesite contains less than 20 percent quartz and averages approximately 6 percent quartz (Mindat.org n.d.). Quartz can be a product of metamorphism due to crystallization from silica bearing fluids (IARC 1997 p. 60). The presence of quartz phenocryst in the meta-andesite "porphyrite" of the Brunswick area is reported by the United States Geological Survey (USGS) (W.D. Johnston Jr 1940 p. 10). Gold is hosted in discrete veins and in stockworks consisting primarily of massive to banded, sheared, and brecciated milky white quartz plus or minus carbonate. The historic veins mined in the Idaho systems averaged from 3 feet to 5 feet. Veins in the Brunswick mine generally ranged from inches to 7 feet or developed in stockwork zones of quartz stringers (AMEC 2017 Section 7.4). Gold mineralization which is mined therefore is not composed entirely of quartz but includes other minerals. Gold mineralization is also diluted during mining by the rock surrounding the veins as full recovery of the vein is desired and mining width requires mine excavations to be of a minimum width. The minimum mining width is dependent on the mining equipment and method used but would not be less than 6 feet. Therefore, a typical "solid" quartz vein would be diluted by one ton of other minerals for every ton of quartz rock.

The HRA model assumed that mined mineralization contains 80 percent quartz (1,000 tons per day) and barren rock contains 20 percent quartz (500 tons per day), which results in an average quartz content of 60 percent for all mined materials. As explained above, the 60 percent quartz content is higher than what is actually expected. Engineered fill produced by the project would be composed of 500 tons barren rock and 500 tons sand tailings. The above assumptions of quartz content would result in an average quartz content of 50 percent for engineered fill; however, the HRA assumed a higher quartz content of 60 percent.

Further evidence of conservatism in the HRA is provided by dust sampling at active mines by inspectors in the United States from 1988-1992. Mean quartz content of 238 samples in underground gold mines was 9.0 percent and from 334 samples at gold mills was 15.3 percent (IARC 1997 p. 66, Table 12). Accordingly, the assumption of 60 percent quartz content is significantly larger than measured values in producing gold mines and process plants, and likely overstates the actual amount of quartz (and therefore crystalline silica) that will be mined by the project.

Conclusion

Given that the HRA assumes a greater crystalline silica content in the mined rock than is likely or observed in similar mines, and also uses an overinclusive definition of "respirable" silica particle size by counting all silica particles of a diameter of 10 microns or less, the HRA overestimates health impacts from respirable crystalline silica exposure. Accordingly, the commenters' requested additional sampling of materials for crystalline silica content or revision to the HRA is not required. because the DEIR properly analyzed the impacts of silica.

References

AMEC (Amec Foster Wheeler. 2017. *Technical Report on the Idaho-Maryland Mine Project.* Grass Valley, California. Available at: https://www.risegoldcorp.com/uploads/content/I-M_Tech_Report.pdf

OEHHA (Office of Environmental Health Hazard Assessment). 2005. *Chronic Toxicity Summary for Silica (Crystalline, Respirable).* February 2005. Page 37. Available at: https://oehha.ca.gov/media/downloads/air/document/silicacrelfinal.pdf

IARC (WHO International Agency for Research on Cancer). 1997. *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans Volume 68 Silica, some Silicates, Coad Dust, and Para-Aramid Fibrils.* Lyon, France. Available at: https://www.ncbi.nlm.nih.gov/books/NBK410047/

Mindat.org. n.d. "Andesite". Available at: https://www.mindat.org/min-48484.html

W.D. Johnston Jr. 1940. *The Gold Quartz Veins of Grass Valley California.* Washington DC. Available at: https://pubs.er.usgs.gov/publication/pp194#:~:text=The%20gold%20quartz%20veins%20in,is%20reproduced%20from%20his%20reports

Master Response 22 - Conservatism of Asbestos Assumptions

Comments

Several commenters asserted that the assumptions used in the Health Risk Assessment (HRA) understated the amount of asbestos that will be found in the rock mined at the project, and likewise the level of respirable asbestos that will be emitted into the air. Conversely, the assumptions used for the HRA were based on conservative assumptions that overstate the amount of asbestos in

the rock and tailings and overstate the amount of asbestos that will become airborne. As such, the HRA provides a conservative analysis of asbestos impacts, and thus, adequately evaluates the potential health effects from asbestos attributable to the proposed project.

Discussion

The HRA for the Project (included in Appendix B of Appendix E.1 of the DEIR) assumes that all rock mined will contain 1.07 transmission electron microscopy (TEM) asbestos structures per nanogram (s/ng) (0.01 percent phase contrast microscopy [PCM] equivalent weight percent). This is a conservative assumption based on the asbestos testing conducted on exploration samples presented in the Asbestos, Serpentinite, and Ultramafic Rock Management Plan (ASUR Plan) (Appendix E.2 of the DEIR). The majority of the 500 tons per day of barren rock produced by the Project is expected to be composed of meta-andesite. Exploration sampling shows this lithology averages 0.26 TEM structures per nanogram (Appendix C of the ASUR Plan). The assumed asbestos content for barren rock used in the HRA for the Project is approximately 4 times the sampled values; thus, the HRA analysis already includes a conservative 4x factor overestimation of asbestos content in barren rock.

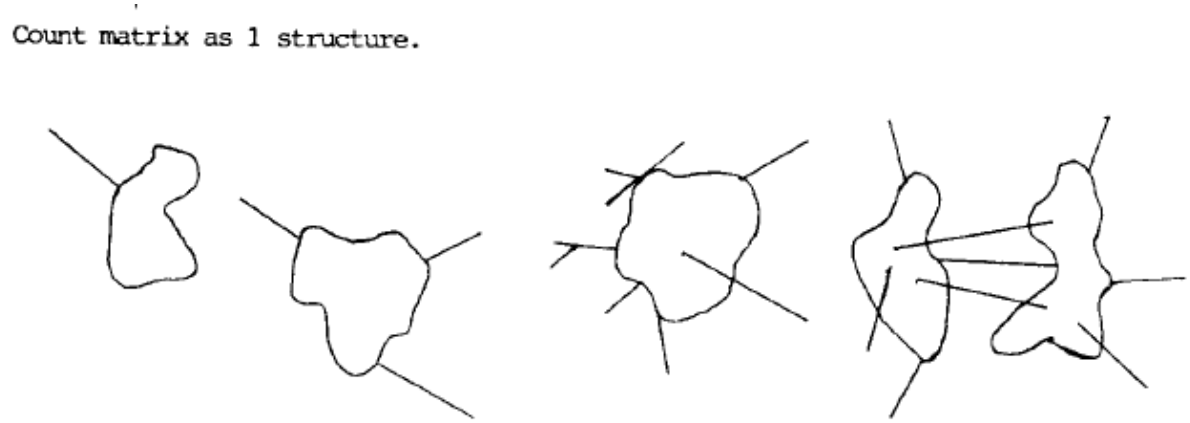
The Project would produce 1,000 tons per day of sand tailings. The applicant submitted two samples of the historical tailings for TEM asbestos testing, which are presented in Appendix C of the ASUR Plan (Appendix E.2 of the DEIR). One sample of historic tailings did not contain any asbestos and one sample contained 0.03 TEM s/ng. In addition, NV5 submitted 10 samples retained from the historical tailings for TEM asbestos testing. Asbestos structures were not present in 7 samples from the western tailings area. Three samples from the eastern tailings area had detectable asbestos ranging from 0.081 s/ng to 0.214 s/ng (see Master Response 9 – Historical Mine Waste at Centennial Site). The average asbestos content of the 10 samples of historic tailings collected by NV5 was 0.049 TEMS asbestos structures per nanogram. The assumed asbestos content for sand tailings used in the HRA for the project (1.07 TEM asbestos structures per nanogram) is over 20 times greater than the average content of the 10 samples taken by NV5 from the historic tailings area on the Centennial Site. As such, the HRA was modeled using asbestos content for the sand tailings that is much higher than is likely to be present during the life of the Project.

Air monitoring requirements will be specified in the approved Asbestos Dust Mitigation Plan (ADMP), which must be approved by the Northern Sierra Air Quality Management District prior to Project operations. The ADMP is required under the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mine Operations. Section (h)(3) of the ATCM specifies the requirement for analysis of air samples. Analysis of all air samples shall follow the analytical method specified by the United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) criteria for asbestos (40 CFR, Part 763 Subpart E, Appendix A, adopted October 30, 1987). The ATCM modifies the AHERA criteria for asbestos and requires a lower detection limit and the counting of all asbestos structures irrespective of length, as per the following exceptions:

A) The analytical sensitivity shall be 0.001 structure per cubic centimeter (0.001 s/cc); and
B) All asbestos structure with an aspect ration greater than three to one (3 to 1) shall be counted irrespective of length.

The ATCM otherwise uses the AHERA criteria for asbestos. AHERA Recording Rules specify that a “matrix” is defined as a structure or structures with one end free and the other end is embedded in or hidden in a particle. A matrix where many asbestos structures are embedded in a dust

particle would be only counted as 1 structure. (see page number 789 on 40 CFR, Part 763 Subpart E, Appendix A)



Under the AHERA Recording Rules, if a fiber does not protrude with an aspect ratio of <3:1 then none of the embedded structures would be counted. (see page number 789 on 40 CFR, Part 763 Subpart E, Appendix A – Note that California uses a 3:1 aspect ratio as discussed above)



Conclusion

The HRA for the project assumes that every asbestos structure present in dust (coarse particulate matter, PM_{10}) is liberated and would be counted as 1 structure in a given airmass. This is a very conservative assumption as a large proportion of asbestos structures in dust particles would not be counted as asbestos in air samples and therefore would not contribute to health risk from asbestos. As such, the HRA provides a conservative analysis of asbestos impacts, and thus, adequately evaluates the potential health effects from asbestos attributable to the proposed project.

Master Response 23 - Adequacy of Sampling - Asbestos

Comments

Several commenters have expressed concerns about the adequacy of asbestos sampling of geological materials conducted for the Idaho-Maryland Mine Project. Many commenters assert that the amount of rock sampled was insufficient for purposes of determining concentration of asbestos and associated risks of exposure.

Discussion

As stated on page 7 of the Asbestos, Serpentinite, and Ultramafic Rock (ASUR) Management Plan attached to the DEIR, Rise completed 19 exploration drill holes, totalling 67,500 feet of drilling, from 2017 to 2019. Forty-two (42) samples, mainly from diamond drill core from various lithologies at the Idaho-Maryland Mine Project, were submitted for asbestos testing in 2019. PLM testing was done on forty samples and TEM testing was done on two samples. In 2021, Rise requested the 40 samples previously submitted (and analyzed by PLM) to be reanalyzed using the TEM method. Grouping by lithology is important as mining is planned and completed in the distinct geological units present in the mine. For example, serpentine is a lithology of concern due to the presence of chrysotile asbestos.

Several commenters have asserted that the applicant stopped exploration drilling when asbestos was detected. Drilling was stopped when the exploration geologist determined there was little potential for discovery of gold mineralization. Serpentinite is a poor host rock for gold mineralization and holes which encounter it are not continued in this lithology. Continued drilling, and sampling in geological units that have low potential for gold mineralization, would not be representative of the rock that will be encountered during mining operations. Asbestos sampling is not done at the same time as drilling and cannot be detected visually at the low levels present without sophisticated microscopy. Samples from various lithologies at the Idaho-Maryland Mine Project were selected for asbestos testing. The volume and methodology for sampling from the mine area is adequate for the intended purpose of supporting the thresholds and assumptions used in the ASUR Plan and HRA attached to the DEIR (see Master Response 22 – Conservatism Used for Asbestos Assessment). Samples were taken from geological units of the type where gold mining is expected to occur. The sampling methods requested by some commenters with more samples being taken from serpentine rocks and at greater depths than the gold mineralization would be inappropriate for the purpose of estimating asbestos from the planned mining operation, as these samples would not be representative of rock that would be encountered during gold mining activities.

Prior to underground gold mining, intensive planning efforts will be conducted as required under the ASUR Plan and as required to meet state and federal regulations and achieve safety, environmental, and economic goals. Please see Section 6.0 of the ASUR Plan (Appendix E.2 of the DEIR). Underground mine planning, as required in the ASUR Plan, includes exploratory drilling, geologic mapping, material logging, and testing. These same processes also ensure future mining operations avoid and manage rock types that may contain naturally occurring asbestos to ensure that applicable thresholds are not exceeded. In other words, the mandatory mine planning that is required by the DEIR in the ASUR Plan will provide information to the mine operator on asbestos content of rock prior to mining that area. This is a standard component of modern underground mine planning, and was made an explicit requirement of the ASUR Plan, which will be required through a Condition of Approval. As such, the ASUR Plan will be binding on the mine operator and any potential successors in interest to the mine.

Additionally, the HRA is based on conservative assumptions, such that the analysis overestimates health impacts rather than underestimates those impacts. Please see Master Response 22 – Conservatism Used for Asbestos Assessment.

Conclusion

Based on these conservative assumptions, the DEIR concludes that the Project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to



Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in Mitigation Measure 4.3-2. Additional measures, such as air monitoring, if required by the NSAQMD, would be detailed in the ADMP.

Master Response 24 - Project Construction Schedule

Comments

The County received several comments questioning the construction schedule presented in the DEIR. The primary concerns relate to the different construction timelines provided in the air quality (4.3) and project description (3.0) chapters of the DEIR, and the assertion that all phases of construction cannot fit within either timeline. In general, no specific conclusions are drawn from these comments, but rather, the assertion is made that the DEIR analysis would result in different impact conclusions had the construction timeline been more accurate.

Discussion

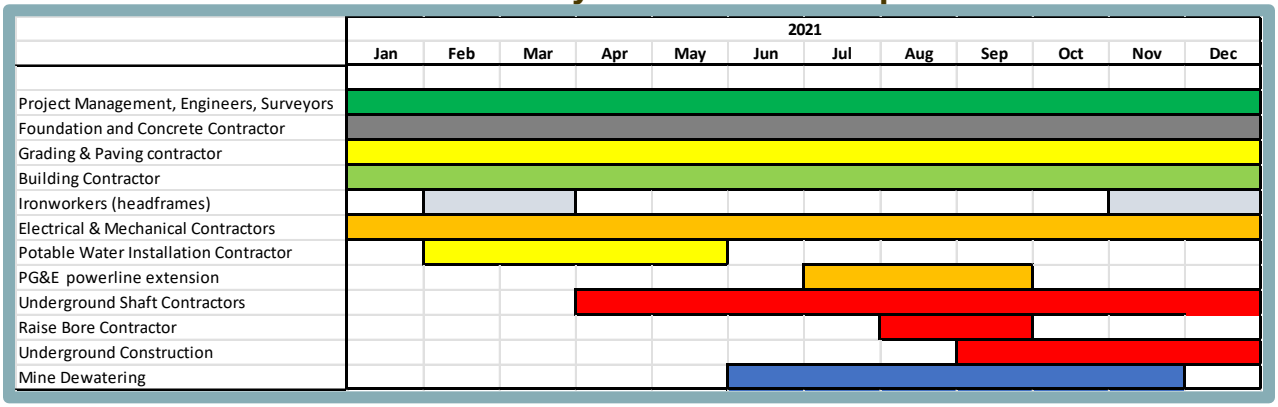
As discussed below, the DEIR assumed an aggressive construction schedule where many activities are overlapping or occurring simultaneously, to provide a conservative assessment of construction noise and air quality impacts. The actual construction schedule may occur as presented in the DEIR, or may be spread out over more time, which would reduce impacts.

Table 3-7 of the DEIR estimates 18 months for aboveground facility construction and 6 months for initial mine dewatering and notes that durations are approximate and dependent on factors such as equipment and personnel availability, fluctuations in the economy, and technical details.

Certain activities must happen sequentially while others may be done in parallel. For example, on page 3-40 of the DEIR, the use of NID supplied water for dust suppression in construction grading is assumed until the mine water treatment plant becomes operational. During this time, the NID potable water line could also be under construction, which is estimated to take four months to complete (page 4.10-27 of the DEIR).

As described on page 4.3-44 of the DEIR, the air quality assessment assumed in general, construction was anticipated to occur over approximately 12 months. The various construction tasks required for the Project and the related equipment emissions were modelled in sequence on a monthly basis as detailed on pages 123 through 127 of Appendix E.1 of the DEIR and shown in Figure 24 below.

Figure 24
Construction schedule assumed in Air Quality and Greenhouse Gas Emissions Analysis Technical Report



The construction scenario assessed in the air quality analysis is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced, which would result in reduced maximum daily and annual emissions. Lengthening the construction period would also push out the operational and reclamation phases by the same amount of time. The actual construction period would depend on numerous factors including permitting timelines and economic conditions.

Conclusion

In general, an increase in the duration of construction activities and/or the completion of activities sequentially would serve to reduce environmental impacts in many areas, such as air quality and noise due to the reasonably assumed smaller vehicle/equipment fleet that would be required to complete concurrent construction of more than one phase. The conservative approach, which has been taken in the DEIR, is to assume a more aggressive construction timeline. This approach is adequate pursuant to CEQA.

Master Response 25 - Nevada County Energy Action Plan

Comments

Several commenters asserted that the Project is not consistent with the County Energy Action Plan (EAP). As set forth below, the Project furthers some of the strategies outlined in the EAP, and supports the voluntary goals of the EAP, as required by App. G, Section VI(b).

Discussion

As stated on page 4.3-89 of the EIR, Nevada County adopted the EAP in 2019. The EAP includes voluntary actions that are intended to meet the goals of reducing Countywide annual electricity demand by 51 percent and natural gas consumption by 30 percent in the year 2035, relative to a year 2005 baseline. The EAP is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(b); therefore, no subsequent CEQA document can tier from the County EAP and the Project DEIR did not attempt to do so. In addition, the EAP is not a GHG reduction plan and does not provide carbon emissions inventory or strategies for the reduction of GHG emissions in the County other than those associated with the use of utility supplied electricity and natural gas. The reduction of GHG emissions from the reduction of electricity are not quantified in the EAP. The EAP does not consider the use of propane or other fossil fuels, electrification of vehicles, or retrofitting of homes heated by fossil fuels. Once again, the DEIR did not attempt to use the EAP for those purposes. Nevertheless, the compliance of the Project with EAP strategies has been analyzed and the Project found to be consistent with the EAP; therefore, the Project does comply with Section VI(b) of the Appendix G of the CEQA Guidelines because the Project is consistent with the EAP.

The EAP was prepared by the Sierra Business Council and accepted by the Board of Supervisors on February 12, 2019. The EAP provided an analysis of the energy use within the unincorporated County limits by the community and County operated facilities. (see page 1 of the EAP).

The actions within the EAP are voluntary and do not require the County or community to meet the reduction goals. The goal of the plan is to reduce energy use through efficiency, which would save utility customers money, energy, and water (see page 2 of EAP). The EAP sets a goal of reducing electricity use by 51 percent from the Business-as-Usual projection for the year 2035. The majority of savings are attributed to encouraging the installation of renewable energy on existing and new homes and persuading residents to reduce energy use. The potential energy reduction calculations are provided in Appendix C of the EAP and summarized as follows.

	Strategy	Assumption	Projected Electricity Savings (GWhr)
1.1	Outreach and education on energy efficiency practices, programs, and financing options for utility customers.	Projection that 50% of customers will be persuaded to reduce energy use by 30%	51.0
1.2	Improve compliance with current California Building Energy Efficiency Standards (Title 24, part 6) by providing information materials.	100% of new construction meets Title 24 standards	6.5
1.3	Improve energy efficiency of County buildings, facilities, and operations	Reduce energy use in County buildings and public lighting by 50%.	2.6
2.1	Encourage inclusion of renewable energy systems in new construction and large retrofit projects by providing informational materials when available.	100% of new development meet required zero-net-energy standards by 2035	24.0
2.2	Encourage renewable energy projects through education, outreach, and local leadership	7,946 solar participants (56 MW installed power) and 4,099 wind participants (90' Rotor Hub)	112.5
3.1	Improve outreach and education in collaboration with NID by providing information on existing and future programs	100% of households and Businesses reduce indoor water use by 50%	1.6
3.2	Encourage utilities district to reduce water losses through leak detection programs	Reduce water losses by 50%	0.1
3.3	Improve efficiency of County Wastewater Treatment and encourage other agencies to improve efficiency	Reduce energy intensity of wastewater treatment by 30%	0.7
	TOTAL		**199.0**

The new structures proposed by the Project will all meet Title 24 standards in applicable buildings, which is consistent with the EAP. (see DEIR Table 4.3-22.) Further, Project activities would comply with water efficiency Title 24, Part 11 (CALGreen Code) standards in applicable buildings, including installing toilets, urinals, faucets, and showerheads subject to the CALGreen maximum flow rates, which is consistent with the EAP water saving goals. (Id.) While solar panels are not now proposed as part of the Project, the roof space of the Project buildings may be available in the future for installation of solar panels to reduce the Project's reliance on the energy grid. Moreover, the proposed project does not otherwise interfere with the strategies proposed by the EAP or the potential success of the goals of the EAP to reduce energy use by residential and non-residential utility customers by 2035.



Conclusion

The EAP is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(b); therefore, no subsequent CEQA document can tier from the County EAP and the Project DEIR did not attempt to do so. Nevertheless, the compliance of the Project with EAP strategies has been analyzed and the Project found to be consistent with the EAP; therefore, the Project complies with Section VI(b) of the Appendix G of the CEQA Guidelines.

Master Response 26 - Life Cycle GHG Emissions

Comments

Several commenters have suggested that Greenhouse Gas (GHG) emissions associated with the manufacture of materials used by the Project, or the refinement of gold concentrates produced by the Project to gold products, should have been included in the DEIR in order to adequately evaluate the Project's potential GHG impacts. These comments pertain to a "lifecycle" analysis, which is not required under CEQA.

Discussion

As described by the California Natural Resources Agency in the *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97* (2009):

> Moreover, even if a standard definition of the term "lifecycle" existed, requiring such an analysis may not be consistent with CEQA. As a general matter, the term could refer to emissions beyond those that could be considered "indirect effects" of a project as that term is defined in section 15358 of the State CEQA Guidelines... Depending on the circumstances of a particular project, an example of such emissions could be those resulting from the manufacture of building materials. (CAPCOA White Paper, at pp. 50-51.) CEQA only requires analysis of impacts that are directly or indirectly attributable to the project under consideration. (State CEQA Guidelines, § 15064(d).) In some instances, materials may be manufactured for many different projects as a result of general market demand, regardless of whether one particular project proceeds. Thus, such emissions may not be "caused by" the project under consideration. Similarly, in this scenario, a lead agency may not be able to require mitigation for emissions that result from the manufacturing process. Mitigation can only be required for emissions that are actually caused by the project. (State CEQA Guidelines, § 15126.4(a)(4).)

The Project will use materials including cement, steel, and various products and materials. The manufacture of many of the materials that are used by the proposed project occurs outside of Nevada County boundaries, outside of the local agencies' jurisdictional control or substantial jurisdictional influence. The project GHG emissions estimate includes the shipping of these materials to the site from an origin of 60 miles. Project operations produce gold concentrates as a final product. The project GHG emissions estimate includes the shipping of the concentrates a distance of 145 miles. Life cycle GHG emissions include indirect emissions associated with materials manufacture or production of gold products. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions, found that lifecycle analysis was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and

manufacturing information for those raw materials is also not known, calculation of life cycle emissions would be speculative. The inclusion in the DEIR analysis of indirect GHG emissions from materials used by the project or the subsequent manufacturing of gold products produced using the concentrates from the proposed project is not warranted.

Conclusion

Therefore, consistent with state guidance, a lifecycle analysis of GHG emissions is not warranted for the project-specific CEQA analysis in the DEIR; and the DEIR's GHG impact analysis is adequate for purposes of CEQA.

Master Response 27 - Greenhouse Gas Thresholds

Comments

Several commenters asserted that the operational and construction greenhouse gas (GHG) thresholds set by the County for the Project's DEIR are inappropriate often stating that the County should have chosen thresholds that are lower or are "net-zero" such that any emission of GHGs over baseline would be considered a significant and unavoidable impact. For the reasons set forth below, the County's decision to choose emission of 1,100 Metric Tons (MT) of Carbon Dioxide Equivalent (CO2*e*) per year as the construction threshold and emission of 10,000 Metric Tons of Carbon Dioxide Equivalent (CO2*e*) per year as the operational threshold is authorized under the CEQA Guidelines and is supported by substantial evidence; thus, the DEIR properly analyzed impacts by using these thresholds.

Discussion

As stated in CEQA Guidelines Section 15064.7(b), "Each public agency is encouraged to develop and publish thresholds of significance that the agency uses in the determination of the significance of environmental effects … Lead agencies may also use thresholds on a case-by-case basis as provided in Section 15064(b)(2)." Further, as stated in CEQA Guidelines Section 15064.7(c), "When adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." As defined in CEQA Guidelines Section 15384(a), Substantial Evidence means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached."

As stated on page 4.3-42 of the DEIR, "At this time, neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the project." Pursuant to the authority granted to lead agencies to determine the appropriate threshold for GHG emissions impacts (and other impacts) under CEQA Guidelines Sections 15064.7(b) and 15064.7(c), the County considered the GHG emissions thresholds that other California agencies had selected for CEQA analysis and considered the context of each of those thresholds. Pages 4.3-42 through 4.3-43 of the DEIR includes discussion of the GHG emissions thresholds set by the Sacramento Metropolitan Air Quality Management District (SMAQMD), the Placer County Air Pollution Control District (PCAPCD), the Bay Area Air Quality Management District (BAAQMD), and the South Coast Air Quality Management District (SCAQMD) as a basis for the County's selection of the GHG emissions thresholds to be applied to the Project.

As discussed on page 4.3-43 of the DEIR, while the nearby PCAPCD uses a construction emissions threshold of 10,000 MT CO2*e*, the County conservatively chose to apply the lower construction emissions threshold of 1,100 MT CO2*e* per year used by SMAQMD for construction

phases of land use development projects. As a basis for choosing 10,000 MT CO2*e* as the threshold of significance for operational GHG emissions, the DEIR provided the following reasoning: "For operations, because the project is an industrial project that includes stationary sources (i.e., diesel generators used for emergency power), the project's GHG emissions were compared to the 10,000 MT CO2*e* per year quantitative threshold, which, as described above, is used by SMAQMD, PCAPCD, BAAQMD, and SCAQMD for industrial and/or stationary source emissions of GHGs. The substantial evidence for this GHG emissions threshold is based on the expert opinion of various California air districts, which have applied the 10,000 MT CO2*e* per year threshold in numerous CEQA documents where those air districts are the lead agency." (DEIR, p. 4.3-43.)

Various commenters presented arguments as to why a lower threshold would be preferable; however, consistent with CEQA Guidelines Section 15384(a), the County's reasoned consideration of other agencies' GHG thresholds and selection of the most appropriate thresholds based on a comparison of the Project to the various categories used by other agencies constitutes substantial evidence as it provides "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (14 CCR § 15384(a).)

Various commenters also asserted that the Project's DEIR should have evaluated emissions against a net zero GHG threshold based on the 2017 Scoping Plan and statewide GHG reduction goals. However, these commenters' opinions that any project that results in GHGs above net zero should be considered significant is inconsistent with the statewide guidance, as described in the DEIR on page 4.3-29:

> The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

As discussed above, the CEQA Guidelines allow a CEQA lead agency to determine its own thresholds for environmental impacts (including GHG emissions), and explicitly provides that an agency may consider thresholds adopted by other agencies provided that such decision is supported by substantial evidence. The County's reasoned consideration of thresholds set by other expert agencies and adoption of thresholds that are similar to those used by other agencies constitutes substantial evidence for the GHG emissions thresholds used by the County and the associated GHG emissions impact analyses.

Conclusion

Therefore, the use of these GHG thresholds to determine the significance of the Project's GHG impacts is appropriate and legally correct pursuant to CEQA.

Master Response 28 - Greenhouse Gas Credits

Comments

Several commenters asserted that Mitigation Measure 4.3-7(b) is inadequate based on the holding in *Golden Door Properties, LLC v. County of San Diego* (2018) 27 Cal.App.5th 892, and that the Mitigation Measure is unenforceable, impermissibly delegates verification and enforcement authority to third parties, lacks specific performance standards, is deferred mitigation, fails to mitigate for the environmental impacts of offset projects, fails to include onsite mitigation, should involve annual purchases of credits rather than a one-time purchase, does not

require that the offsets comply with CARB protocols, and should not allow purchase of offsets based on forecasted reductions.

Discussion

While several commenters compared the mitigation measure that was set aside in the *Golden Door* case to Mitigation Measure 4.3-7(b) in the Project's DEIR, these measures are factually distinguishable. The mitigation measure in *Golden Door* did not require that the carbon credits purchased by the applicant in that case be based on registries that are CARB approved and did not even mention the concept of protocols. This was one of the major factors that lead to the Court's decision that the mitigation measure requiring purchase of carbon credits was inadequate in that case. Conversely, Mitigation Measure 4.3-7(b) in the Project's DEIR includes explicit language requiring that the carbon credits are issued under CARB approved registries (i.e., Climate Action Reserve, the American Carbon Registry, or Verra). Likewise, while the court in *Golden Door* found that a carbon offset mitigation measure's failure to incorporate "additionality" requirement was a fatal flaw, Mitigation Measure 4.3-7(b) in the Project's DEIR clearly states that the carbon offset meet additionality requirements.

Several commenters asserted that Mitigation Measure 4.3-7(b) is unenforceable because the carbon credits could be generated in states or countries outside of CARB's jurisdiction. Mitigation Measure 4.3-7(b) requires that any carbon credits used for mitigation be obtained from a CARB-approved registry and further, comply with CARB-approved protocols to provide certainty that mitigation will be provided consistent with CARB standards. Even though no new impact has been identified, to provide an additional level of enforcement certainty, the County has modified Mitigation Measure 4.3-7(b), as shown below, to require that all carbon credits need to be generated within the State of California.

Commenters also opined that Mitigation Measure 4.3-7(b) impermissibly delegates verification and enforcement authority to third parties, purportedly because the measure requires that protocols for credits adhere to the principles set forth in the program manuals of each of the listed carbon credit registries. Mitigation Measure 4.3-7(b) clearly requires that the carbon credits comply with CARB-approved registries that implement specific protocols, so the additional requirement that the protocols comply with registry manuals does not in any manner impermissibly delegate the authority to develop protocols.

Commenters opined that Mitigation Measure 4.3-7(b) is inadequate because it lacks specific performance standards; however, Mitigation Measure 4.3-7(b) is legally adequate because it includes specific requirements for the type, quantity, source of carbon credits and specifies that the credit achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions. Nonetheless, to aid the County in enforcement of the mitigation measure, the DEIR now includes a flowchart (attached to the FEIR as Appendix F) to provide more detail on the specific performance standards required to ensure effective mitigation. Commenters also asserted that Mitigation Measure 4.3-7(b) constitutes impermissible deferred mitigation, because allegedly Mitigation Measure 4.3-7(b) lacks adequate performance standards. As discussed above, Mitigation Measure 4.3-7(b) includes specific performance standards, which have been augmented with even more specificity in the FEIR.

Commenters also asserted that Mitigation Measure 4.3-7(b) is improper because it fails to mitigate for the environmental impacts of offset projects. GHG offsets projects avoid, destruct, or sequester CO_2e emissions. GHG offsets projects may be subject to environmental review such

as CEQA or NEPA; however, most GHG offset projects do not require environmental analysis as they do not result in adverse environmental impacts. For example, landfill gas destruction and beneficial use carbon offsets collect and combust landfill gas at an existing landfill and do not generate adverse environmental impacts. The various commenters raising this issue did not provide any evidence that GHG offset projects result in foreseeable environmental impacts. Therefore, analysis of impacts from GHG offset projects is not necessary.

Commenters asserted that Mitigation Measure 4.3-7(b) fails to include onsite mitigation for the Project's construction GHG emissions. However, Mitigation Measure 4.3-7(b) mitigates the Project's construction GHG emissions impacts to a less than significant level, so there is no need of further mitigation for this impact, whether onsite or offsite. There is no specific requirement that GHG emission impacts be mitigated onsite. In addition, as discussed on page 4.3-91 of the DEIR, "because climate change is a global phenomenon, a single project could not generate enough GHG emissions to contribute noticeably to climate change. However, the combination of GHG emissions from a project with other past, present, and future projects (including global anthropomorphic activities) could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts." Therefore, the proposed project's GHG emissions would be a local contribution to a global impact, and the location of offset mitigation is not a prerequisite for effectiveness. Even so, Mitigation Measure 4.3-7(b) was changed (as shown below) to limit to offset projects to be located within California.

Commenters also asserted that Mitigation Measure 4.3-7(b) should involve annual purchases of credits rather than a one-time purchase. However, the required one-time purchase of carbon credits mitigates the construction emissions of the Project to a less than significant level, even if such emissions occurred over several years. Moreover, the amount of mitigation required to be purchased if the Project construction schedule were spread out over several years, would likely be less than under the assumed one-year project construction schedule. For example, the current assumed one-year construction schedule results in a GHG offset responsibility of 2,345 MT CO_2e (3,445 MT CO_2e – 1,100 MT CO_2e) while under a two-year construction schedule where hypothetically, 60% of activity occurs in year 1 and 40% activity occurs in year 2, the offset responsibility would be reduced to 1,245 MT CO_2e ([year 1 2,067 MT CO_2e – 1,100 MT CO_2e] + [year 2 1,378 MT CO_2e – 1,100 MT CO_2e]).

Commenters also asserted that Mitigation Measure 4.3-7(b) does not require that the offsets comply with CARB protocols and should not allow purchase of offsets based on forecasted reductions. As discussed previously, Mitigation Measure 4.3-7(b) clearly requires that that the offsets comply with CARB protocols. Purchase of carbon credits based on forecasted reductions is a standard approach to implementation of GHG mitigation in California; however, based on input from commenters, Mitigation Measure 4.3-7(b) has been revised to require only carbon credits based on past reductions in GHG emissions.

Even though the DEIR thoroughly addressed all impacts and mitigation, based on comments received on the DEIR, Mitigation Measure 4.3-7(b) (see page 4.3-96 through 4.3-99 of the DEIR) has been revised as set forth below (additions in double underline, deletions in ~~strikethrough~~):

4.3-7(b) ***Carbon Offsets – Construction Emissions.***
Rise Grass Valley Inc. (Rise) shall retire carbon offsets in a quantity sufficient to offset the project's construction greenhouse gas (GHG) emissions to below the 1,100 metric ton carbon dioxide equivalent (MT CO2e) per year construction threshold, consistent with the performance standards and requirements set forth below. Specifically, prior to Nevada County's (County) issuance of the project's first grading permit, Rise shall retire carbon offsets

equaling 2,345 MT CO2e, which was calculated by subtracting 1,100 MT CO2e (threshold) from the construction emissions generated by the project.

Carbon Offset Standards – Eligible Registries, Acceptable Protocols and Defined Terms:
"Carbon offset" shall mean an instrument, credit or other certification verifying the reduction of GHG emissions issued by the Climate Action Reserve, the American Carbon Registry, or Verra (previously, the Verified Carbon Standard). This shall include, but is not limited to, an instrument, credit or other certification issued by these registries for GHG reduction activities within the Nevada County region. The Project shall neither purchase offsets from the Clean Development Mechanism (CDM) registry nor purchase offsets generated under CDM protocols. Qualifying carbon offsets presented for compliance with this mitigation measure may be used provided that the evidence required by the "Reporting and Enforcement Standards" below is submitted to the County demonstrating that each registry shall continue its existing practice of requiring the following for the development and approval of protocols or methodologies:

i) Adherence to established GHG accounting principles set forth in the International Organization for Standardization (ISO) 14064, Part 2 or the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol for Project Accounting; and
ii) Oversight of the implementation of protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions achieved from such projects. The protocols and methodologies shall:

a. Be developed by the registries through a transparent public and expert stakeholder review process that affords an opportunity for comment and is informed by science;
b. Incorporate standardized offset crediting parameters that define whether and how much emissions reduction credit a carbon offset project should receive, having identified conservative project baselines and the length of the crediting period and considered potential leakage and quantification uncertainties;
c. Establish data collection and monitoring procedures, mechanisms to ensure permanency in reductions, and additionality and geographic boundary provisions; and,
d. Adhere to the principles set forth in the program manuals of each of the aforementioned registries, as such manuals are updated from time to time.
e. Be approved by the California Air Resources Board, and be compliant with 17 CCR § 95972 and AB 32 (the California Global Warming Solutions Act of 2006) to the extent applicable to voluntary offsets.

Further, any carbon offset used to reduce the project's GHG emissions shall be a carbon offset that represents the past ~~or forecasted~~ reduction or sequestration of one MT of CO2e that is "not otherwise required" (CEQA Guidelines Section 15126.4[c][3]). Each carbon offset used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions, which are defined for purposes of this mitigation measure as follows:

i) *"Additional" means that the carbon offset is ~~not~~ in addition to: (1) any greenhouse gas emission reduction otherwise required by law or regulation; ~~and not~~ (2) any other GHG emissions reduction that otherwise would occur; and (3) is consistent with Health and Safety Code Section 38562(d)(2);*
ii) *"Real" means that the GHG reduction underlying the carbon offset results from a demonstrable action or set of actions, and is quantified under the protocol or methodology using appropriate, accurate, and conservative methodologies that account for all GHG emissions sources and sinks within the boundary of the applicable carbon offset project, uncertainty, and the potential for activity shifting leakage and market-shifting leakage;*
iii) *"Verifiable" means that the GHG reduction underlying the carbon offset is well documented, transparent and set forth in a document prepared by an independent verification body that is accredited through the American National Standards Institute (ANSI);*
iv) *"Permanent" means that the GHG reduction underlying the carbon offset is not reversible; or, when GHG reduction may be reversible, that a mechanism is in place to replace any reversed GHG emission reduction;*
v) *"Quantifiable" means the ability to accurately measure and calculate the GHG reduction relative to a project baseline in a reliable and replicable manner for all GHG emission sources and sinks included within the boundary of the carbon offset project, while accounting for uncertainty and leakage; and*
vi) *"Enforceable" means that the implementation of the GHG reduction activity must represent the legally binding commitment of the offset project developer to undertake and carry it out.*

The protocols and methodologies of the Climate Action Reserve, the American Carbon Registry, and Verra establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions. Additionally, the "Reporting and Enforcement Standards" below ensure that the emissions reductions required by this mitigation measure are enforceable against Rise, as the County has authority to hold Rise accountable and to take appropriate corrective action if the County determines that any carbon offsets do not comply with the requirements set forth in this mitigation measure.

The above definitions are provided as criteria and performance standards associated with the use of carbon offsets. Such criteria and performance standards are intended only to further construe the standards under CEQA for mitigation related to GHG emissions (see, e.g., State CEQA Guidelines Section 15126.4(a), (c)), and are not intended to apply or incorporate the requirements of any other statutory or regulatory scheme not applicable to the project (e.g., the Cap-and-Trade Program).

Additionally, the County shall require that all carbon offsets purchased by the Project applicant shall originate from inside the state of California.

Reporting and Enforcement Standards:
Prior to issuance of requested grading permits, Rise shall submit a report to the County that identifies the quantity of emission reductions required by this mitigation measure, as well as the carbon offsets to be retired to achieve compliance with this measure. For purposes of demonstrating that each offset

is additional, real, permanent, quantifiable, verifiable and enforceable, the report shall include: (i) the applicable protocol(s) and methodologies associated with the carbon offsets, (ii) the third-party verification report(s) and statement(s) affiliated with the carbon offset projects, (iii) the unique serial numbers assigned by the registry(ies) to the carbon offsets to be retired, which serves as evidence that the registry has determined the carbon offset project to have been implemented in accordance with the applicable protocol or methodology and ensures that the offsets cannot be further used in any manner, and information sufficient for the County to verify that the purchased offsets meet the requirements identified within this mitigation.

To ensure consistent and effective enforcement of this mitigation measure and to assist the County with its review of the report described above, an implementation process timeline and associated flow chart for the implementation and administration of this mitigation measure's requirements has been prepared and is attached as Appendix F to the FEIR.

If the County determines that the project's carbon offsets do meet the requirements of this mitigation measure, the offsets can be used to reduce project GHG emissions and project permits shall be issued. If the County determines that the project's carbon offsets do not meet the requirements of this mitigation measure, the offsets cannot be used to reduce project GHG emissions and project permits shall not be issued. Additionally, the County may issue a notice of non-consistency and cease permitting activities in the event that the County determines the carbon offsets provided to reduce project GHG emissions are not compliant with the aforementioned standards. In the event of such an occurrence, project permitting activities shall not resume until Rise has demonstrated that the previously provided carbon offsets are compliant with the standards herein or have provided substitute carbon offsets achieving the standards of this mitigation measure in the quantity needed to achieve the required emission reduction. In the event that the project is out of compliance with this Mitigation Measure and fails to demonstrate compliance after receiving notice of said violation, the County shall have authority to impose administrative penalties, take legal action to force compliance, or to start proceedings to suspend or revoke the Project's permits.

Conclusion

As discussed above, Mitigation Measure 4.3-7(b) is distinguishable from the mitigation measure in the *Golden Door* case and complies with all legal requirements for mitigation measures involving purchase of carbon credits. Moreover, although no new impacts have been identified, the County has revised Mitigation Measure 4.3-7(b) to further address concerns raised by commenters and to clarify with certainty that the carbon credits will effectively mitigate the Project's impacts from construction-related emissions of greenhouse gas to a less than significant level. Thus, the DEIR adequately mitigates the Project's construction GHG emissions.

Master Response 29 - Near Surface Workings and Subsidence

Comments

Several commenters asserted that the Project would cause hazards due to the collapse of near surface workings, or deep mine workings when the mine is dewatered, which could result in impacts to surrounding properties (e.g., above-ground structures and residents) atop the underworkings.

Discussion

As discussed on pages 4.6-44 to 4.6-49 of the DEIR, under Impact Statement 4.6-3 related to unstable geological units, the potential collapse of near surface mine workings was evaluated and Mitigation Measure 4.6-3(c) was included in the DEIR to close six near surface mine features, resulting in a less-than significant impact relating to potential collapse of mine features.

As discussed on page 4.6-12 of the DEIR, the current water elevation in the mine is approximately 2,500 feet above mean sea level. In order to recommence mining, the underground mine must be dewatered, and groundwater entering the mine must be continuously pumped during the mining operation. When the water level in the mine workings is located near the ground surface, the drawdown of groundwater within the mine workings may increase the potential for settlement or collapse of shallow workings that were not formally closed. (see DEIR, pp. 4.6-44 to 4.6-49.) Near surface workings that are already in a dewatered state would generally not be significantly impacted by dewatering the mine. As shown on Drawing A207, including in Appendix H.6 to the DEIR, the current water level in the mine is only close to the surface in the area near the Idaho shaft near Idaho Maryland Road. All near surface mine workings were specifically evaluated by NV5 in the Geotech Review of Near Surface Features, as shown in Table 1 of Appendix H.6.

As discussed on page 4.6-44 of the DEIR, potential for collapse of existing near-surface mine features as a result of the proposed project was evaluated by NV5, whose report was independently peer reviewed by the County's consultant, ECM. Mitigation Measure 4.6-3(c) required the closure of six mine features.

As stated on page 2 of Appendix H.6, near-surface mine features are generally more susceptible to subsidence and collapse than are deeper mine workings, because the near-surface features may be located in weaker materials (soil and weathered rock); whereas the deeper mine workings are commonly located in competent bedrock. In addition, the underground mine workings focused on removal of quartz vein materials that are generally narrow, so the collapse of a deep (e.g., 100 feet bgs) mine feature is not likely to be expressed at the ground surface. The County's independent expert ECM is in agreement with NV5 and based on the known physical characteristics of the rock units, considered a 100-foot distance below ground surface to be conservative (page 33 of Appendix H7), meaning that NV5 believed that collapse of features even closer to the surface than 100 feet bgs are unlikely to be expressed on the surface. Furthermore, flooded workings that are not already closed or proposed to be closed are greater than 165 feet below surface (see Drawing 207 in DEIR Appendix H.6) and therefore underground workings that have potential to cause subsidence at surface have been thoroughly analyzed in the DEIR.

Once the mine is dewatered, new mining excavations will be constructed as described on page 3-19 of the DEIR. To provide access to the gold mineralization, a network of tunnels and raises would be constructed throughout the life of the mine. The tunnels would be constructed in the nonmineralized rock which, at the mine, is typically meta-andesite volcanic rock. Modern ground support, which may include rock bolting and screens, would be installed in tunnels as deemed necessary to ensure a safe work environment and in accordance with best mining practices coupled with routine inspections by the US Mine Health and Safety Administration (MSHA). Therefore, it is unlikely that any new underground openings would produce a fall of ground or collapse that would affect the integrity of the mine. Except for the new Service Shaft, all of these new workings would be at least 500 feet below ground surface and therefore too deep to cause subsidence at surface even if they were to collapse. As described on page 3-19 and 3-20 of the DEIR, production blasting is used to create underground openings, and these openings are then refilled with cemented paste backfill. Backfilling re-supports the rock within and around the original opening preventing caving and resulting in stability in the deep part of the mine. This stability at

depth carries upwards, thus eliminating the possibility of the mining producing any voids that would reach the surface or near surface.

Conclusion

The DEIR's evaluation of the potential for dewatering to result in collapse of surface materials is legally adequate and based on expert analysis, independently reviewed and corroborated by the County's independent consultant.

Master Response 30 - Biological Study Technical Adequacy

Comments

Several commenters questioned the adequacy of the biological technical reports, specifically the timing and methodology of surveys.

Discussion

As summarized in section 4.4.1, "Introduction," and 4.4.4, "Method of Analysis," of the DEIR, and included as Appendix F, eleven different technical reports were prepared that characterize and analyze the biological resources, habitat, and waters within the Project site. These technical reports were prepared by biologists with over 30 years of combined local expertise in the species and environment within the Project site, and in accordance with federal, state, and local regulations and agency-authored manuals. For example, the aquatic resource delineations prepared for the Centennial Site and Brunswick Area followed U.S. Army Corps of Engineers manuals for conducting wetland delineations.[15] As another example, the botanical field surveys were conducted in accordance with the relevant California Department of Fish and Wildlife guidance.[16] These technical studies were then peer reviewed by the County and their biological consultant. The peer review was conducted by a biological resources firm (Madrone) with similar local experience that resulted in several rounds of review and revision prior to the County's acceptance of these reports for use in the DEIR. As a result, numerous biological experts with local knowledge have analyzed, and reviewed the characterization and analysis included in these biological technical reports prior to their use and incorporation into the DEIR. Specifics regarding methodology and timing of surveys for rare plants is found in Master Response 31 (Rare Plants) and amphibians is addressed in Master Response 38 (Foothill Yellow Legged Frog and California Red Legged Frog).

In addition to the biological resources assessment reports and aquatic resource delineations, management plans were also prepared in accordance with Nevada County Land Use and Development Code (Section L-II 4.3.3) to minimize Project impacts to certain biological resources (i.e., aquatic resources, Pine Hill flannelbush) to the maximum extent possible. These management plans were similarly peer reviewed by the County's biological consultant.

The biological studies and management plans were the basis of scientific evidence used by the County to determine whether the Project would trigger any of the thresholds of significance identified in Chapter 4.4, Biological Resources, of the DEIR, and thus, result in significant effects to biological resources. The thresholds of significance used in the DEIR are based on Appendix G of the CEQA Guidelines (Section IV).

[15] *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratories, 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys and Coast Regions* (Version 2.0) (Corps, 2010).
[16] *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018).*

In general, the biological resources surveys conducted for this Project were reconnaissance-level in nature, and were conducted primarily to identify *habitat* for special-status species. Protocol-level surveys were conducted for plants, which are not mobile. The wildlife species with potential to occur in the area are highly mobile; as a result, negative protocol-level surveys would not be informative in regard to their presence or absence from a site during construction a year or more in the future. As a result, it is common practice to adopt a more conservative approach whereby one maps habitats on-site and assumes a species could be present if suitable habitat is present. Focused surveys for a species are conducted shortly prior to construction to ensure that any individuals of a species that are present at that time are appropriately protected and avoided.

Conclusion

Therefore, the DEIR thoroughly identified, analyzed and mitigated, as necessary,_ Project impacts to biological resources.

Master Response 31 - Rare Plants

Comments

Several commenters assert that the rare plant surveys were not conducted during the appropriate times of the year, and thus, certain special-status plants occurring on the Sites may not have been detected.

Discussion

As summarized in DEIR section 4.4.1 and Appendix F, protocol-level rare plant surveys were conducted within the Project site in December 2019 and July and August 2020. The survey dates in July and August 2020 were at a time of year when most of the potential rare plants would be blooming. In addition, following release of the DEIR, an additional rare plant survey of the Project site was conducted in June 2022 to address comments regarding the potential that July and August 2020 surveys were conducted outside published blooming periods and may have missed potential rare plants that may bloom earlier in the year. Please see Appendix G to this Final EIR for the Technical Memo for Botanical Resource Surveys at the Brunswick Mine and Centennial Study Areas (June 2022). The June 2022 rare plant survey did not identify any new rare or special-status plant species but did identify that many of the Pine Hill flannelbush had burned in the recent fire and germination of seedlings around these plants existed. In addition, during Visual Encounter Surveys for foothill yellow-legged frog in June 2022, two populations of giant checkerbloom (*Sidalcea Gigantea*) were identified in upland riparian areas adjacent to South Fork Wolf Creek. Giant checkerbloom has no federal status and is CNPS list 4.3 (not very threatened in California and limited distribution or infrequent throughout a broader area in California).

As summarized in DEIR section 4.4.2, 23 CNPS ranked plants and special-status plant species were identified as occurring within a nine Quad search of the Project site. The majority of the identified plant species were dismissed from further consideration in the DEIR due to a lack of suitable habitat on the Project site, being substantially outside of the known range and distribution for the plant species, or both. Ten plant species were analyzed in the DEIR (see DEIR section 4.4.2 and Impact 4.4-1.). Of these ten species, only four have a moderate to high potential of occurring within the Project site, including the Scadden Flat checkerbloom (List 1B.1), brownish beaked-rush (List 2B.2), Sierra blue grass (List 1B.3), and Pine Hill flannelbush (federally endangered and List 1B.2).

Surveys for those List 1 and List 2 species with a potential to occur within the Project site were conducted within the appropriate blooming periods. Surveys were conducted on June 20, 21, and 28. The blooming periods for potential special-status species plants that may occur onsite are

May through August with the additional surveys conducted on June 20, 21, and 28, covering each of the List 1 and List 2 species except for brownish beaked-rush and Scadden Flat checkerbloom with blooming periods between July and August. However, brownish beaked-rush and Scadden Flat checkerbloom have a low potential to occur within the Project site and neither species was identified during the July and August 2020 surveys of the project site.

In addition, a reference site visit was conducted for the finger rush at the location identified within the mapped CNDDB location for the species on June 24, 2019, and it was determined that the species was identifiable and therefore, it would have been identifiable during the special-status plant surveys conducted in early July 2019. The species was not identified and is considered to have a low potential to occur within any of the proposed areas of disturbance. Chaparral sedge, a perennial herb, and Red Hills soaproot, a perennial bulbiferous herb, have a low potential to occur within the areas of proposed disturbance and they were not identified during special-status plant surveys conducted in early July 2019. Both species are perennial and neither species was identified within the areas of proposed disturbance based on a comprehensive survey and keying out the characteristics of each plant species identified during the special-status plant species surveys. Neither the finger rush (April to June blooming period), chaparral sedge (March to June blooming period), or Red Hills soaproot (May to June blooming period) were documented within the Project site during the botanical surveys conducted on June 20, 21, and 28, 2022.

Disturbance related impacts to CNPS list 3 and list 4 species would not be considered a "significant" impact requiring additional mitigation under CEQA Guidelines Section 15380. As a result, impacts to List 3 and List 4 species identified as potentially occurring within the Project site, including the Humboldt lily and Sierra brodiaea (both List 4 Species,) do not meet the CEQA Guidelines Section 15380 definitions as either "endangered," "threatened," or "rare". Therefore, per the analysis of special-status plant species covering the entirety of the Project disturbance areas, special-status plant surveys were conducted within the known blooming season for each of the potential special-status plant species identified as part of the initial background research and analysis except for three (3) species that are CNPS list 1 and 2 species. Those species include the finger rush, chaparral sedge, and Red Hills soaproot and the June 2022 surveys confirmed that none of these three species are located within the Project site.

Based on this extensive technical analysis and detailed peer review, the DEIR concluded Project-related surface disturbance could have a potential to impact special-status plant species or habitat that may contain special-status plant species. As a result, the DEIR included Mitigation Measure 4.4-1 requiring a management plan for the impacts to the Pine Hill flannelbush and pre-construction special-status plant species surveys. The preconstruction special-status plant survey would include an additional survey for these and other special-status plant species with potential to occur within the Project's areas of disturbance.

Conclusion

Therefore, special-status plant surveys were conducted within the known blooming season for each of the potential special-status plant species occurring within the project area. Nevertheless, potentially occurring special-status plant species that may not have been in bloom during previously conducted surveys would 1) be identified prior to the implementation of the proposed disturbance and 2) would be fully mitigated per the mitigation measures outlined within the DEIR to avoid, minimize, and mitigate for potential impacts to special-status plant species.

Master Response 32 - Temperature of Mine Water Discharge

Comments

The County received several comments that asserted the Project would cause significant impacts due to increases in natural water temperature in the South Fork of Wolf Creek, which could lead to downstream effects on aquatic organisms and violation of NPDES permitting requirements for treated water discharge.

Discussion

Prior to discharging any mine water to the South Fork of Wolf Creek, the mine operator must first obtain coverage under the Central Valley Regional Water Quality Control Board (RWQCB) General Order for Limited Threat Discharges to Surface Waters (R5-2022-006), which General Order requires that natural water temperatures in the creek not be raised by more than 5°F, in addition to monitoring requirements that will be included in the Notice of Applicability issued by the RWQCB. Further, during periods of low flow in the creek, when discharge temperature could potentially result in an exceedance of the 5°F limit, discharge volume reductions will be used to ensure compliance with the General Order and to ensure no significant impacts related to increased water temperature will occur.

As discussed on page 4.8-31 of the DEIR, the RWQCB adopted a Water Quality Control Plan, Fifth Edition, for the Sacramento and San Joaquin River Basins (hereinafter Basin Plan) that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan, at page 2.3, states that the "…beneficial uses of any specifically identified water body generally apply to its tributary streams." The Basin Plan does not specifically identify beneficial uses for South Fork of Wolf Creek but does identify present and potential uses for the Bear River, to which the South Fork of Wolf Creek and Wolf Creek, is tributary. As stated in note 2 of Table 2-1 of the Basin Plan, any segments with both COLD and WARM beneficial use designations will be considered COLD water bodies for the application of water quality objectives. Therefore, the COLD beneficial use is applicable to South Fork Wolf Creek.

Mitigation Measure 4.8-1(a) requires the applicant to submit a Notice of Intent (NOI) to the RWQCB and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. NPDES CAG995002 General Order R5-2022-006 requires that natural temperatures not be increased by more than 5°F (2.8°C). Regular receiving water monitoring is required with a frequency specified in the NOA sufficient to evaluate the impacts of the discharge and compliance with the General Order. Regular receiving water monitoring data, measured at the upstream and downstream monitoring locations identified in the NOA, are used to determine compliance. (p. 50 of R5-2022-006).

As stated on page 108 of Appendix K.2, after being pumped from the mine, the water would be stored within a surface pond before treatment and discharge. The temperature of the water within the mine workings and drains remains relatively constant, between 14 and 15 degrees Celsius (~58°F). During the summer the temperature of the mine water would be comparable to the temperature of the receiving water in South Fork Wolf Creek. Measured temperatures in South Fork Wolf Creek are greater than 11.7°C (53°F) from May though September (see Table 4 below) and therefore water temperature of the mine discharge is not of concern during these months. During the winter, the ambient temperature should cool the water in the pond (see below for more discussion). In addition, the dilution with upstream flows would lower temperatures depending on the rate of flow and temperature versus the discharge from the water treatment plant. As is

presented in the record of streamflow in appendix I of Appendix K.2, there are times when natural temperature of South Fork Wolf Creek is low, which coincide with low flow rates. If necessary, the reduction in mine water discharge would provide an operational tool to ensure compliance with the temperature requirements of the water discharge permit. As such, if the discharge water temperature and volume would result in a temperature increase above 5°F during low flow rate periods, the Project would reduce discharge volume to stay within the temperature range allowed by the General Order during those low flow periods. While flows would not likely need to be reduced below 850 gpm to meet discharge temperature requirements (see discussion below), flows could be reduced below the maximum discharge of 2,500 gpm by simply reducing the pumping rate from the mine into the pond for the period in which the reduction is required. In an unlikely scenario where discharge flow needs to be reduced below 850 gpm to achieve discharge temperature requirements, additional water could be stored in the pond, and if necessary, the maintenance pumping rate could be reduced to allow water storage in the lowest levels of the mine until the flow reduction is no longer necessary to meet temperature requirements.

The natural temperature of South Fork Wolf Creek is correlated to the ambient air temperature with seasonal highs and lows regulated by ground contact (see Figure 25 below). A lower ambient temperature will also influence the temperature of water in the water treatment pond.

The calculation of the heat loss from the pond will vary depending on the weather conditions throughout the operation. However, the operation can influence the water discharge temperature in order to meet the requirements based on natural creek temperature. The flowrate of the mine water discharge can be reduced when natural temperature of South Fork Wolf Creek is low and coincides with low flow rates, if necessary to ensure compliance with the General Order. The maximum discharge rate of 2,500 gpm is equal to 1,249,500 pounds of water per hour and the operational discharge rate of 850 gpm is equal to 424,800 pounds of water per hour. One BTU is the amount of heat energy required to raise one pound of water by 1°F. Assuming an extreme case where mine water temperature must be reduced by 10°F, the required heat loss at 850 gpm would be 4.2 million BTU/hr versus 12.5 million BTU/hr at 2,500 gpm. The reduction of flow would therefore dramatically influence the water temperature of the discharge given a constant heat loss from the pond.

The majority of heat loss from the pond surface is a result of evaporation and the surface heat loss can be expressed as the heat loss factor multiplied by the temperature difference and surface area of the pond. Assuming mine water temperature of 58.1°F[17] and ambient air temperature of 39.3°F[18], the surface area of the pond of 113,587 ft^2, and a surface heat loss factor of 5.5 BTU/hr[19], the heat loss from evaporation would be up to 11.7 million BTU/hr (~2,470 BTU/ ft^2/day). This number is similar to the extreme case requirement of 12.5 million BTU/hr at 2,500 gpm and approximately 3 times larger than the 4.2 million BTU/hr requirement at 850 gpm.

Heat loss from radiation is on the order of 2,400 to 3,600 BTU/ ft^2/day and conduction less than 500 BTU/ ft^2/day. Solar radiation generally adds between 300 to 2,800 BTU/ ft^2/day and atmospheric radiation generally adds between 2,400 to 3,200 BTU/ ft^2/day (Hanford 1972). Heat gain from solar radiation would be lower during the late/fall or winter and the net heat loss from these processes would be minor in comparison to the heat loss from evaporation.

[17] 14.5 degree Celsius is median of estimated range on page 108 of Appendix K.2
[18] Average air temperature in November 2020 measured at SF Wolf Creek Discharge point
[19] Surface heat loss factor of 5.5 is midrange of values for sheltered position with wind velocity of 2 to 5 mph. https://www.engineeringtoolbox.com/swimming-pool-heating-d_878.html . Average windspeed in area is approximately 6 mph. https://wind.willyweather.com/ca/nevada-county/grass-valley.html

This example demonstrates that substantial cooling would occur in the water treatment pond during periods of low temperature and low flows in South Fork Wolf Creek. The reduction of discharge flow would reduce the required heat loss proportionally and provides a feasible tool to ensure compliance with the temperature requirements for the mine water discharge.

Conclusion

In summary, the Project will be subject to the State's General Order, which requires that discharge not increase natural temperatures of the creek by more than 5°F, and discharge flow reduction provides an adequate mechanism to ensure compliance even during low flow conditions in the creek. The EIR analysis demonstrates that the proposed discharge of treated water into South Fork Wolf Creek is regulated by the State permitting process and would not result in adverse effects to downstream water quality and aquatic organisms.

References

Hanford (Hanford Engineering Development Library). 1972. *Cooling Ponds – A Survey of the State of the Art* Richland, Washington. Available at: https://www.osti.gov/servlets/purl/5150728

Table 4
Average Monthly Water and Air temperature Measured at South Fork Wolf Creek Discharge Point

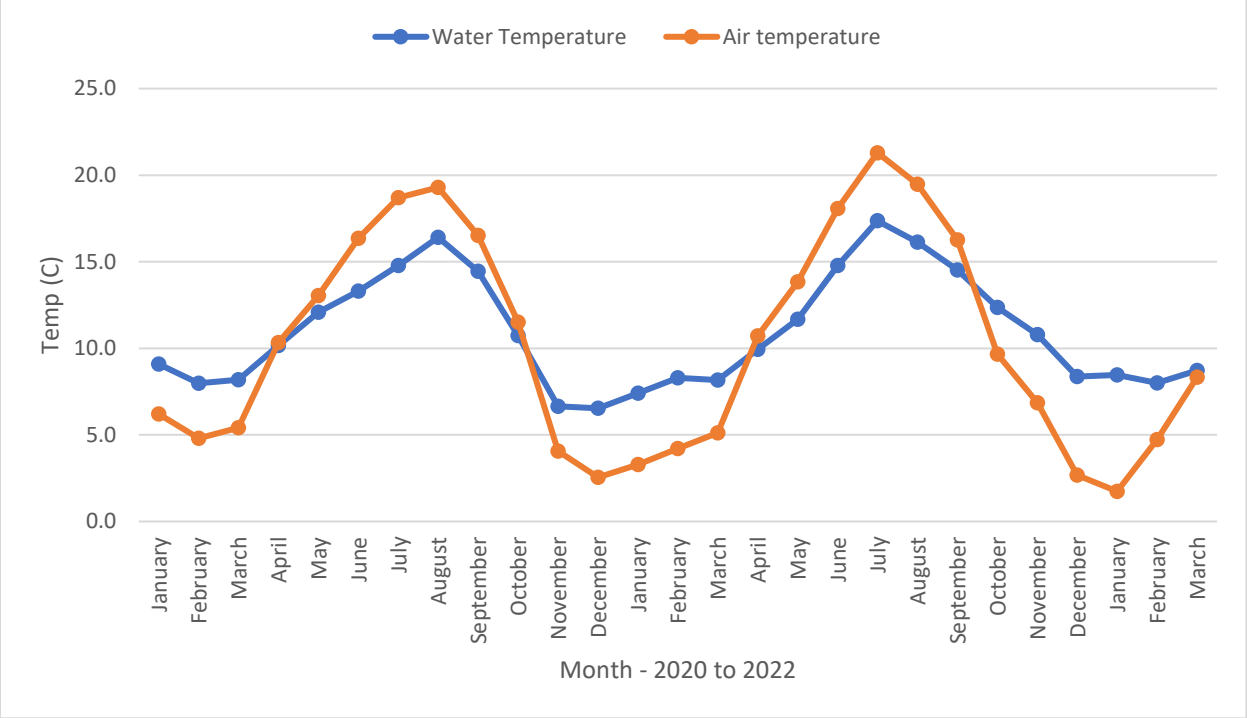
Year	Month	Water Temperature (C)	Air Temperature (C)	Water Temperature (F)	Air Temperature (F)
2020	January	9.1	6.2	48.4	43.2
2020	February	8.0	4.8	46.4	40.6
2020	March	8.2	5.4	46.7	41.7
2020	April	10.2	10.3	50.3	50.6
2020	May	12.1	13.1	53.7	55.5
2020	June	13.3	16.3	56.0	61.4
2020	July	14.8	18.7	58.6	65.7
2020	August	16.4	19.3	61.5	66.7
2020	September	14.4	16.5	58.0	61.7
2020	October	10.7	11.5	51.3	52.7
2020	November	6.6	4.1	44.0	39.3
2020	December	6.5	2.5	43.8	36.6
2021	January	7.4	3.3	45.3	37.9
2021	February	8.3	4.2	46.9	39.6
2021	March	8.2	5.1	46.7	41.2
2021	April	9.9	10.7	49.9	51.3
2021	May	11.7	13.8	53.0	56.9
2021	June	14.8	18.1	58.6	64.5
2021	July	17.4	21.3	63.3	70.3
2021	August	16.1	19.5	61.0	67.1

2021	September	14.5	16.3	58.2	61.3
2021	October	12.4	9.7	54.3	49.4
2021	November	10.8	6.9	51.4	44.3
2021	December	8.4	2.7	47.1	36.8
2022	January	8.5	1.7	47.2	35.1
2022	February	8.0	4.7	46.4	40.5
2022	March	8.7	8.3	47.7	47.0

Notes:
Data provided by Balance Hydrologics.

Water and air temperature are collected continuously (15-minute intervals) by instruments installed and maintained by Balance.

Figure 25
Water and Air Temperature Measured at South Fork Wolf Creek Discharge Point (Plotted from Table 4)



Master Response 33 - Groundwater Dependent Vegetation

Comments

Several commenters have expressed concerns about the impact of mine dewatering, and lowering of groundwater levels, on groundwater dependent vegetation, which could lead to drying up of vegetation and increase in fire hazard. As explained below, this concern is addressed in the Wildfire chapter of the DEIR (DEIR, p. 4.13-21).

Discussion

Most vegetation in the Project are not groundwater dependent. Terrestrial vegetation, such as Ponderosa Pine, Incense Cedar, Douglas Fir, and California Black Oak in the project area have roots depths typically less than 6 feet[20] which are within the unsaturated zone (above the water table and capillary fringe). Mature ponderosa pines put down a root to depths of more than 2 m (6 ft) in porous soils, but seldom more than 1 m (3 ft) in heavy clay soils. Exceptions occur in soils underlain by rock with deep fissures, where roots have been observed along cut banks at depths of 11 to 12 m (35 to 40 ft). However, the main mass of roots is concentrated within the top 60 cm (24 in) of the soil mantle[21]. Plant roots occupy this unsaturated zone because it contains air, and oxygen is essential to root respiration. As discussed on page 4.13-21 of the DEIR, in the areas away from the creeks and valleys, the depth to groundwater is typically greater than 10 feet and, in many cases, may be 100 feet or more. In addition, the normal seasonal fluctuation in the depth to groundwater may be 10 feet to 30 feet or more. Thus, in the areas away from the creeks, the existing groundwater surface is below the typical depth of rooted vegetation and tap roots from trees, especially during the drier months when the depth to groundwater is at its greatest. Therefore, terrestrial vegetation, which is not groundwater dependent, will not be affected by groundwater drawdown induced by mine dewatering.

At the location of the perennial streams, South Fork Wolf Creek and Wolf Creek, the groundwater level is at or above the level of the streambed. These streams have developed valleys along their courses. Groundwater levels are shallow in the valley bottoms. Hydrophytic vegetation are plants which have adapted to growing in the low-oxygen conditions associated with prolonged saturation or flooding. These plants therefore are dependent on the saturated soil conditions provided by the capillary fringe above the water table. In order to create these saturated soil conditions, the water table must be close to surface and the soil type must have small pores, such as silt or clay, in order to create a sufficient height of capillary fringe. Meadows develop in areas where there is a shallow water table and an accumulation of fine-textured soils, often with rich organic layers that are needed to draw water to shallow rooted meadow plants by capillary rise[22]. As discussed on page 4.13-21 of the DEIR, discharge of treated water to South Fork Wolf Creek would prevent the lowering of the groundwater levels along the reach of that creek because the full dewatering volume would be discharged to the creek, whereas only a small fraction of the groundwater that would be removed from the subsurface would come from that area. Thus, the potential increased recharge due to the enhanced base flow in South Fork Wolf Creek would more than offset any effects from dewatering in the area near the creek. In order to clarify that groundwater drawdown induced from the mine would not impact groundwater dependent (phreatophytic) vegetation, Itasca Denver prepared a memo showing the simulated drawdown in selected meadows which is attached to the Final EIR as Appendix H. These three meadows (Brunswick Site, Empire Mine Park, and Loma Rica) would experience minimal drawdown, even without consideration of the mine water discharge to South Fork Wolf Creek. With the addition of 1.9 cfs (850 gpm) (average maintenance dewatering rate), future mining is predicted to have no to very little groundwater drawdown in the vicinities of the meadows. (see Itasca Memo – Simulated Drawdown of Selected

[20] It should be noted that the root depths referred to on page 121 of Appendix K.2 represent extreme cases. Mature ponderosa pines put down a root to depths of more than 2 m (6 ft) in porous soils, but seldom more than 1 m (3 ft) in heavy clay soils. Exceptions occur in soils underlain by rock with deep fissures, where roots have been observed along cut banks at depths of 11 to 12 m (35 to 40 ft). The main mass of roots is concentrated within the top 60 cm (24 in) of the soil mantle.
(see source material at (https://www.srs.fs.usda.gov/pubs/misc/ag_654/volume_1/pinus/ponderosa.htm)
[21] https://www.srs.fs.usda.gov/pubs/misc/ag_654/volume_1/pinus/ponderosa.htm
[22] https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5434345.pdf

Meadows attached to the Final EIR as Appendix H). As such, this impact is still considered less than significant.

Conclusion

The DEIR provides substantial evidence (Chapter 4.13) that the dewatering operations would not adversely impact surface level vegetation leading to the indirect effect of providing more dry fuel sources and increasing wildfire risk. Appendix H to this Final EIR provides supplemental evidence, corroborating the findings in the DEIR that dewatering would not increase fire risk due to reduced groundwater levels.

Master Response 34 - Resident Fish

Comments

Several commenters questioned the Project's potential impact on resident fish and their habitat in South Fork Wolf Creek. As discussed below, brown trout and bluegill were identified within South Fork Wolf Creek; however, these are not special-status species, and rather, are invasive species. Nonetheless, the Project will not cause significant impacts to fish due to the requirement that the Project obtain coverage under the Central Valley Regional Water Quality Control Board's limited threat discharge order, which requires that discharge meet water quality standards and limit temperature change to receiving waters.

Discussion

The March 23, 2022 CDFW reporting on electrofishing samples collected by the agency in early March 2022 at three (3) distinct sampling locations identified two fish species, brown trout and bluegill, within South Fork Wolf Creek (see Agency Letter 3 of this Final EIR). Both the brown trout and bluegill are non-native species and though they may be resident within stretches of South Fork Wolf Creek, these species have no state or federal protections given their status as non-native fish species.

The sampling location closest to the daylighting of South Fork Wolf Creek within the Brunswick Site included three brown trout that were considered to be of "poor body condition" and "the fish were thinly distributed with plenty of unoccupied habitats between fish occurrences." Furthermore, CDFW concluded that "these preliminary data suggest that Brown Trout migrate into this site from more ideal spawning and rearing habitats downstream."

CDFW also concluded that fish captured in Site 2 were of good body condition with healthy fins and no visible signs of disease. Site 2 had the highest fish density and diversity of Brown Trout sizes suggesting that Site 2 is a spawning and rearing location for Brown Trout. Fish captured in Site 3 were of good body condition with healthy fins and no visible signs of disease. The results of CDFW electroshocking suggest that the best habitat within South Fork Wolf Creek between the Brunswick Site and Highway 174, where the creek is culverted underground along Highway 174 before daylighting closer to the City of Grass Valley, lies within the stretch within the Bennett Street Grasslands when compared to the location closer to the Brunswick Site upstream where there were fewer non-native fish that were in "poor body condition."

For potential indirect downstream impacts to fish species and aquatic and riparian habitat along South Fork Wolf Creek, including the area located within the Bennett Street Grasslands, from the proposed 5.6 cfs discharge limit within South Fork Wolf Creek, the applicant must remain in compliance with the National Pollutant Discharge Elimination System (NPDES) discharge requirements covering the discharge to South Fork Wolf Creek. The NPDES discharge requirements are mandated by the State Water Resources Control Board. The Clean Water Act

(CWA) requires all point source discharges from mining operations, including discharges from associated impoundments, be authorized under an NPDES permit. The NPDES program regulates discharges from three general categories of mining activities as well as the considerations associated with abandoned mines. For the proposed project, the hard rock mining NPDES permit discharge limits must be adhered to.

Therefore, remaining in compliance with the NPDES discharge requirements covering the discharge to South Fork Wolf Creek will ensure that the proposed discharge will not have an adverse effect on the South Fork Wolf Creek aquatic ecosystem and any sensitive aquatic biological resources, including fish and aquatic habitat along South Fork Wolf Creek. Remaining within the NPDES discharge limit of 5.6 cfs, potential bank erosion, bed scour, and channel avulsion would not be substantial and water quality standards for constituents and parameters of concern would remain in compliance. These parameters of concern include temperature, siltation, and turbidity within South Fork Wolf Creek and downstream to the Bennett Street Grasslands.

Therefore, negative impacts to aquatic resources, including fisheries, downstream of the Brunswick Site from excess siltation and turbidity, as well as from exceeding safe threshold limits caused by the proposed discharge, would be avoided and minimized by staying within the required NPDES discharge limits as part of the proposed discharge to the South Fork Wolf Creek. This would include minimizing any potential changes in water temperature per the NPDES discharge limits and requirements.

Conclusion

Any potential impacts to fish and aquatic habitat within South Fork Wolf Creek would be less than significant given the stringent requirements of the NPDES discharge requirements and the high levels of water treatment that will be implemented prior to discharging to South Fork Wolf Creek.

Master Response 35 - Discharge to South Fork Wolf Creek

Comments

Several comments received on the DEIR focus on the discharge of water to South Fork Wolf Creek from the New Brunswick Industrial Site. Various comments assert the discharged water would contain pollutants, contaminate the creek, or damage the surrounding ecosystem. As demonstrated in the DEIR, any outflow of groundwater to South Fork Wolf Creek resulting from the dewatering of the Idaho-Maryland Mine will be treated in accordance with strict regulatory standards prior to discharge. In fact, the water quality of the groundwater to be discharged, after on-site treatment, will exceed the existing water quality levels of surface water in South Fork Wolf Creek.

Discussion

Dewatering Process

As discussed in the Project Description of the DEIR (Chapter 3), to reinitiate the underground mining and gold mineralization process, the Project applicant is proposing to dewater the underground mine workings of the Idaho-Maryland Mine, which has been flooded since the mid-1950s. The initial dewatering process will be accomplished by using the New Brunswick shaft to access the underground mine workings and place submersible and staged centrifugal pumps to pump the water out of the shaft through a pipeline. (DEIR, p. 3-15.) As measured by the New Brunswick shaft, the groundwater level currently sits at approximately 260 feet below ground surface (bgs). (DEIR, p. 3-15.) The submersible pump will gradually pump water out of the shaft

at approximately 5.6 cubic feet per second (cfs), or 2,500 gallons per minute (gpm). (DEIR, p. 3-15.) Over the first six-month period, the Project applicant will pump approximately 2,500 acre-feet from the underground mine workings through the pipeline and into an existing clay-lined settling pond with an approximate 40-acre-foot total capacity. (DEIR, p. 3-15.) From the clay-lined settling pond, the water will then be moved through a water treatment system to meet or exceed applicable water quality objectives and then be discharged to South Fork Wolf Creek. (DEIR, p. 3-18.) Any discharge of water to South Fork Wolf Creek will be performed under a discharge permit from the Central Valley Regional Water Quality Control Board (CVRWQCB), with required monitoring and reporting, to ensure that discharge water meets all applicable water quality standards. (DEIR, p. 4.8-28.)

Water Quality

Water samples of the groundwater from the underground mine indicate the primary constituents of concern are iron and manganese. (DEIR, p. 4.8-21). Within the New Brunswick shaft, the iron concentration ranges from 1,400 micrograms per liter (µg/L) to 1,600 µg/L. (DEIR, p. 4.8-21). The secondary drinking water maximum contaminant level (MCL) and the National Pollutant Discharge Elimination System (NPDES) effluent limit for iron are both 300 µg/L. (DEIR, p. 4.8-21). For manganese, the groundwater samples indicate concentration ranges from 230 µg/L to 270 µg/L. (DEIR, p. 4.8-21). The MCL and NPDES effluent limit for manganese are both 50 µg/L. Arsenic also was detected in the New Brunswick groundwater samples below the MCL and NPDES effluent limit of 10 µg/L. (DEIR, p. 4.8-21).

The New Brunswick groundwater samples also detected the compound cis-1 ,2-dichloroethylene (cis-1 ,2-DCE). This compound generally occurs as a breakdown product of industrial solvent trichloroethylene (TCE) or the dry-cleaning solvent tetrachloroethylene (PCE). (DEIR, p. 4.8-21). The presence of cis-1 ,2-DCE may be attributable to two potential sources: either a historic solvent used within the New Brunswick mine for equipment repair and maintenance, or a seepage from the adjacent former SPI Mill Site to the southeast. The SPI Mill Site was known to have industrial solvent impacts. (DEIR, p. 4.8-21).

Water Treatment

Groundwater from the underground mine workings will be pumped to the settling pond for water storage and removal of total suspended solids. (DEIR, p. 3-17.) The settling pond will also feature an aeration system to oxygenate the water, which will precipitate (i.e., create a solid from a solution) a significant portion of dissolved iron and manganese and be removed from the settling pond approximately every 10 years. (DEIR, p. 3-17.) Water from the settling pond will then be pumped to the proposed on-site water treatment plant (WTP) and filtered to remove the remaining iron and manganese. During this process, a small dose of chemical oxidant [sodium hypochlorite (NaOCl) or potassium permanganate (KMnO4)] will be added to enhance the kinetics of the reaction under all surface conditions, such as seasonal variations. (DEIR, p. 3-17.) The first step in the WTP process is filtration through natural, mined manganese dioxide (MnO_2) media. (DEIR, p. 3-17.) The Project applicant chose MnO_2 as the primary form of treatment due to its efficient removal characteristics for iron and manganese. (DEIR, p. 3-17.) Based on the groundwater quality conditions identified above, this treatment process is sufficient to meet State discharge standards. (DEIR, p. 3-17.) However, the WTP design calls for an additional level of treatment using granular activated carbon (GAC) in the event that water quality worsens during periods of active mining. (DEIR, p. 3-17.)

The proposed treatment process will also reduce concentrations of arsenic and ammonia, both of which have been detected at low concentrations in surface seeps near the mine. (DEIR, p. 3-17.)

Arsenic is not present in levels above water quality goals in the Brunswick Shaft samples but exceeds water quality goals in the mine drains. Once mine dewatering commences the flow of water through the mine workings would be reversed from its current condition with water pumped up the New Brunswick shaft rather than the current mine drains. The elevated arsenic levels in the drain versus the New Brunswick shaft have been noted in the DEIR. (DEIR, p. 4.8-21.) Oxidized arsenic will be adsorbed by precipitated iron and then adsorbed by the MnO_2 filter media. The low concentrations of ammonia (NH3) will be removed by the aeration process occurring in the pond. (DEIR, p. 3-17.) As a contingency, sodium hydroxide, commonly used in water quality treatment processes to adjust pH, will be included in the State permitting efforts for the WTP should it become necessary to treat NH3 in higher concentrations than have been previously detected. (DEIR, p. 3-17.) This may occur as a result of explosives used during periods of active mining.

After the water treatment process, water will be stored in a finish water tank and will constitute the final effluent before discharge to South Fork Wolf Creek. (DEIR, p. 3-18.) The water contained in the finish tank will be pH adjusted to meet regulatory compliance standards. (DEIR, p. 3-18.) The project applicant will achieve this by adding a small amount of sulfuric acid (commonly used in municipal treatment systems) to treat the effluent as necessary. (DEIR, p. 3-18.) At the conclusion of the water treatment process, any water discharged to South Fork Wolf Creek will meet or exceed applicable water quality objectives.

Water Quality in South Fork Wolf Creek

Contrary to some commenters' statements, any discharged treated water from the Project will exceed the water quality levels currently found in South Fork Wolf Creek. South Fork Wolf Creek is a heavily disturbed watershed and has been altered by historical land uses, including logging, hard rock and placer mining, agriculture, and construction and maintenance of road and railroad transportation networks. (Balance Hydrologics, 2020, pp. 8-9, 39.) South Fork Wolf Creek is a perennial stream that begins at a 48-inch culvert fed by surface drainage and road runoff from both the east and west sides of Brunswick Road. (DEIR, p. 4.4-3.) Samples from the creek taken in December 2018 and April 2019 detected elevated levels of iron and manganese. (DEIR, p. 4.8-23.) South Fork Wolf Creek flows west and empties into Wolf Creek, which itself is heavily disturbed and has historically included upstream discharges, such as that from the City of Grass Valley Wastewater Treatment Plant.[23] The Project will treat the groundwater currently existing in the mine to remove iron, manganese, and other elements to a level that meets or exceeds drinking water quality. The result will be that any water discharged to South Fork Wolf Creek will exceed the water quality levels currently existing within the creek, thus having a positive environmental effect on the creek, downstream users, and habitat.[24]

[23] Waste Discharge Requirements for the City of Grass Valley Wastewater Treatment Plant, Nevada County, CVRWQCB Order No. R5-2016-0012 (NPDES No. CA0079898), available at https://www.waterboards.ca.gov/rwqcb5/board_decisions/adopted_orders/nevada/r5-2016-0012.pdf.

[24] For example, surface water samples taken from South Fork Wolf Creek in April 2019 contained iron ranging from 310 µg/L to 940 µg/L and manganese ranging from 57 µg/L to 140 µg/L, depending on the location of the sample. (DEIR, 4.8-23.) The Project's proposed WTP would treat groundwater pumped from the New Brunswick shaft to concentrations of iron and manganese below 300 µg/L and 50 µg/L, respectively, which meets the screening level and effluent limits for Receiving Waters with Municipal and Domestic Supply Beneficial Use. (DEIR, Table 4.8-2.)

Contrary to the assertions of some commenters, the DEIR contains voluminous baseline surface water quality data. The baseline surface water quality data are described within Section 3.4.1.2 and presented in Tables 3.5 through 3.10 of Appendix K.2 of the DEIR. The baseline data include results from samples collected from the underground workings, from drains that discharge water from the underground workings, from Wolf Creek, and from South Fork Wolf Creek. The results include field parameters, general water chemistry parameters, and metals. In particular, Table 3-8 of Appendix K.2 contains pH, temperature, dissolved oxygen (DO), electrical conductivity, and oxidation-reduction potential (ORP) measurements from three locations along South Fork Wolf Creek and two locations on the former SPI site that discharge to South Fork Wolf Creek. Table 3-8 of Appendix K.2 presents laboratory analytical results for 18 general water chemistry parameters and 19 different metals from two samples collected along South Fork Wolf Creek at locations that will be upstream and downstream of the proposed treated water discharge location.

Table 3-10 of Appendix K.2 provides field measurements of flow, temperature, specific conductance, pH, and turbidity for two locations (upstream and downstream) along South Fork Wolf Creek measured during five different storm flow conditions, including summer baseflow, early-season post-storm (comparable to first-flush) flows, winter baseflow, rising flows during a "qualifying rain event of 1.25 inches", and peak flows during the same "qualifying rain event". Additional details regarding flow conditions and baseline water quality conditions in South Fork Wolf Creek are also provided in Appendix K.1 of the DEIR.

Further analysis of the baseline water quality data is provided in Section 3.4.2 of Appendix K.2 to the DEIR. In particular, data from South Fork Wolf Creek are presented on Figures 3-12 and 3-19 of Appendix K.2 to the DEIR, while the baseline data from the underground workings, drains, and Wolf Creek are presented on Figures 3-12 through 3-18 of Appendix K.2 to the DEIR. All the sampling described was considered as part of the evaluations conducted in the DEIR. However, future compliance with water quality standards, including parameters such as temperature, turbidity, pH, and dissolved oxygen, and also general chemistry and metals, will be based on comparison of the results from the upstream and downstream sample locations, while treated water discharge to South Fork Wolf Creek is actually taking place, and not on current baseline conditions. While the baseline sampling that has been conducted for the Project informs the analysis of potential impacts in the DEIR, it would not be relevant for future compliance once dewatering, water treatment, and discharge begin. The compliance sampling requirements would be defined in the Monitoring and Reporting Program for the NPDES permit to be issued by the Regional Water Quality Control Board.

Regulatory Requirements

The Project applicant is undertaking extensive water treatment procedures before discharging any effluent into South Fork Wolf Creek in conformance with all legal requirements. Any discharge to South Fork Wolf Creek that does not meet certain water quality standards is prohibited by law. The state Porter-Cologne Water Quality Control act authorizes the CVRWQCB to implement certain water quality control measures. (DEIR, p. 4.8-28.) These measures are known as water quality control plans (also referred to as basin plans) for specific groundwater and surface water basins. (DEIR, p. 4.8-28.) The CVRWQCB is responsible for issuing permits that regulate activities such as stormwater, wastewater, industrial water discharge, and disturbance of wetlands. (DEIR, p. 4.8-28.) The Project applicant's discharge of treated water is expected to fall under the CVRWQCB's Limited General Threat Order (R5-2016-0076-01) as a "Tier 3" discharge. (DEIR, p. 4.8-28.) Such discharges to surface water that are greater than 250,000 gpd (greater than 175 gpm) and/or that are longer than four months are allowed if the water to be discharged

(with or without treatment) meets the applicable screening levels in the permit. (DEIR, p. 4.8-28.) To comply with this provision, the Project applicant will file a Notice of Intent (NOI) with the CVRWQCB for coverage under the Limited Threat Discharge permit, which will include a detailed description of the dewatering, treatment, and discharge components of the Project. (DEIR, p. 4.8-28.) The Project applicant will also be required to implement a Monitoring and Reporting Program to continuously monitor, sample, and report discharges as required by the Regional Board.

As the Project applicant will be legally required to meet certain water quality objectives, the applicant will determine whether the discharge from the Project to South Fork Wolf Creek will exceed the existing water quality levels of the surface water in the creek, based on water samples from the creek. Additionally, the Regional Board's permit will contain requirements that the project applicant continuously monitor and ensure that water quality objectives are met throughout the life cycle of the Project.

A Notice of Applicability (NOA) for the water discharge is required by Mitigation Measure 4.8-1(a). As stated in the mitigation measure, the owner shall be required to submit quarterly monitoring reports to the Regional Water Quality Control Board. General Order R-5-2016-0076 has been replaced with General Order R-5-2022-006 and the FEIR has been updated to reflect this change (see Chapter 3 of this Final EIR, Revisions to the DEIR Text). Upon receipt of the complete Notice of Intent (NOI), if the discharge is deemed eligible for coverage under the General Order, the CVRWQB will issue a Notice of Applicability (NOA). The NOI shall include evaluation of potential constituents of concern and demonstrate that WTP design shall successfully treat mine water to meet the water quality standards and treatment goals. The NOA will specify monitoring and reporting program requirements. All NPDES permits are required to specify requirements for recording and reporting monitoring results. General monitoring provisions of the General Order require that samples taken for the purpose of monitoring be representative of the monitored activity. Records of monitoring must be kept and maintained and reports to the CVRWCB quarterly. Any noncompliance which may endanger health or the environment must be reported orally within 24 hours from the time the Discharger becomes aware of the circumstances. A report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. If the discharge is not deemed eligible for coverage under the General Order, the mine operator would need to apply for project-specific waste discharge requirements to achieve water quality that meets applicable water quality standards; however, it is expected that the discharge will qualify for coverage under the General Order based on the available industry standard methods to reduce iron and manganese (and potentially ammonia and arsenic) and the existing use of the General Order for the nearby Empire Mine and North Star Mine water discharge.

A standard provision in the NOA is the duty to comply with all of the terms, requirements, and conditions of the General Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof.

There are currently two other permitted discharges downstream of the Project under the same General Order. The Empire Mine State Park discharges to South Fork Wolf Creek and the North Star Water Treatment Facility discharges to Wolf Creek.

Conclusion

As discussed in this master response and the DEIR (Chapter 4.8, Hydrology and Water Quality), the Project will construct an on-site water treatment plant that will be designed and permitted by the CVRWQCB to treat groundwater pumped from the mine to drinking water quality standards. The Project will only discharge treated groundwater to South Fork Wolf Creek. Thus, the DEIR appropriately concludes (DEIR, p. 4.8-52) that, after implementation of mitigation, the Project would result in a less than significant impact to the water quality of South Fork Wolf Creek.

References

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01/r5-2016-0076_noas/r5-2016-0076-005_amend.pdf
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01/r5-2016-0076_noas/r5-2016-0076-001_noa.pdf

Master Response 36 - Flows in South Fork Wolf Creek

Comments

Several commenters expressed concern for potential biological impacts resulting from dewatering the Project and the associated discharge to South Fork Wolf Creek. These concerns included water quality, erosion, and increased flows and how these changes may impact a variety of species that use this habitat area.

Discussion

As discussed in the Project Description of the DEIR and summarized in Master Response 35, groundwater exists within the underground workings of the Project site and would be pumped out of the New Brunswick shaft into an existing clay-lined settling pond. From the clay-lined settling pond, the water will then be moved through an on-site water treatment system to meet or exceed applicable water quality objectives and then be discharged to South Fork Wolf Creek. (DEIR, p. 3-18.) Any discharge of water to South Fork Wolf Creek will be performed under a discharge permit from the Central Valley Regional Water Quality Control Board (CVRWQCB), with required monitoring and reporting, to ensure that discharge water meets all applicable water quality standards. (DEIR, p. 4.8-28.) Water will be discharged to South Fork Wolf Creek at a maximum rate of 5.6 cubic feet per second (cfs) or 2,500 gallons per minute (gpm) during the approximately 6 months of initial dewatering of the mine. After initial dewatering, groundwater is anticipated to continue to infiltrate the underground workings at a rate of approximately 1.9 cfs (850 gpm) once initial dewatering is complete and will require an ongoing dewatering program.

Water Quality and Erosion

The DEIR Hydrology section (DEIR Chapter 4.8) and associated technical studies (Appendix K) addressed potential impacts to the South Fork Wolf Creek stream channel that may result from discharge of treated water, including water quality and erosion. Groundwater from the underground mine workings will be pumped to the settling pond for water storage and removal of total suspended solids and iron and manganese (through an aeriation system), then to an on-site water treatment system for filtration for removal of remaining iron and manganese. (DEIR, p. 3-17.) The proposed treatment process will also reduce concentrations of arsenic and ammonia, both of which have been detected at low concentrations in surface seeps near the mine. (DEIR, p. 3-17.) At the conclusion of water treatment, water discharged to South Fork Wolf Creek will exceed the water quality levels currently existing within the creek. As a result, biological species that may utilize South Fork Wolf Creek will experience an improvement in overall water quality.

Analysis of Potential Impacts to Species

As discussed above, for approximately 6 months during initial dewatering, water will be discharged to South Fork Wolf Creek at a rate of approximately 5.6 cfs and then reduced to approximately 1.9 cfs at the conclusion of this period for ongoing dewatering. The DEIR Hydrology section (DEIR Chapter 4.8) and associated technical studies (Appendix K) assumed the maximum discharge rate of 5.6 cfs to assess potential impacts from treated water discharge. Impact 4.4-2 addressed potential treated mine water discharge impacts to biological species, including fish, amphibians, invertebrates, and benthic macroinvertebrates (BMI) and concluded this impact would not be significant. As explained in Impact 4.4-2, and detailed in Chapter 4.8 and Appendix K.1, the proposed project will discharge a maximum of 5.6 cubic feet per second (cfs) of treated mine water to South Fork Wolf Creek. Base flow in South Fork Wolf Creek may range from 0.17 cfs in the summer to 6.5 cfs in the winter between storm events. Sediment pebble count analysis (see Appendix K.1) indicates that the flow rate at which sediment within the channel may become mobilized ranges from 20 cfs to 90 cfs. With the addition of the maximum proposed discharge of 5.6 cfs and increasing measured baseflows by a 50 percent safety factor, post-project baseflows during non-storm periods would be expected to range between approximately 5.8 cfs and 15 cfs. These estimates are less than 23 cfs, the threshold for bedload sediment mobility and well below flows that commonly exhibit significant work on the channel (i.e., 1- to 2-year flood).

Conclusion

The DEIR therefore concludes potential downstream water quality and erosion impacts to the stream channel and associated riparian zone along both sides of South Fork Wolf Creek from the additional discharge of 5.6 cfs would be minimal on sensitive biological resources, and do not represent a significant impact to the stream channel or associated riparian zone within South Fork Wolf Creek.

Master Response 37 - Birds and Raptors

Comments

Several comment letters asserted that the DEIR did not evaluate certain protected bird species having the potential to occur in the project area and mischaracterized the California black rail. The bird species that the commenters allege are not evaluated in the DEIR include willow flycatcher, olive-sided flycatcher, yellow-breasted chat, yellow warbler, and California spotted owl. Many commenters also allege that the bird surveys performed for the Project were not appropriately timed.

Discussion

The Project site was studied for special-status and protected birds, and raptors as part of the Biological Reconnaissance Surveys (BRA) conducted in 2018 and 2019. These surveys were conducted to determine whether special-status species protected under the federal Endangered Species Act (ESA), California Endangered Species Act (CESA), or the Migratory Bird Treaty Act, are present or have the potential to be present on-site due to suitable habitat. Reconnaissance level biological resources field surveys were conducted on foot for the Brunswick Site and Centennial Site on December 9th through 12th and 17th and 18th, 2018. Follow-up reconnaissance level biological resources field surveys were conducted for potential special-status wildlife species habitats on December 30th, 2018 for both sites. Reconnaissance-level wildlife surveys were conducted on July 10th and 14th, 2019 for the Centennial Site and July 14th and 16th, 2019 for the Brunswick Site, to document the presence and/or suitable habitat for special-status wildlife species.

As summarized in DEIR section 4.4.2 and Appendix F, only two special-status bird species have the potential to occur onsite: Cooper's hawk and California black rail. None of these species were identified during the BRA site visits and are considered to have a low potential to occur within the Project site except for Cooper's hawk, which has a moderate potential to occur within the project site. In addition, the DEIR and Appendix F, identified the potential for nesting raptors and other migratory bird species to occur within the Project site.

Impact 4.4-2 in the DEIR addressed potential impacts to California black rail and non-special status birds protected by other laws (e.g., Migratory Bird Treaty Act). As detailed in Impact 4.4-2, the potential for California black rail to occur onsite is low. Despite this low potential for onsite occurrence, the DEIR conservatively concluded that the Project would cause a potential impact to this species and therefore the DEIR required mitigation. The potential for non-special status birds and raptors on-site is high and considered a potentially significant impact, which also includes the potential for Cooper's hawk to occur and nest within the Project site. Mitigation measures for potential impacts to all bird and raptor species require pre-construction surveys prior to surface disturbance and avoidance and minimization measures if any of these species are identified during the preconstruction survey. These mitigation measures reduce the impact to a less than significant level. Note that the DEIR reflected that California black rail is California Threatened, but it is also considered California Fully Protected. Even though no new impact has been identified, the DEIR has been amended to reflect the Fully Protected status for this species (see Chapter 3 of this Final EIR, Revisions to the Draft EIR Text). Additionally, Mitigation Measure 4.4-2(d) has been amended to remove reference to an ITP being obtained for take of California black rail. As this species is considered to have a very low potential to be found on-site, surveys will be conducted prior to site disturbance, and consultation with CDFW and avoidance shall be required in the case of species presence, this impact is still considered less than significant.

Riparian Bird Species

A more recent CNDDB search was conducted in May 2022 and identified a recently reported occurrence of the yellow-breasted chat within the 5-mile search radius of the Project site. According to the California Department of Fish and Wildlife CNDDB Occurrence Report, the yellow-breasted chat was observed July 2021 within the 5-mile search radius of the Project site. Only the yellow-breasted chat and California spotted owl (see below) has been mapped in the CNDDB within 5 miles of the Project site. The yellow-breasted chat occurrence was mapped along the South Fork Wolf Creek, approximately 1.5 miles downstream of the Brunswick culvert outlet where South Fork Wolf Creek daylights within the Brunswick Site. The yellow-breasted chat is a CDFW Species of Special Concern and is not State or federally listed. This species CNDDB mapped location is within the Empire Mine State Historic Park and within an area referred to as the Bennett Street Grasslands. This species was not identified within any of the Project areas during surveys conducted between December 2018 and August 2020.

If the yellow-breasted chat were to be found on-site, it would most likely be found within the riparian areas of the Project site. As discussed above, nesting raptors and other migratory bird species were analyzed and identified as a potential impact. Mitigation Measure 4.4-2(g) requires a pre-construction survey for bird species prior to surface disturbance and avoidance and minimization measures in the event a species is identified. Therefore, the potential impact to this species has been analyzed and addressed in the DEIR. Nevertheless, for clarity, this Final EIR includes revisions to Chapter 4.4, Biological Resources, to include discussion of yellow-breasted chat and other riparian bird species discussed below, and as shown below, targeted revisions have been made to Mitigation Measure 4.4-2(g) to reference this species. Willow flycatcher, olive-sided flycatcher, and yellow warbler have not been mapped within the CNDDB within 5 miles of the Project site. However, an updated CNDDB 9 Quad Species List review of the Project site

within the Grass Valley Quad being the central quad in the 9 Quad Species review does list those three species as "unprocessed" under data status. The CNDDB 9 Quad Species List was generated on April 20, 2022. Per CDFW, "unprocessed CNDDB data is data that has been submitted to the CNDDB but has not yet been entered into the CNDDB occurrence database and GIS. A bibliographic record has been created for this data with quad and county information, but a thorough review of the information has not yet been conducted. Unprocessed records should be used with caution as they have not been quality controlled. These data will eventually be reviewed by a CNDDB Program biologist and incorporated into the CNDDB occurrence database and GIS if appropriate." These species are most likely to occur within riparian areas where quality habitat for these species occurs. Habitat for these species within the Project site is considered limited given the level of disturbance within the Project site. More developed and less disturbed riparian habitat is located outside of the Project site along South Fork Wolf Creek within the Bennett Street Grasslands where the yellow-breasted chat is mapped within the CNDDB. The riparian habitat within the Centennial and Brunswick Industrial Sites provides minimal suitable habitat for any of these species given the level of disturbance historically within those areas as well as the recent disturbance within both areas in 2021 related to a fire that burned a large area within the Centennial Area and a large storm in late December 2021 that heavily impacted the riparian habitat along the South Fork Wolf Creek within the Brunswick Area. These species were not identified within the Project site during surveys conducted between December 2018 and August 2020. Accordingly, these species have a low probability of occurrence on-site, and no potential impact is expected. In addition, as discussed above, nesting raptors and other migratory bird species were analyzed and identified as a potential impact and mitigation is required for these potential impacts in the DEIR. Although no new impact has been identified, for clarification purposes, Mitigation Measure 4.4-2(g) is hereby revised in this Final EIR (as shown below) to include, by name, the above-discussed riparian bird species.

California Spotted Owl

In response to several public comments about the known presence of California spotted owl within Empire Mine State Park, and information available on the Biogeographic Information and Observation System (BIOS) managed by CDFW, the Final EIR includes specific discussion of the California spotted owl (CSO) species (see Chapter 3 of this Final EIR, Revisions to the DEIR Text). The California spotted owl is not listed as threatened or endangered in the federal Endangered Species Act (ESA) or the California State Endangered Species Act (CESA) but is rather referred to as a Species of Special Concern by CDFW, which do not require take permits for incidental take, but do require analysis under CEQA. The DEIR acknowledges that raptor nests and eggs are protected by Section 3503.5 of the California FGC, which states, "It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto." Notably, the DEIR also acknowledged that the Brunswick Site has suitable habitat for raptors (owls are a type of raptor) and included mitigation specifically for raptor and nesting bird species. (see Mitigation Measure 4.4-2(g).)

As identified in the BIOS database, a CSO nest was documented within the Brunswick Area in 2011. Three additional follow up surveys in 2012, 2016 and 2018 did not document the presence of a nest but did document the presence of a pair of CSO (in 2012 and 2016) and a single male CSO in 2018. Based on the information from BIOS, and to clarify the analysis provided in the DEIR on impacts to raptors, two surveys for presence and nesting status of California spotted owl were conducted by a qualified biologist pursuant to the United States Forest Service (USFS) protocol (1992) on the Brunswick Site. California spotted owl callback surveys were conducted at two locations within the Brunswick Area on August 5, 2022 and then again on August 11, 2022. No

CSO responded to any of the calls from either survey station either night (Please see Appendix I to this Final EIR for the Technical Memorandum for the Idaho-Maryland Mine Project – Brunswick Area California Spotted Owl Surveys and Assessment, August 2022).

Given the information obtained via BIOS 6, identifying four previous sightings of CSO on the Brunswick Site, Table 4.4-6 in the DEIR has been updated in Section 4.4 of the FEIR to include California spotted owl by name, and to indicate that the potential for CSO nesting onsite is Moderate, while potential for presence of transitory CSO onsite is High (please see Response to Comment Grp 31-10 and Chapter 3 of this Final EIR, Revisions to the Draft EIR Text). Although CSO was seen on-site most recently in 2018, it was a single male bird, not a nest or breeding pair; thus, it would not be protected by the Fish & Game Code's prohibition of disturbing eggs or nests. A nest has not been seen on-site since 2011. Further, the two protocol surveys conducted in 2022 did not identify any CSO on-site.

Although no new impact has been identified, Mitigation Measure 4.4-2(g) has been amended as shown below. In addition, for clarification purposes, Mitigation Measure 4.4-2(g) is hereby revised in this Final EIR to include, by name, the above-discussed riparian bird species:

~~Non-Special Status Raptors and Migratory~~ Nesting Birds

4.4-2(g) *Pre-construction Survey and Avoidance and Minimization Measures. Prior to initiation of ground-disturbing activities for any phase of project construction, if construction is expected to occur during the raptor nesting season (February 1 to August 31), a qualified biologist shall conduct a preconstruction survey prior to vegetation removal, including one daytime survey and one nighttime survey targeted at California spotted owl, consistent with the USFWS (1992) California spotted owl survey protocol. The pre-construction survey shall be conducted within 7 days prior to commencement of ground-disturbing activities. The survey shall be conducted within all areas of proposed disturbance and all accessible areas within 250 feet of proposed disturbance. If the pre-construction survey does not show evidence of active nests, a letter report documenting the results of the survey shall be provided to the Nevada County Planning Department, and additional measures are not required. If construction does not commence within 7 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey shall be required. Removal of any trees within the Brunswick Area would occur between September 1st and January 31st to ensure that no nesting birds, raptors, or owls would be impacted by the proposed IMM project.*

If any active nests are located within the proposed disturbance area, including active nests within riparian habitat for the yellow-breasted chat, willow flycatcher, yellow warbler, and olive-sided flycatcher, an appropriate buffer zone shall be established around the nests, as determined by the project biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 500 feet for raptor nests. If active nests are found within the disturbance footprint, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. Guidance from CDFW shall be required if establishing the typical buffer zone is impractical and/or the willow flycatcher, a State listed species, is documented nesting during the pre-construction surveys for nesting birds. Additionally, an ITP could be required by CDFW if complete avoidance of willow flycatcher is

> *not feasible. If construction activities cause the nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the young have fledged or as otherwise determined by a qualified biologist.*

Per CDFW, an analysis of project level impacts to Species of Special Concern typically includes analysis of "population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features." Population-level and regional effects to CSO are not expected, given that CSO prefer older, closed canopy forests and forages for prey that require woody debris and understory vegetation for cover, and the Project site does not include this optimal type of CSO habitat. Further, the 18.7 acres of trees being removed from the Brunswick Site are a very small proportion of the range of a single CSO, which can range from 946 to 1,520 acres in the Tahoe National Forest (see Roberts 2017), and an even smaller percentage of the overall range of CSO species along the western slope of the Sierra Nevada, in the southern Coast Ranges from Monterey County to Santa Barbara County, and in the Traverse and Peninsular Ranges from southern California to Baja California. Moreover, while 18.7 acres of trees will be removed from the Brunswick Area, the impacts to overall habitat features are considered minimal, given that the Project sites do not include optimal CSO habitat, and the provided mitigation measure will ensure protection for any nesting pairs. The Centennial Site has younger trees than the Brunswick Site and does not contain suitable habitat for CSO. As such, given the negative results from recent surveys and the time that has passed since a prior nest sighting in 2011, the DEIR's conclusion that a less than significant impact to raptors and nesting birds (including CSO) would occur with implementation of mitigation remains appropriate.

Timing of Bird Surveys

Some commenters asserted that wildlife surveys were not conducted at the appropriate time of year, and not in conformance with CDFG or USFWS protocols. However, protocol-level surveys are not required for CEQA analysis. Moreover, many surveys were conducted during the appropriate time of year, as set forth in relevant survey protocols, to detect presence of the relevant wildlife species. As an example, the 2003 CDFW protocol for willow flycatcher calls for a survey during the period of June 15 to June 25, and a second survey either between June 1 and June 14, or between June 26 and July 15. Reconnaissance surveys were conducted at both sites on July 14th, which is within one of the protocol survey windows, even though protocol level surveys are not required. Moreover, Mitigation Measure 4.4-2(g) requires pre-construction surveys for willow flycatcher, which will ensure that impacts to willow flycatcher nests are avoided.

While the reconnaissance level surveys conducted on July 10th and 14th 2019 for the Centennial Site and July 14th and 16th for the Brunswick Site may not fall within the survey protocol recommended windows for all species, protocol-level surveys are not required for CEQA analysis. Rather, the survey results along with review of CNDDB records and appropriate mitigation measures including pre-construction surveys was relied on to appropriately reach the conclusion that impacts to wildlife species is less than significant after mitigation. As protocol-level surveys are not required, and the DEIR requires pre-construction surveys, the selected survey dates are appropriate for purposes of CEQA analysis.

Conclusion

This master response confirms that the DEIR identifies the Project could result in a significant impact to nesting raptors and other migratory bird species, and thus, includes Mitigation Measure

4.4-2(g) requiring a pre-construction survey for nesting raptors and migratory bird species prior to surface disturbance and avoidance and minimization measures in the event a species is identified. Thus, no new significant impact has been identified and the mitigation in the DEIR is protective of the bird species identified by the commenters as being missed in the DEIR. Nevertheless, for clarity, Mitigation Measure 4.4-2(g) has been revised to reference the species identified by the commenters, including yellow-breasted chat, willow flycatcher, yellow warbler, and olive-sided flycatcher and California spotted owl, and provide additional details regarding survey methodology.

Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog

Comments

Several commenters asserted that the DEIR incorrectly concluded that foothill yellow-legged frog and California red-legged frog have a very low potential to occur within the Centennial and Brunswick Sites (i.e., Project site). Many commenters also claimed that the visual encounter surveys performed for foothill yellow-legged frog was not conducted during the optimal time of year.

Discussion

As explained in Master Response 30 (Biological Study Technical Adequacy), significant technical study was undertaken of the Project site, including review of site conditions for special-status amphibians. As part of the Biological Resources Assessment (BRA), the site was surveyed and analyzed for potential California Red-Legged Frog (CRLF) and Foothill Yellow-Legged Frog (FYLF) habitat. The BRA did not identify FYLF or CRLF on-site and found that only marginal habitat existed for these species on the Project site. This analysis, and its conclusions, were peer reviewed by the County's biological consultant and summarized in DEIR section 4.4.2 and Impact 4.4-2.

DEIR section 4.4.2 and Impact 4.4-2 explain that neither CRLF or FYLF have been previously identified within the Wolf Creek watersheds and the likelihood of either of these species being present within the project areas was considered very low (see DEIR Table 4.4-6).

Regarding the CRLF, no Designated Critical Habitat (DCH) has been mapped for CRLF on the project site and the species has not been identified within 5 miles of the project site. CRLF require suitable breeding locations be located within 1.25 miles of each other and connected by barrier-free dispersal habitat that is at least 300 feet in width (USFWS Region 1 CRLF Recovery Plan dated May 28, 2002). It is unknown whether suitable breeding locations are located within 1.25 miles of the project site; however, the areas surrounding the project site contain busy roads, industrial, commercial, and residential development, and the ponds within the project site do not connect with barrier-free dispersal habitat that is a minimum of 300 feet wide. Additionally, given that CRLF have not been identified in the Grass Valley USGS Quadrangle, the watershed associated with the project area, or within 5 miles of the Brunswick Site, the potential for this species to occur is considered very low.

Despite the very low likelihood CRLF may be present on-site, the DEIR conservatively concluded a potential impact could occur and required preconstruction surveys for CRLF. With the implementation of this mitigation measure, the CRLF would be avoided and fully mitigated. Furthermore, given the impacts to Clean Water Act regulated "waters of the U.S.," including wetlands, a Section 7 consultation with the USFWS will be required. The pre-construction surveys and monitoring outlined within the DEIR for CRLF are comprehensive and provide measures to



further minimize potential impacts to CRLF. In addition, the pre-construction survey and monitoring methodologies would follow the recommendations made by the USFWS as part of any Section 7 consultation process for this species.

There are several occurrences of FYLF within 5 miles of the project site. The nearest occurrence of FYLF is located along Deer Creek, approximately 3 miles north of the Centennial Site. The occurrence consists of a single FYLF observed in Deer Creek in 1903 and the species is considered extirpated from Deer Creek (CNDDB 2022). The nearest FYLF occurrence to the Brunswick Site is located approximately 3 miles to the east/southeast in Greenhorn Creek. This occurrence is considered extant.

Visual Encounter Surveys (VES) for FYLF were conducted August 29, 2019 within South Fork Wolf Creek. The FYLF VES surveys were conducted during the periods identified by CDFW as the most accurate for detecting species presence, per the CDFW Considerations for Conserving the FYLF document (dated May 14, 2018). As stated within the CDFW document, "current scientific literature suggests surveys for presence will be most accurate if conducted during and immediately following the breeding season (spring-summer)" and they recommended VES methods to be employed to determine an accurate survey result for the species. In addition, following release of the DEIR, additional FYLF VES surveys were conducted on June 8th and June 15th 2022 (see Appendix J to this Final EIR for a survey memo). The June 2022 VES surveys did not identify FYLF and confirmed marginal suitable habitat as explained in the DEIR and summarized below. The additional FYLF VES surveys conducted in June 2022 included surveys within three survey stretches similar to the survey locations conducted in August 2019 for FYLF; however, the June 2022 FYLF surveys included the entire stretch of South Fork Wolf Creek within the Bennett Street Grasslands and where 2 of the 3 electrofishing locations surveyed by CDFW on March 8, 2022 are located.

In its comment letter (see Agency Letter 3 of this Final EIR), CDFW suggested additional surveys under the CDFW Considerations for Conserving the FYLF document, but acknowledged that no approved survey protocols exist for FYLF. CDFW noted that surveys in the late summer are often the easiest method to determine presence, and that to increase likelihood of detection, surveys should include one VES in April-June. The applicant already conducted a survey in June and then one in August, so the applicant has already complied with most of what CDFW is suggesting – even though what it is suggesting is not mandatory. The surveys conducted are sufficient to detect presence for CEQA purposes, and protocol level surveys (such as the suggested survey schedule in the CDFW Considerations for Conserving the FYLF) are not required for CEQA. Moreover, Mitigation Measure 4.4-2(a) requires pre-construction surveys that would detect species presence prior to disturbance, to ensure avoidance of impacts to this species.

The CDFW electrofishing surveys identified two non-native fish species (brown trout and bluegill) and no additional fish or amphibian species during the survey. CDFW concluded that the two survey locations furthest away from the Brunswick Site had the greatest densities of fish with better health conditions than the survey location located closest to the Brunswick Site.

As summarized in DEIR Impact 4.4-2 and Appendix F, FYLF was not identified within South Fork Wolf Creek from the outlet of South Fork Wolf Creek within the Brunswick project area during the summer 2019 VES surveys conducted. As discussed above, the species has not been previously identified within the Wolf Creek watershed and was not identified within South Fork Wolf Creek during FYLF VES surveys implemented in August 2020 and June 2022. These surveys were conducted by two qualified biologists with extensive experience conducting amphibian and FYLF VES surveys. In addition, the area near the project site only includes marginal suitable habitat for

the species downstream towards the City of Grass Valley within a small area of the Empire Mine State Historic Park and, as a result, the species has a very low likelihood of being present within South Fork Wolf Creek or the Wolf Creek watershed, given the lack of suitable habitat for the species, except for a very small stretch of the creek between the Brunswick Site and the City of Grass Valley. Suitable habitat is lacking due to the high levels of current and historical disturbance within South Fork Wolf Creek within and downstream of the Brunswick Site. Despite this low likelihood of potential occurrence, the DEIR concluded a significant impact to FYLF habitat may occur and provided Mitigation Measure 4.4-2(a) requiring pre-construction VES surveys (following the CDFW 2018 Considerations for Conserving the FYLF) prior to any proposed disturbance and changes in discharges within South Fork Wolf Creek. Implementation of this mitigation measure reduces the potential impact to a less than significant level, if FYLF were to be documented within South Fork Wolf Creek during the implementation of the pre-construction VES surveys for FYLF.

Conclusion

Based on extensive scientific investigation (e.g., literature review, site surveys), the DEIR appropriately concluded that there is a very low likelihood for CRLF and FYLF to occur on the Centennial and Brunswick Sites. Nevertheless, out of an abundance of caution, the DEIR conservatively concluded the project could have a significant impact to these species, and thus, included Mitigation Measures 4.4-2(a) (FYLF) and 4.4-2(c) (CRLF) setting forth avoidance and minimization measures to ensure protection of the species.

References

USFWS. 2002. Recovery Plan for the Red-legged Frog (*Rana aurora draytonii*). Region 1 Portland, Oregon. May 28, 2002.

2.3 RESPONSES TO COMMENTS

Each comment letter received has been numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. As noted above, for efficiency and clarity, the comment letters have been organized into 10 distinct categories: Agency Letters; Group Letters; Form Letter A; Form Letter B; Form Letter C; Form Letter D; Support Cards; Individual Letters; Late Letters; and DEIR Meeting. Therefore, the letter number will correspond to the category (i.e., the first agency letter would be numbered Agency Letter 1), and the first comment in Agency Letter 1 would have the following format: Agcy 1-1. For further example and clarification, the first comment in Group Letter 1 would be numbered Grp 1-1; the first comment in Form Letter A 1 would be A 1-1; the first comment in Form Letter B 1 would be B 1-1; the first comment in Form Letter C 1 would be C 1-1; the first comment in Form Letter D would be D 1-1; the first comment in Support Card 1 would be Sup 1-1; the first comment in Individual Letter 1 would be Ind 1-1; the first comment in Late Letter 1 would be Lt 1-1; and the first comment in the DEIR Meeting transcript would be Meet-1. The response to each comment references the comment number.

Similar to the Master Responses above, the responses to the comment letters amplify or clarify information provided in the DEIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Where revisions to the DEIR text are required in response to the comments, such revisions are noted in the response to the comment, and are also listed in Chapter 3 of this Final EIR. All new text is shown as <u>double underlined</u> and deleted text is shown as ~~struck through~~.

As stated above, the changes to the analysis contained in the DEIR represent only minor clarifications/amplifications and do not constitute significant new information. In accordance with

CEQA Guidelines, Section 15088.5, recirculation of the DEIR is not required, as discussed in detail in Chapter 1 of this Final EIR.

Agency Letter 1

State of California • Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
P.O. Box 942896 • Sacramento, CA 94296-0001

Gavin Newsom, *Governor*
Armando Quintero, *Director*

March 30, 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue
Nevada City, CA 95959-8617
matt.kelley@co.nevada.ca.us

Subject: Draft Environmental Impact Report for the Idaho-Maryland Mine Project, State Clearinghouse # 2020070378

Dear Mr. Kelley,

The California Department of Parks and Recreation, or California State Parks (CSP), as it is familiarly called, welcomes the opportunity to comment on the Draft Environmental Impact Report, State Clearinghouse #2020070378 for the proposed Idaho-Maryland Mine Project. CDPR is a State Agency as defined by the California Environmental Quality Act (CEQA) § 21082.1, and a Trustee Agency as used by CEQA, its Guidelines, and as defined by CCR § 15386 for the resources affected by this project within a unit of the State Park System.

The mission statement and the Department Operations Manual directs CDPR to: preserve and protect biodiversity and fully functioning natural ecosystems; provide for the health and safety of the public (park visitors, park employees, and park residents); create and maintain outdoor recreation opportunities for residents and visitors of California; and protect cultural resources (http://www.parks.ca.gov/?page_id=91). The following comments reflect the internal policies and directives of CDPR as they relate to the Draft Environmental Impact Report for the Idaho-Maryland Mine Project (the Project).

Agcy 1-1

CDPR owns and operates Empire Mine State Historic Park (the Park) in Grass Valley, CA. The Park hosts over 100,000 visitors annually, of which at least 50,000 use the vast trail system. Empire Mine SHP is located nearby to both the Brunswick and the Centennial Project sites of the Idaho Maryland Mine. The northwest boundary of the Union Hill area of the Park is just 450 feet to the southwest of the Brunswick facility project boundary, and the Upper Union Hill Trail Loop is located 850 feet away. The main processing areas at Brunswick are less than 0.5 miles away from a large area of Union Hill, including trails and valuable wildlife habitat.

The Park contains the "Bennett Street Grasslands," which are located along East Bennett Road, a 33-acre assemblage of dense riparian areas, wetlands, and unique, low elevation wet and dry grassland communities. The Bennett Street Grasslands contain a 0.45-mile stretch of South Fork Wolf Creek. The Bennett Street Grasslands provide important breeding, wintering, and fall migration habitat for birds. Over 80 species have been detected at the site; this includes the banding and capture of the Willow Flycatcher, *Empidonax traillii* (California State Endangered Species), the yellow breasted chat, *Icteria virens* (California Bird Species of Special Concern), and detections of Olive-sided Flycatcher, *Contopus cooperi* (California State Bird Species of Special Concern) as well as, Yellow Warbler, *Setophaga petechia* (California State Bird Species of Special Concern), from 2019-2021.

The Bennett Street Grasslands and the South Fork Wolf Creek are also the site of a recently completed six-year mitigation project, the "Magenta Drain Mitigation" project which was a required mitigation from **Section A.8 of Streambed Alteration Agreement and Major Amendment No. 1600-2011-0009-R2**. The mitigation restored both wetland and riparian habitats along the South Fork Wolf Creek and included several local school groups planting native riparian vegetation along the banks of the creek.

The Bennett Street Grasslands hosts annual field trips for local 4th and 5th grade students. These students participate in active resource restoration and with the volunteer bird banding and inventory project taking place along the South Fork Wolf Creek. One such field trip was captured in the video "Bird Banding at Empire Mine State Historic Park" and featured in the 2019 Wild and Scenic Film Festival: https://youtu.be/3kJ68T92Flw. Bird banding is handled by Allison Nelson and Gold Country Avian Studies under a 7-acre conservation easement with the Bear Yuba Land Trust that is held at the Grasslands.

The Park also contains an additional portion of the South Fork Wolf Creek that is both upstream of the Bennett Street Grasslands, and downstream of the Brunswick facility, albeit much closer, familiarly called the "Upstream Reach". The "Upstream Reach" is 0.4 miles (2200 feet) downstream of Brunswick facility on South Fork Wolf Creek, 1470 feet south of the Centennial site, and holds 13 acres of valuable riparian habitat. CSP requests that it be noted that an undisturbed, historic "sulphurette works" currently located at this site.

General Comments:

Agcy 1-2

CSP has several significant concerns regarding the Draft Environmental Impact Report (DEIR), it's impacts, mitigations, and the Project as proposed within, as currently stated. Water quantity and quality, air quality, noise and vibration, hazardous materials, and wildfire dangers are all crucial issues for CSP, and we find the DEIR to be inadequate in mitigations, and several sections are unclear as to what the potential impacts may be. Cumulatively and individually, these potentially significant issues could negatively affect the natural resources, recreational values, health and safety of Park visitors and employees, and the general well-being of Empire Mine State Historic Park (SHP).

Water / Dewatering / Downstream Impacts

Agcy 1-3

Specifically, CSP believes the Project as well as it's impacts and mitigations fail to adequately protect the South Fork Wolf Creek, it's riparian ecosystem, and it's "Beneficial Uses." The proposal to add up to 5.6 cubic feet per second (cfs) of water from mine de-watering actions to this small fragile stream and associated riparian areas for the next 80 years, is of major concern. The South Fork Wolf Creek flows downstream from the Project through two stretches, totaling 0.64 linear miles owned by Empire Mine State Historic Park, one of which is only 0.4 miles (2200 feet) downstream of the Brunswick facility.

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CA Water Code § 13050 section (f) states: "'**Beneficial uses**' of the waters of the state that may be protected against quality degradation include … preservation and enhancement of fish, wildlife, and other aquatic resources or preserves". The Central Valley Regional Water Quality Control Board have established in their 2018, Sacramento and San Juaquin Basin Plan that "**Fish, plants, and other wildlife, as well as humans, use water beneficially"** (page 2-1, Beneficial Uses, California Regional Water Quality Control Board, Central Valley Region, (RWQCB), 2018), and that existing "Beneficial Uses" of the Bear River Watershed which includes South Fork Wolf Creek are "Wildlife Habitat" and "Cold and Warm Freshwater Habitat" (page 2-10, RWQCB).

CDPR believes the project proposal and DEIR conflict with Nevada County General Plan, Volume 1 Goals, Objectives, Policies, & Implementation Measures, Chapter 17: Mineral Management Element, Policy 17.11: "Recognize the importance of water conservation and quality for the present and future needs of the County by: 3. Requiring that any increase or decrease of off-site discharge **is not detrimental to the downstream environment or downstream water users**." The increase in off-site water discharge from the Project to South Fork Wolf Creek could be extremely detrimental to the downstream environment and water users, of which include wildlife and riparian trees.

Specifically, the proposal to add 1.9-5.6 cfs from the Project to the South Fork Wolf Creek threatens to drastically alter the immediate riparian ecosystem with unpredictable and fluctuating water levels at any season. This could lead to changes in existing riparian tree health, unknown alterations of adjacent plant communities (including recent native tree and shrub plantings), a decrease in benthic macroinvertebrate populations, erosion and degradation of bank stability, chances of increased heavy metals, increases in turbidity, and degradation of aquatic wildlife habitat, especially for amphibians.

Air Quality and Noise / Vibration Impacts

Agcy 1-4

While the DEIR has focused air quality, noise, and vibration impacts on surrounding residential areas, it has failed to mention the close proximity of Empire Mine SHP, and the potential hazards for its Park trail users and employees. The Park, the natural resources contained within and its recreational users, have been neglected to be considered a "**Sensitive Receptor**" regarding Air Quality and Noise impacts. The definition of *Sensitive Receptors* in *Chapter 4.3 – Air Quality, Greenhouse Gas Emissions, and Energy, Page 4.3* neglects to include "parks and playgrounds," thereby failing to assess potential impacts to recreational users of the Park from air quality impacts. The popular Union Hill Trail Loop is just 850 feet away from the Brunswick facility and the Bennett Street Grasslands is only 900 feet south of the Centennial facility. The entire DEIR also fails to discuss how close Sensitive receptors should be to warrant analysis. Guidance from other reputable CEQA documents and air quality districts find a distance of at least 1000 feet or more when finding and analyzing Sensitive receptors.

An example of a more applicable "**Sensitive Receptors**" definition is from: *Hidden Falls Regional Park Trail Expansion Subsequent DEIR, Chapter 9, Air Quality (2020), Page 9-12*, https://www.placerair.org/DocumentCenter/View/42743/Chapter-9---Air-Quality-PDF):

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"9.2.4 SENSITIVE RECEPTORS Some land uses are considered more sensitive to air pollution than others, because of the types of population groups or activities involved. Children, pregnant women, the elderly, those with existing health conditions, and athletes or others who engage in frequent exercise are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered **sensitive receptors** include schools, daycare centers, **parks** and playgrounds, and medical facilities. Residential areas are considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to the pollutants present. **Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation."**

Agcy 1-5

Empire Mine SHP is mentioned twenty times in the complete DEIR, but with only one reference to the close proximity of the Park to the Project in *Chapter 4.11 – Public Services and Utilities*. *Chapter 4.4 – Biological Resources* mentions Empire Mine SHP only four times: Three occurrences stem from documentation of the Foothill Yellow Legged Frog survey under the *Reconnaissance Level Biological Resources Field Surveys* section when contract biologist Greg Matuzak surveyed an unknown section of South Fork Wolf Creek on Park property one time on August 29, 2019 (without Park knowledge or a valid State Scientific Collection Permit). Empire Mine SHP is not mentioned at any point during discussions of hydrological impacts due to mine de-watering even though CSP owns a large section of the free-flowing stretch of South Fork Wolf Creek downstream of the Project. The Park location and boundaries are also lacking from all maps within the DEIR, aside from *Figure 4.8-9, South Fork Wolf Creek Reaches in Project Vicinity*, which shows an older incorrect boundary of Empire Mine SHP from a USGS topo map. CSP sent in a comment letter for the Notice of Preparation for this DEIR and it is surprising and unfortunate that very few of our concerns were addressed.

Since discussions of the proximity of the Park to the Project are virtually non-existent in the DEIR, CSP would like to encourage remedying this mistake. Environmental review by Nevada County, State Agencies and the local community are entitled to know that Empire Mine SHP is a neighbor to this potential project and that any potential impacts would affect this important community resource. All relevant maps and documents need to discuss and display the close proximity of the Park with ownership by a State Agency focused on resource protection and outdoor recreation. These sections would include:

- 3.2 Project Location
- 3.5 Project Setting and Surrounding Land Uses
- 4.3 Air Quality and Greenhouse Gas Emissions
- 4.4 Biological Resources
- 4.7 Hazards and Hazardous Materials
- 4.8 Hydrology and Water Quality
- 4.10 Noise and Vibration
- 4.13 Wildfire

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Several maps are attached to these comments displaying location of Empire Mine SHP to both Project sites and relevant distances. Park boundaries can also be found on Page 8 of the Empire Mine State Historic Park brochure available here: https://www.parks.ca.gov/pages/499/files/EmpireMineSHPWebLayout2016.pdf

The health and safety of Park visitors and employees, the Park visitor experience, and the preservation of natural and cultural resources are of the utmost importance to California State Parks. The Project as proposed could have significant impacts on those resources and values.

If any of our comments need clarification, please do not hesitate to contact Parks Environmental Scientist Daniel Lubin at dan.lubin@parks.ca.gov or at (530) 272-0298.

Sincerely,

Daniel Lubin, Environmental Scientist
Sierra District of California State Parks

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Comments:

The following sections and bullet points detail CSP points of concerns with project components, impacts and mitigations from the Idaho-Maryland Mine Project Draft EIR Volume I (Draft EIR Chapters 1-8), and may include references to the Appendices:

Chapter 4.3 – Air Quality, Greenhouse Gas Emissions, and Energy

Agcy 1-6

- *Sensitive Receptors, Page 4.3-11*

  The definition of "Sensitive Receptors" has omitted the important category of "Parks and Playgrounds" in this paragraph and in numerous following sub-sections, and in *Appendix E.1, Health Risk Assessment*. CSP requests that "Parks and Playgrounds" be added to this definition as a "Sensitive Receptor," especially considering the numerous air pollutants theorized to be generated by the Project, the proximity of Empire Mine State Historic Park, and the guidance found in many relevant CEQA documents. The *San Joaquin Valley Unified Air Pollution Control District Final Draft Guidance for Assessing and Mitigating Air Quality Impacts February 19, 2015* (page 10) (https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF) states:

  "Sensitive Receptors: People that have an increased sensitivity to air pollution or environmental contaminants. **Sensitive receptor locations include** schools, **parks** and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). **The location of sensitive receptors is needed to assess toxic impacts on public health**."

  The *CEQA Air Quality Handbook A GUIDE FOR ASSESSING THE AIR QUALITY IMPACTS FOR PROJECTS SUBJECT TO CEQA REVIEW (San Luis Obispo County Air Pollution Control District, April 2012, Page iv)* (https://www.prcity.com/DocumentCenter/View/14604/CEQA-Air-Quality-Handbook---2012-Volume-1-PDF) states:

  "Sensitive Receptors: Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants. **Sensitive receptor locations** include schools, **parks** and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). **The location of sensitive receptors is needed to assess toxic impacts on public health**."
  Hidden Falls Regional Park Trail Expansion Subsequent DEIR, Chapter 9, Air Quality (2020) states:

  "Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation."

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CSP agrees with Placer County's analysis about recognizing the importance of insuring protection for recreational trail users and park employees from air quality impacts. Empire Mine State Historic Park's boundary is 450 away from the Project's Brunswick facility's boundary, with many popular trails within 1000 feet.

- *Health Risk Assessment*
  - On *Page 4.3-61*: "The TAC emissions associated with blasting and crushing, ore processing, and earthwork and material handling would include asbestos and silica emitted from the fugitive dust produced."
    - CSP appreciates knowing this information as this is of utmost concern for the health of the Park. Silica is mentioned 10 times within the DEIR, with many references to negative health consequences when inhaled. CSP can find no mention of threshold values for silica inhalation or estimated emissions within the DEIR. In *Appendix E.1 Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project Nevada County, California*, silica emissions were found on *page 25* in *Table 10. Project Annual On-Site Operational TAC Emissions* which listed silica emissions of 4.32-4.42 tons per year for the operational phases of *Year 2022 to 2026 – Mining, Brunswick Industrial Site Operations, Fill Placement at Centennial Industrial Site* and *Year 2027 to 2032 – Mining, Brunswick Industrial Site Operations, Fill Placement at Brunswick Industrial Site*. Considering the amount of silica potentially emitted from the Project there is no reference of the threshold values that the California Office of Environmental Health Hazard Assessment (OEHHA) have established in the Adoption of Chronic Reference Exposure Levels for Silica (Crystalline, Respirable) *Feb 10, 2005*. CSP requests a transparent evaluation of how 4.32-4.42 tons per year of silica emissions from operational phases of the Project would correspond to the Inhalation Reference Exposure Level of 3 µg/m3 that OEHHA have established in the Adopted Chronic Reference Exposure Levels for Silica (Crystalline, Respirable), and in particular reference to the Park's users and employees as a *sensitive receptor*. Without this information CSP has found it impossible to evaluate this potential health impact.

Agcy 1-7

  - On *Page 4.3-62*: "Blasting and crushing would also result in emissions of heavy metal TACs including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium."
    - CSP appreciates knowing this information as this is of utmost concern for the health of the Park, employees, residents, and its visitors. CSP can find no relevant information on exact threshold values for each of the above state heavy metals and has found it impossible therefore to evaluate this potential impact to the Park's

Agcy 1-8

  - On *Page 4.3-62*: "However, it should be noted that mine operations would be required to comply with MSHA PELs that protect underground workers from asbestos fiber. The protections sufficient to meet the MSHA PELs would result in

Agcy 1-9

7

limiting the potential emissions of asbestos aboveground from the shaft in general."

- CSP believes this statement relies on a false pretense that following Mine Safety and Health Administration permissible exposure limits (PEL) for asbestos for individual mine workers during a shift will also "limit" asbestos emissions aboveground "in general." How are the PELs being achieved for mine workers and how does this relate to limiting asbestos being released into the aboveground environment? Asbestos pollution is of extreme concern for CSP, and we would like clarification on the above assumption.

Agcy 1-10

- On *Page 4.3-62*: "A dispersion modeling analysis was conducted for the HRA of DPM emitted from diesel vehicles and off-road equipment, blasting emissions, and TACs from fugitive dust sources on the project sites. A full list of emission sources and the parameters used to model each source may be found in the HRA included within Appendix E.1 to this EIR."
  - CSP has reviewed Appendix E.1 and the Health Risk Assessment included within and cannot find a discussion, map or table disclosing the locations(s) of where the actual dispersion of air pollutants would be transported to and from the Project sites, besides a "Wind Rose" graph from the Blue Canyon meteorological station. CSP requests a detailed map displaying modelled air pollutant levels at nearby "Sensitive Receptors" and for the region in general. CSP cannot effectively interpret the air quality impact data as is currently presented to evaluate risks for Empire Mine SHP resources, personnel, and recreational users.

Agcy 1-11

- On *Page 4.3-62*: "Discrete cartesian receptors were placed at residents proximate to the project sites. A uniform Cartesian grid of 4,426 by 3,299 meters was centered over the project sites to capture the maximum point of impact and extent of the plume isopleth."
  - CSP cannot find a detailed discussion, map, or table of this "grid". CSP requests to know where the "maximum point of impact and extent of the plume isopleth" is located. CSP cannot effectively evaluate impacts to the Park, employees, residents, and recreational users without knowing this important crucial data.

Agcy 1-12

- *On Page 4.3-65: Applicant Proposed Emissions Reduction Measures*
  - APM-AQ-2: Surface Fugitive Dust Controls
    - "The following measures shall be implemented to reduce surface fugitive dust emissions: During construction, operation, and reclamation, all exposed soil surfaces (e.g., unpaved disturbed areas, unpaved parking areas, and unpaved staging areas, and soil piles) shall be adequately wetted to ensure that no visible dust crosses the property boundary, except when rains are occurring. As an alternative to watering, inactive soil piles shall be covered to minimize wind erosion. During construction, all on-site roadways shall be paved as soon as possible after grading and

any unpaved gravel roads shall be treated with chemical stabilizers in order to control fugitive dust."

- CSP has found no details on what the "chemical stabilizers" are within the DEIR. There are exactly four mentions of the chemical stabilizers within the entire DEIR, and no analysis of potential hazards associated with their potential release into the environment. CSP believes all "chemicals" associated with the project should be disclosed and evaluated for potential impacts, especially if they could be water soluble and find an entryway to South Fork Wolf Creek from surface runoff or become airborne.

- *Project-Specific Impacts and Mitigation Measures - 4.3-1 Conflict with or obstruct implementation of the applicable air quality plan. Based on the analysis below and with implementation of mitigation, the impact is less than significant.*

  - *Page 4.3-70*: "Therefore, prior to mitigation, the project would result in potentially significant levels of ROG, NOx, and PM10 emissions and could conflict with or obstruct implementation of the Ozone Attainment Plan pursuant to Criterion 1."
    - CSP recognizes this potential for air quality impacts and is very concerned about this issue in regard to the health and welfare of the Park, its employees, residents, and visitors. CSP is in full support of the Ozone Attainment Plan to insure the region's future health.

Agcy 1-13

  - *Page 4.3-73*: "Conclusion - Based on the analysis presented above, the proposed project would comply with Criterion 2. However, as presented in Table 4.3-17, emissions of ROG, NOx, and PM10 would be potentially significant (Level A or B) during construction, operations, and reclamation, and mitigation would be required in order for the project to comply with Criterion 1. Because the project would not comply with Criterion 1 without mitigation, implementation of the project could conflict with the Ozone Attainment Plan, and implementation of the project could create a conflict with or obstruct implementation of the applicable air quality plan related to the region's nonattainment status for ozone and PM10, resulting in a significant impact prior to implementation of mitigation."
    - CSP recognizes this potential for air quality impacts and is very concerned about ozone and PM10 pollution in regard to the health and welfare of the Park. CSP is in full support of the Ozone Attainment Plan to insure the region's future health.

  - *Page 4.3-73*: "Mitigation Measure(s) The emission data presented in Table 4.3-17 (i.e., unmitigated emissions) reflect the reductions that would occur with implementation of APM-AQ-1 and APM-AQ-2. Table 4.3-19 shows the estimated maximum daily mitigated emissions associated with construction, operation, and reclamation of the project, accounting for additional emissions reductions associated with Mitigation Measure 4.3-1(b), which would result in a reduction in construction contractors' equipment exhaust criteria air pollutants during project construction (year 2021)."

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- Mitigation Measure 4.3-1(b) *Construction Exhaust Emissions Minimization Plan* is wholly based on the exact duplication of *Applicant Proposed Emissions Reduction Measure APM-AQ-1 Exhaust Emission Controls (page 4.3-65)*. CSP believes that this mitigation must be in error and questions how can the exact duplicate mitigation achieve a reduction in air quality emissions, when "unmitigated emissions" already reflected a reduction in emissions with using *California Air Resources Board (CARB) certified Tier 4 Final engines* with the applicant's own APM-AQ-1 *Exhaust Emission Controls* mitigation? According to the CEQA process, mitigations should be clear in the process of how they will effectively mitigate the impact [*Sundstrom* v. *County of Mendocino* (1988) 202 Cal.App.3d 296]. Since this mitigation is unclear at best how it would achieve any reductions in air quality impacts, CSP believes that Mitigation Measure 4.3-1(b) should be null and void and would thus change the impact to *Significant.*

Agcy 1-15

- CSP believes Project Impact 4.3-1 is still *significant* even after all stated mitigations (even with questioning the duplicate mitigations detailed above), based on Northern Sierra Air Quality Management District (NSAQMD) criteria. CSP believes the project would still conflict with the Ozone Attainment Plan based on NSAQMD criteria even after "implementation of mitigation", by measurements of the applicant's own air quality impact data. The differences in emissions from *Table 4.3-17 Maximum Unmitigated Daily Project Emissions (lbs/day)* to *Table 4.3-19 Maximum Mitigated Daily Project Emissions (lbs/day)* are almost negligible for NOx and PM10, and in some cases have no reduction in emissions at all. NOx unmitigated emissions during *Year 2022 to 2026 – Mining, Brunswick Industrial Site Operations, Fill Placement at Centennial Industrial Site* is listed at 107.49 lbs/day and after mitigation measures is still listed at 107.49 lbs/day, which still qualifies as significant under NSAQMD criteria. PM10 is listed at 54.40 lbs/day for "Unmitigated" and the exact same 54.40 lbs/day for "Mitigated". NOx and PM10 Values for *Year 2027 to 2032 – Mining, Brunswick Industrial Site Operations, Fill Placement at Brunswick Industrial Site* and *Year 2033 to 2102 – Mining, Brunswick Industrial Site Operations, Fill Placement at Off-Site Location* are also the exact same for both figures. Mitigation for NOx and PM10 has not been achieved by any actual reduction in values.

Agcy 1-16

Page 4.3-73: "Additional reductions could not be quantified for Mitigation Measure 4.3-1(a), which are the NSAQMD recommended mitigation measures that are applicable to the project. According to the NSAQMD, implementation of recommended mitigation measures for Level A and B thresholds (included as Mitigation Measure 4.3-1[b] below) would reduce project impacts to a less-than-significant level during all years of project construction, operations, and reclamation."

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- CSP believes the reference to *Mitigation Measure 4.3-1[b]* is in error. The components in *Mitigation 4.3-1[b]* are not listed anywhere within any NSAQMD relevant documents. NSAQMD's recommended mitigations are instead correctly listed as *Mitigation 4.3-1(a)* on *Table 2-1 Summary of Impacts and Mitigation Measures* and on *Page 4.3-77* and can be correctly identified in Guidelines For Assessing And Mitigating Air Quality Impacts Of Land Use Projects, Section I. Mitigations for Use During Design and Construction Phases" (NSAQMD, revised 2009).

Agcy 1-17

- Although the Project would put forth mitigations listed under the NSAQMD's "Guidelines" in *Mitigation 4.3-1(a)* the project is noted to still have air pollutant threshold "Level B" of NO_x *after* mitigations for the following project phases: *Year 2022 to 2026 – Mining, Brunswick Industrial Site Operations, Fill Placement at Centennial Industrial Site Year 2027 to 2032 – Mining, Brunswick Industrial Site Operations, Fill Placement at Brunswick Industrial Site and Year 2033 to 2102 – Mining, Brunswick Industrial Site Operations, Fill Placement at Off-Site Location*. The NSAQMD "Guidelines For Assessing And Mitigating Air Quality Impacts Of Land Use Projects" document clearly states in Step Three: Emission Thresholds of Significance, Page 9 that "*NOx, ROG and PM10 emissions must be mitigated to a level below significant. If emissions for NOx, ROG and PM10 exceeds 136 pounds per day (Level C), then there is a significant impact; below Level C is potentially significant.*" CSP therefore believes emissions are clearly still *potentially significant* even after mitigations.

Agcy 1-18

- *Chapter 4.3 – Air Quality, Greenhouse Gas Emissions, and Energy* and *Appendix E.1 Air Quality and Greenhouse Gas Emissions Analysis Technical Report for the Idaho-Maryland Mine Project Nevada County, California* fails to mention that the NSAQMD also requires that projects follow the mitigations in the "IV. Mitigation for Land Use Emissions" section of the "Guidelines," as this is foremost a "Land Use" project. Unfortunately, regardless of this omission, the applicable mitigations under section IV. from the NSAQMD appear to be based on a "Land Use" residential housing / retail shopping development with the following mitigations listed:
  - *IV. Mitigation for Land Use Emissions for Classification as Level B or Level C Threshold*
    - *a. The project shall incorporate mixed uses, where permitted by local development regulations, to achieve a balance of commercial, employment, retail and housing options where feasible.*
    - *b. Larger projects shall provide for neighborhood parks or other recreational options such as trails to minimize vehicle travel to off-site recreational uses and/or commercial areas.*

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- *c. The project should provide densities of nine units per acre or greater, where allowed by the General Plan and/or Zone Plan, along bus routes and at bus stops to encourage transit use, where feasible.*

CSP understands then that these mitigations are clearly not applicable to a Land Use project centered on mining extraction and have no use in this Project for significantly reducing air quality impacts. Fortunately, the NSAQMD does allow for the Lead Agency in CEQA projects to "revise" mitigations and admits that the list of mitigations within the "Guidelines" are not "*all-inclusive*" and are only a "*suggested list*" on Page 10. The "Guidelines" state that "*the District will request that the lead agency review a suggested list of mitigations (below) for both short-term and long-term sources. This list is not all-inclusive, and may be revised by the lead agency. During the CEQA review process, the District recommend (or the applicant may propose) additional, project-specific mitigation measures.*"

Since both *Mitigation Measure 4.3-1(a)* and *4.3-1(b)* have been clearly shown to be inadequate in mitigating air quality impacts, and without other applicable mitigation written guidance from the NSAQMD, CSP requests that Nevada County follow NSAQMD's suggestion to revise the mitigation measures for Air Quality impacts to include more *project-specific mitigations*.

- *Project-Specific Impacts and Mitigation Measures - 4.3-2 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below and with implementation of mitigation, the impact is less than significant.*

Agcy 1-19

As discussed on Page 3 and Pages 5-7 of these comments, CSP has detailed how Empire Mine State Historic Park has been neglected to be evaluated as a *sensitive receptor*. With the Park located 450 feet away from the Brunswick facility boundary and 900 feet south of the Centennial facility, CSP believes that air pollutants of concern from the project would impact Park recreational users and Park employees. CSP cannot effectively evaluate if the Park would be *exposed to substantial pollutant concentrations* of both toxic air contaminants (TACs) and *Criteria Pollutants* NOx and PM10 without a thorough discussion, visual representation, and analysis centered on the Park as a sensitive receptor. CSP therefore requests that *Impact 4.3-2* be changed to *potentially significant* until the DEIR can be shown to prove mitigations would be effective at reducing the impacts to *less than significant* for the Park.

Agcy 1-20

- CSP further believes its concerns about the potential for both TAC's and NOx and PM10 impacting the health of the Park and its users is the DEIR's reliance on inadequate mitigations from Impact 4.3-1 that were detailed on pages 8-11 of these comments. The DEIR makes the following statements on *Page 4.3-81*:

- "Because ROG and NOx emissions associated with project construction, operation, and reclamation would be potentially significant before mitigation, the project could minimally contribute to regional O3 concentrations and the associated health effects."

- "Health effects that result from NOx (including NO2) include respiratory irritation. NOx emissions from project construction, operation, and reclamation would occur at NSAQMD threshold Level B."

- "Construction, operation, and reclamation of the project would result in PM10 emissions at NSAQMD threshold Level A, which would be considered potentially significant before mitigation. As such, the project would potentially contribute to exceedances of the CAAQS for PM10, and would potentially obstruct the MCAB from coming into attainment for this pollutant. The project would be required to comply with NSAQMD Rule 207, Particulate Matter, and would implement APM-AQ-2, Surface Fugitive Dust Controls, which would limit the amount of dust generated during project implementation. By reducing the generation of fugitive dust through compliance with the foregoing NSAQMD rules and APM-AQ-2, emissions of PM10 would be reduced to the maximum extent practicable and receptors would not be exposed to excess pollutant concentrations."

With the DEIR's own admissions above that O3 and NOx emissions can lead to negative health impacts, there is no verifiable data within this section to refute that "receptors would not be exposed to excess pollutant concentrations." NOx emissions are stated to be exactly the same in the Project for all phases after construction even after mitigation, which is *Potentially Significant* according to NSAQMD. Mitigation measure APM-AQ-2 has already been factored in *Table 4.3-17 Maximum Unmitigated Daily Project Emissions (lbs/day)* and has also been found to stay at the same levels for all phases of the Project post construction.

Chapter 4.3 – Chapter 4.4 – Biological Resources

- *4.4-2 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status wildlife species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Based on the analysis below and with implementation of mitigation, the impact is less than significant.*

Agcy 1-21

  - CSP believes that the impact should be changed to *potentially significant* based on the potential that either Foothill Yellow Legged Frog, California Red-Legged Frog, or Willow Flycatcher may occupy downstream habitat within the South Fork Wolf Creek riparian corridor on Empire Mine State Historic Park lands. Downstream habitat at the Park has not been adequately evaluated by the Project's biological consultants. CSP believes that the Project's mine de-watering, subsequent non seasonal

flooding, and contribution to erratic and fluctuating water levels within South Fork Wolf Creek could disrupt potential sensitive or special status wildlife species within the Park.

- CSP has detected an occurrence of *Empidonax traillii*, Willow Flycatcher, (CA state listed "Endangered") within the Bennett Street Grasslands adjacent to the South Fork Wolf Creek in the recent past. CSP believes that the cumulative potential impact of mine dewatering on the riparian corridor, coupled with potential noise and vibration impacts, warrants review for sensitive or special status wildlife in downstream and nearby lands including at the Park.

Agcy 1-22

- *Foothill Yellow Legged Frog - Chapter 4.4 – Biological Resources*
  - *Page 4.4-69* states: "Given the species has not been previously identified within the South Fork Wolf Creek watershed and only marginal suitable habitat occurs within the Brunswick Industrial Site for the species, there is a very low likelihood this species occurs within the South Fork Wolf Creek."
    - CSP disagrees with the assumptions made above that there is a "very low likelihood this species occurs within the South Fork Wolf Creek." Documentation and evaluation of downstream habitat within the South Fork Wolf Creek riparian has been wholly inadequate within the DEIR and is based on one occurrence within the *Reconnaissance Level Biological Resources Field Surveys* section on *Page 4.4-53* when contract biologist Greg Matuzak surveyed an unknown section of South Fork Wolf Creek on Park property on August 29, 2019.

Agcy 1-23

  - *Page 4.4-70* states: "Therefore, based on the conclusion of Balance, potential downstream impacts to the stream channel and associated riparian zone along both sides of South Fork Wolf Creek from the additional discharge of 5.6 cfs would be minimal on sensitive biological resources, such as foothill yellow-legged frog, and do not represent a potential significant impact to the stream channel or associated riparian zone within South Fork Wolf Creek."
    - CSP disagrees that additional discharge of 5.6 cfs would be minimal on sensitive biological resources. The DEIR does not contain adequate analysis concerning the nature of the Project's mine de-watering proposal, specifically relating to erratic and fluctuating water inputs that have been detailed on *Page 70, 4.0 Project Effects* in *Appendix K.2 Groundwater Hydrology And Water Quality Analysis Report For The Idaho-Maryland Mine Project -Nevada County, California* and in *Chapter 4.8 – Hydrology and Water Quality Page 4.8-45*:
      - "Initial dewatering of the Idaho-Maryland Mine will occur at a rate of 2,500 gpm, or 5.6 cfs. If this rate of dewatering is achieved it would take approximately 160 days (5.3 months) to dewater the underground

Agcy 1-24

workings, assuming an average groundwater inflow rate into the existing mine workings of 850 gpm and total water currently in the mine workings of 385 million gallons. After that time, the dewatering will continue at a rate equal to the groundwater inflow into the mine, ranging from approximately 500 gpm to 1200 gpm seasonally and averaging approximately 850 gpm or about 1.9 cfs. The maximum discharge rate permitted will be 2,500 gpm, which will allow flexibility for unexpected seasonal inflows, operational issues, and increased groundwater inflows from the expansion of the mine during operations."

- CSP is extremely concerned with this project detail that would allow maintenance dewatering to occur up to 5.6 cfs at any time during the life of the Project. Water levels within South Fork Wolf Creek could theoretically change above baseline conditions from less than 1.9 cfs to 5.6 cfs depending on mine operations. Fluctuating water levels especially during the summer months when creeks normally return to a slower flow could have potential to disrupt many forms of life dependent on the normal ebbs and flows of riparian water levels. CSP has no mechanism to evaluate the impacts from erratic and fluctuating water levels during the summer breeding months, and unfortunately the DEIR does not attempt too either.

Agcy 1-25

- Considering the above-mentioned project proposal and comments, CSP is especially concerned with how proposed fluctuating water levels within South Fork Wolf Creek would impact potentially occurring species such as the Foothill Yellow Legged Frog. "California Herps" website states that Foothill Yellow Legged Frogs "mating and egg-laying occurs exclusively in streams and rivers (not in ponds or lakes) from April until early July, after streams have slowed from winter runoff." Amphibians in general rely on a slow, steady water level to insure egg survival.

Agcy 1-26

- *Non-Special Status Birds Protected by Other Laws, Wildlife Disturbance*
  - *Page 4.4-74* states: "Above-ground activities would generate noise during project operations, including placement of engineered fill, shaft ventilation fan, exterior pumps outside the process plant building, water treatment plant pumps and turbine aerator, and Brunswick shaft skipping within the headframe building. However, it is important to remember that most protected species have a low to very low potential to occur on the Centennial Industrial Site and Brunswick Area."
    - CSP requests an evaluation of generated noise impacts on wildlife within the nearby areas of the Park, including the northwest corner of the Union Hill area (450 feet away from Brunswick facility boundary), and the Bennett Street Grasslands (900 feet away from the Centennial site). CSP cannot adequately

evaluate potential noise impacts on sensitive potential wildlife species including detected "California Birds of Special Concern" Yellow Warbler, Yellow Breasted Chat, and Olive-sided Flycatcher from the information within the DEIR.

- *Mitigation Measures*
  - *Foothill Yellow-Legged Frog, 4.4-2(a) Pre-construction Survey and Avoidance and Minimization Measures. Page 4.4-75*
  - *California Red-Legged Frog 4.4-2(c) Pre-construction Survey and Avoidance and Minimization Measures. Page 4.4-77*

Agcy 1-27

- Both the above mitigations require preconstruction surveys on the Project sites within riparian and wetland habitats. Since the DEIR has not adequately evaluated downstream potential for either species of frogs to occur, these mitigations would not adequately protect either species if found within the riparian corridor of South Fork Wolf Creek or within known wetland habitat at the Bennett Street Grasslands that are both held within the Park. CSP has established previously in these comments that fluctuating and erratic water levels from mine dewatering maintenance proposed actions (referenced from *Page 70, 4.0 Project Effects* in *Appendix K.2* and *Chapter 4.8 – Hydrology and Water Quality Page 4.8-45)* could have unknown and potentially negative impacts to amphibian habitat, especially regarding breeding. CSP requests both an evaluation of the South Fork Wolf Creek riparian and wetland habitats within the Park, for both Foothill Yellow Legged and California Red Legged Frogs to be included in the DEIR, and for the Park lands along the South Fork Wolf Creek to be included in *Pre-construction Survey and Avoidance and Minimization Measures 4.4-2(a)* and *(c)*.

- *4.4-3 Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is less than significant*

Agcy 1-28

  - *Page 4.4-87* states: "Conclusion - Based on the above, implementation of the proposed project at the Centennial Industrial Site and Brunswick Industrial Site, and East Bennett ROWs could have a substantial adverse effect on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on State or Federally protected aquatic resources (including, but not limited to, marsh, vernal pool, coastal, etc.), through direct removal, filling, hydrological interruption, or other means. Thus, a *significant* impact could occur."
    - "Mitigation Measure(s) Implementation of the following mitigation measures would reduce the above impact to a level."
      - Although CSP appreciates the mitigations listed to protect the immediate riparian and wetland habitats within the Brunswick and Centennial

properties, CSP disagrees that the Mitigation Measures listed under impact 4.4-3 would reduce the impact of substantial adverse effects on riparian habitats and/or sensitive natural communities to *less-than-significant*. Mitigation measures fail to address and thus adequately protect downstream riparian habitat and sensitive natural communities from "hydrological interruption or other means" due to proposed mine dewatering inputs into the South Fork Wolf Creek which could fluctuate from 1.9-5.6 cfs for the life of the Project (referenced from *Page 70, 4.0 Project Effects* in *Appendix K.2)*.

- CSP has the following California Department of Fish and Wildlife Sensitive Natural Communities known within the Park adjacent to the South Fork Wolf Creek riparian area at either the Bennett Street Grasslands or the "Upstream Reach" (Sensitive Natural Communities from been identified from the California Sensitive Natural Communities list updated August 18, 2021):
  - 41.050.05 *Danthonia californica*
  - 61.201.01 *Salix lasiolepis*
  - 61.420.07 *Alnus rhombifolia / Cornus sericea*
  - 52.206.01 *Grindelia camporum*
  - 45.165.01 *Carex densa*
  - 82.200.50 *Pseudotsuga menziesii – Arbutus menziesii*
  - 61.450.01 *Acer macrophyllum / Rubus ursinus*

- CSP cannot adequately evaluate potential effects to existing "Sensitive Natural Communities," riparian trees, willow thickets, amphibian and fish spawning habitat, and benthic macroinvertebrates held within the Park from the information given within the DEIR.

Chapter 4.7 – Hazards and Hazardous Materials

Project-Specific Impacts and Mitigation Measures

- *4.7-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Based on the analysis below, with implementation of mitigation, the impact related to transportation, storage and use of hazardous materials is considered less than significant.*

Agcy 1-29

- CSP is validly concerned with the manner in which explosives and their constituent components will be handled, particularly during transport, delivery and unloading at the Brunswick site. CSP appreciates that several relevant regulations are cited (49 CFR 177 subpart B, 49 CFR 397.7), but the specific process by which explosives will be received, documented, and transferred to storage in the "Service Shaft" is not described in the DEIR. In addition, the added potential hazards for local Nevada County Roadways with transporting explosives routinely and the potential for accidents are of concern for CSP. For this reason, we cannot adequately understand the risks, nor could

the applicant mitigate for the potentially significant impacts, of such explosives, particularly as a potential hazard source of wildfire ignition. CSP also believes that the quantity and frequency of explosives deliveries have not been evaluated. CSP believes that based on the potential for an accident based on the sheer volume of explosives used and transported in the Project, this impact should be changed to *potentially significant*.

Chapter 4.8 – Hydrology and Water Quality

- *Regional Hydrology*
  - *Page 4.8-4* states: "Peak flow rates for a 10-year, 24-hour storm event and a 100-year, 24-hour storm event have been reported by Cranmer Engineering, Inc. (Cranmer, 1986) as part of the development of the Storm Drainage Master Plan for the City of Grass Valley. For **South Fork Wolf Creek** at Hennessy School (i.e., the 2.75 square mile area of the watershed upstream of State Route [SR] 49), **Cranmer (1986) calculated peak flow rates of 658 cfs for the 10-year, 24-hour storm, and 1,087 cfs for the 100-year, 24-hour storm**. Thus, peak flow rates during significant storm events may be as much as two-to-three orders of magnitude (100 times to 1,000 times) greater than the base flow in, or the NID discharges to, South Fork Wolf Creek.

Agcy 1-30

    - With respect to Cranmer (1986), CSP disputes the stated calculated peak flow rates for the South Fork Wolf Creek that are referenced above and believes they could misinform the public and agencies regarding the hydrological system inherent to this watershed. The original document referenced within *Appendix K.2* "Cranmer Engineering, Inc. (1986). *City of Grass Valley, Storm Drainage Master Plan and Criteria*. Priority List Summary, page 2." (https://www.cityofgrassvalley.com/sites/main/files/file-attachments/sd_master_plan_priority_list.pdf?1617826732) is only a table of storm drainage features with no documentation on how values were calculated. The estimate for 658 cfs for a 10-year, 24-hour storm is located at an open concrete ditch adjacent to the Hennessey School which Cranmer notes that it needs a 98 inch (8 feet) diameter concrete pipe, which is approximately the width of the existing channel in 2022. CSP does not have figures for baseline or peak flow measurements at this site, but for comparison, the South Yuba River located in Nevada County, considered the largest river in Nevada County, has an average baseline flow of 150-600 cfs during the winter months peaking in the 1000's during storm events at the Jones Bar USGS gauge station (https://www.dreamflows.com/graphs/avg.065.php). CSP has measured flows at the Bennett Street Grasslands portion of the South Fork Wolf Creek as high as 11 cfs within the past two winters. CSP staff theorize winter storms can average as high as 20 cfs potentially, but disagree with figures in the hundreds or thousands, regardless of the magnitude of the storm.

  - *Page 4.8-4* states: "Based on the stream gaging data and manual measurements made in 2019 to January 2021, base flows range from 0.07 cfs in the summer to 6.5

Agcy 1-31

cfs in the winter. Peak flow during the monitoring period occurred on April 5, 2020 at 33.4 cfs in response to a two-day rainfall event totaling approximately 10 inches."

- CSP appreciates knowing flow measurements for the South Fork Wolf Creek upstream from its properties, and notes that according to the data in *Appendix I – Record of South Fork Wolf Creek Streamflow* contained within *Appendix K.2*, the average "Daily Mean Streamflow" during fall/winter 2020 was as low as 0.2 cfs, with Daily Mean Streamflows as high as 4 cfs during storm events. For reference CSP has measured flows manually as high as 11 cfs within the last two years on the South Fork Wolf Creek. Recently on 03/16/2022 flow was recorded as only .69 cfs by Park staff, and routinely have been measured from 1-2 cfs after average storm events. Winter storm events have been captured from 4-11 cfs on Park property. CSP staff theorize peak flows as high as 20 cfs are common every few years on the South Fork Wolf Creek.

Agcy 1-32

- *South Fork Wolf Creek Geomorphology, Page 4.8-26* states: "South Fork Wolf Creek - Reach D - Reach D receives runoff and sediment from a watershed of approximately 2.2 square miles (U.S. Geological Survey [USGS], 2019). The average reach slope was measured to be 0.5 percent. The reach is in an unconfined valley with an active floodplain and riparian zone and exhibits poolriffle morphology, defined by an undulating bed with a sequence of sediment bars, pools, and riffles. Bars and riffles are comprised of mostly gravel-sized sediment."
  - CSP would like to acknowledge that "Reach D" is contained entirely within the Park at the Bennett Street Grasslands and its ecosystem health is of utmost importance to CSP.
  - *Figure 4.8-9, South Fork Wolf Creek Reaches in Project Vicinity* on *Page 4.8-25* incorrectly displays Empire Mine State Historic Park borders and does not include the Bennett Street Grasslands, which are featured as the entirety of "Reach D."

Agcy 1-33

- *4.8.3 Regulatory Context - Federal Clean Water Act*
  - CSP appreciates an overview of the regulatory framework from the Clean Water Act on *Pages 4.8-26-27*, but missing from this subsection is an excerpt from *Appendix K.1 Geomorphic Assessment SF Wolf Creek, page 5:* "2.1 The Clean Water Act - The United States Environmental Protection Agency (USEPA), through the state regulatory agency (Central Valley Regional Water Quality Control Board, or RWQCB), issues general permits for industrial discharges under the National Pollutant Discharge Elimination System (NPDES). Under the NPDES, a Limited Threat Discharge permit may be authorized for discharges that are relatively pollutant-free and present no or minimal threat to water quality or the environment, **including harm or impairment to existing beneficial uses of receiving waters** (RWQCB, 2018)."

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- CSP would like to acknowledge the repeated theme present in many local, state and federal regulations about protecting downstream ("receiving waters") beneficial uses.

- *4.8.3 Regulatory Context - Central Valley Regional Water Quality Control Board*

  - CSP appreciates including the following excerpt on *Page 4.8-28* which includes reference to protecting "beneficial uses" such as "aquatic resources" from water quality degradation, which would include the whole of South Fork Wolf Creek on Park lands:

    - "As authorized by the Porter-Cologne Water Quality Control Act, the CVRWQCB primary function is to protect the quality of the waters within its jurisdiction for all beneficial uses. State law defines beneficial uses of California's waters that may be protected against quality degradation to include, but not be limited to: domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and **preservation and enhancement of fish, wildlife, and other aquatic resources or preserves**."

Agcy 1-34

- *4.8.3 Regulatory Context – Basin Plans*

  - As CSP detailed in the "General Comments" above on Pages 2-3, the concept of "Beneficial Uses" is of critical importance to an evaluation of potential impacts to the downstream portions of South Fork Wolf Creek below the Brunswick facility. CSP appreciates the overview of the CVRWQCB 2018 Sacramento and San Juaquin Basin Plan on *Page 4.8-31* that references the protection of "Beneficial Uses" eight times, including "non-contact water recreation, including aesthetic enjoyment; warm and cold freshwater habitat; and wildlife habitat. These uses describe current "use" of the South Fork Wolf Creek within Park lands.

Agcy 1-35

- *Local Regulations - Nevada County General Plan - Page 4.8-33*

  - CSP appreciates the review of *Policy FH-10.3.2, Safety Element - Goal FH-10.3 Reduce the potential for injury, property damage, and environmental damage from flooding* which states "**Avoid increases in downstream flooding potential by protecting natural drainage**". CSP acknowledges that the Project's proposal to release up to 5.6 cfs of mine water into South Fork Wolf Creek conflicts with this policy.

Agcy 1-36

  - CSP appreciates the review of *Policy 11.6A, Water Element - Goal 11.1 Identify, protect and manage for sustainable water resources and riparian habitats* which states: "New development shall minimize the discharge of pollutants into surface water drainages by providing the following improvements or similar methods which provide equal or greater runoff control: (a) include curbs and gutters on arterials, collectors, and local roads consistent with adopted urban street designs; and (b) **oil, grease, and silt traps** for subdivisions creating five or more parcels and commercial and industrial development of one acre or greater size. Maintenance of such facilities shall be assured through a

Agcy 1-37

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legally enforceable mechanism." CSP has found no mention of "oil, grease and silt traps" within the Project's proposal in the DEIR. Protecting the South Fork Wolf Creek from oil and sediment runoff from the Brunswick facility is of utmost importance to CSP. CSP requests to evaluate a detailed Industrial Stormwater Pollution Prevention Plan (I-SWPPP) as part of this DEIR. CSP cannot evaluate impacts to the South Fork Wolf Creek from potential degradation to water quality from surface runoff pollutants without a I-SWPPP addressing these concerns.

Agcy 1-38

- CSP appreciates the review of *Policy 17.11(c), Mineral Management – Goal 17.1* "Requiring that any increase or decrease of off-site discharge is not detrimental to the downstream environment or downstream water users." CSP acknowledges that the Project's plan for mine dewatering potentially conflicts with this regulation. CSP cannot evaluate potential impacts to the South Fork Wolf Creek from erratic and fluctuating water levels from the information contained within the DEIR at present.

- *4.8.4 Impacts And Mitigation Measures*

  - *4.8-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Based on the analysis below, with the implementation of mitigation the impact is less than significant.*

    - CSP finds this Impact and the discussion that follows confusing and misleading. The first section states on *Page 4.8-54*: "Thus, the project could not impede sustainable groundwater management within a groundwater basin, because no such basin exists in the project vicinity", while then discussing groundwater depletion effects to residential wells, and thusly requiring mitigations.

Agcy 1-39

- CSP requests a complete and separate *Impact* based on groundwater depletion and evaluation of effects to the surrounding region, including not only residential wells, but also on the surrounding ecosystem. CSP owns property within Empire Mine SHP that will be affected by groundwater depletion (according to *Figure 4.8-12 Well Locations and Itasca Drawdown* on *Page 4.8-63*). Properties include mature coniferous forests at Union Hill, riparian forests of the "Upstream Reach" and of Bennett Street Grasslands along the South Fork Wolf Creek, and wet meadows within Bennett Street Grasslands.

- CSP cannot evaluate impacts from groundwater depletion of 1-5 feet within the Park since no such model exists within the DEIR. Potential effects of a lessening water table could be tree mortality and die-off of existing plant communities. CSP recognizes these are unknowns, but again needs a mechanism for evaluation.

- CSP cannot effectively evaluate impacts of groundwater depletion modeling on the Park, as the boundaries of Empire Mine SHP are

not present on either *Figure 4.8-12 Well Locations and Itasca Drawdown*, *Figure 4.8-11 Simulated Drawdown of Groundwater Levels at End of Future Mining Relative to 2019 Water Level*, or on *Figure 4.8-13 Potential Expansion of Future Mine*, nor were any maps or figures included in *Appendix K.2 Groundwater Hydrology and Water Quality Analysis* displaying Park boundaries. CSP requests all relevant maps and figures of groundwater depletion to include the boundaries of Empire Mine State Historic Park and only then can CSP staff effectively evaluate this impact.

- *Mitigation Measure 4.8-2(a)*:
  - *Page 4.8-67*: "The project applicant shall implement the Groundwater Monitoring Plan (GMP) prepared by Itasca Denver, Inc. (February 2021), as approved by the County."

Agcy 1-40

    - While CSP appreciates the proposal for Groundwater Monitoring before mine dewatering commences, we respectfully request Groundwater Monitoring to also include portions of the Park, located within the "Upstream Reach" and within the Bennett Street Grasslands in areas that are modeled to have groundwater depletion on *Figure 4.8-12 Well Locations and Itasca Drawdown*.

- *Mitigation Measure 4.8-2(b)* and *(c)*:
  - CSP recognizes that *Mitigation Measure 4.8-2 (b)* and *(c)* are wholly focused on supplying lost groundwater to residential well customers.

Agcy 1-41

  - CSP recognizes that the Project is focusing on mitigating the impact of groundwater depletion through *Mitigation Measures 4.8-2 (a-c)*. CSP requests a complete analysis of groundwater depletion within the affected portions of the Park. Once analysis is complete, an appropriate mitigation should be created for any potential effects on vegetation communities within the Park.

- *Impact 4.8-3*, *Page* "Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

Agcy 1-42

  i) Result in substantial erosion or siltation on- or off-site?
  ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?
  iii) Create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

iv) Impede or redirect flood flows?

Based on the analysis below and with implementation of mitigation, the impact is *less than significant*."

- CSP acknowledges that this impact *may* be "*less than significant*" for the South Fork Wolf Creek based on hydrological technical reports *Appendix K.1 and K.2* detailing that "substantial" erosion or siltation would not occur at 5.6 cfs of mine dewatering. However, even Balance Hydrologics found in *Appendix K.1* in *Figure 5-6 Preliminary suspended-sediment load rating curve, South Fork Wolf Creek above proposed discharge location, Nevada County, California* that between 0.6-0.7 tons of day of sediment transport happen at flows of 5-6 cfs. CSP staff has noted visible Turbidity at flows equal and greater than 4 cfs.

  In addition, although 5.6 cfs of flow within the South Fork Wolf Creek may not contribute to "substantial erosion," adding an additional 5.6 cfs to winter storm event flows with a baseline flow over 15 cfs would, according to *Page 4.8-74:*

  - "Sediment pebble count analysis conducted by Balance (2020) indicates that the flow rate at which sediment within the channel may become mobilized ranges from 20 cfs to 90 cfs."

  Balance Hydrologics and EMKO Environmental, Inc. theorize that the threshold for "bedload sediment mobility" is 23 cfs in the following statement on *Page 4.8-74:*

  - "With the addition of the maximum proposed discharge of 5.6 cfs and increasing measured baseflows by a 50 percent safety factor, post-project baseflows during nonstorm periods would be expected to range between approximately 5.8 cfs and 15 cfs. These estimates are less than 23 cfs, the threshold for bedload sediment mobility and well below flows that commonly exhibit significant work on the channel (i.e., 1- to 2-year flood). Balance therefore concludes that discharges during baseflow periods would not result in substantial erosion or siltation on site in South Fork Wolf Creek. ECM is in agreement with Balance that the addition of 5.6 cfs to the South Fork of Wolf Creek drainage basin would have no significant effect on the stream channel or banks, or to the turbidity of the South Fork Wolf Creek."

    - CSP disputes the notion that 23 cfs is a *definite* threshold for bedload sediment mobility. The figure of 23 cfs is referenced from *Appendix K.1* on *Page 27:* "Using indirect methods to estimate peak in Reach D3, peak flow from the December event was estimated to be approximately 23 cfs." CSP cannot base evaluation of sediment mobility based on one *indirect* measurement within one year of monitoring. Balance did note that sediment was not substantially mobile at flows below 17.3 cfs, in *Appendix K.1* on *Page 39:* "Field measurements at stream flows between 11 cfs and 17.3 cfs showed no active bedload transport". CSP does not dispute

the observation and appreciates this information that substantial erosion was not evident at flows less than 17.3 cfs. CSP thus can effectively agree that it appears that bedload sediment mobility happens above 17.3 cfs, but potentially not lower based on Balance Hydrologics' assessments.

Agcy 1-43

- CSP also disputes the notion that "that the addition of 5.6 cfs to the South Fork of Wolf Creek drainage basin would have no significant effect on the stream channel or banks, or to the turbidity of the South Fork Wolf Creek." CSP believes this statement assumes that there is not a potential baseline flow of ~12 cfs existent post winter storm, whereby flows would then combine to +17.6 cfs and thereby *potentially* contribute to bedload sediment mobility.

Agcy 1-44

- CSP also disputes that 5.6 cfs would not have a "significant effect" on "turbidity of the South Fork Wolf Creek". Balance Hydrologics have established in *Appendix K.1* in *Figure 5-6 Preliminary suspended-sediment load rating curve, South Fork Wolf Creek above proposed discharge location, Nevada County, California* that between 0.6-0.7 tons a day of sediment transport happen at flows of 5-6 cfs. Balance has also noted "slightly turbid" water present on 1/24/2020 at a flow of 1.56 cfs; "very turbid" water on 1/26/20 at a flow of 11 cfs; "water slightly turbid" on 3/18/2020 at a flow of 3.22 cfs; "slightly turbid" on 3/29/20 at a flow of 1.91 cfs; "upper watershed channel is very turbid" on 4/5/20 at a flow of 20.4 *cfs*; "Slightly turbid" on 4/7/20 at a flow of 4.14. cfs; (figures taken from *Appendix I – Record of South Fork Wolf Creek Streamflow* contained within *Appendix K.2*).

Agcy 1-45

Based on Balance Hydrologics' own observations that turbidity exists in some form above or equal to 1.56 cfs, with "very turbid" water existing above or equal to 11 cfs, and the DEIR stating on *Page 4.8-74*: "post-project baseflows during nonstorm periods would be expected to range between approximately 5.8 cfs and 15 cfs," CSP believes that turbidity in the South Fork Wolf Creek would be *potentially* significant. "Very turbid" water would potentially occur from 11 -15 cfs during "post-project baseflow". *Appendix K.1* in *Figure 5-6 Preliminary suspended-sediment load rating curve, South Fork Wolf Creek above proposed discharge location, Nevada County, California* displays approximately between 0.6-0.7 tons of day of sediment transport happen at flows of 5-6 cfs, and at 10 cfs this figure is approximately 1.2 tons per day. The DEIR does not adequately relay how many tons of sediment transport is acceptable without mitigations, or before this impact is considered *significant*. CSP therefore requests that *Impact 4.8.3* should be changed to *potentially significant* regarding turbidity (suspended sediments) and acknowledges that the addition of 5.6 cfs of mine dewatering also would bring the South Fork closer to its erosion potential during storm events, (within 2.3 cfs) of *potential* substantial erosion and siltation "off-site" within the Park.

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Chapter 4.9 – Land Use and Population and Housing

- *Impact 4.9-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the impact is less than significant.*

  - CSP disagrees with the analysis of *impact 4.9-2*, and requests that this impact be changed to *potentially significant* based on the following conflicts with regional, local and statewide land use plans, policies and regulations:

    - Nevada County General Plan, Volume 1 Goals, Objectives, Policies, & Implementation Measures
      - *Safety Element - Goal FH-10.3 Reduce the potential for injury, property damage, and environmental damage from flooding.*
        - *Policy FH-10.3.2*
          - ***Avoid increases in downstream flooding potential by protecting natural drainage** and vegetative patterns through project site plan review, application of Comprehensive Site Development Standards, use of clustered development and project subdivision design. The Comprehensive Site Development Standards shall include measures applicable to all discretionary and ministerial projects to **avoid downstream flooding resulting from new development.** Such measures, shall include, but not be limited to:*
            a. Avoidance of stream channel modifications; and
            b. Avoidance of excessive areas of impervious surfaces; and c. Use of on-site retention or detention of stormwater.
      - *Water Element - Goal 11.1 Identify, **protect and manage for sustainable water resources and riparian habitats**.*
      - *Mineral Management - Goal 17.1 Recognize and protect valuable mineral resources for current and future generations in a manner that **does not create land use conflicts**.*
        - *Policy 17.11*
          - *Recognize the importance of water conservation and quality for the present and future needs of the County by: a. Requiring the conservation of on-site water during mining operations; b. Requiring that off-site water discharge complies with State water quality standards; and **c. Requiring that any increase or decrease of off-site discharge is not detrimental to the downstream environment or downstream water users**.*

    - CA Water Code § 13050 section (f) states: "'**Beneficial uses**' of the waters of the state that may be protected against quality degradation include preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.
      - (d) "**Waste**" includes sewage and any and all other waste substances, **liquid**, solid, gaseous, or radioactive, associated with human habitation, or

Agcy 1-46

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of human or animal origin, or **from any producing, manufacturing, or processing operation**, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

- (1) **Beneficial uses to be protected.**
- (l) (1) **"Pollution" means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses."**

The Central Valley Regional Water Quality Control Board established in their 2018, Sacramento and San Juaquin Basin Plan that "**Fish, plants, and other wildlife, as well as humans, use water beneficially"** (Page 2-1, Beneficial Uses, California Regional Water Quality Control Board, Central Valley Region, (RWQCB), 2018), and that existing "Beneficial Uses" of the Bear River Watershed which includes South Fork Wolf Creek are "Wildlife Habitat" and "Cold and Warm Freshwater Habitat" (page 2-10, RWQCB).

These land use policies conflict with the Project's proposal to discharge mine water into the South Fork Wolf Creek and contribute to increased turbidity / sedimentation. The Project's mine dewatering plan would also significantly alter the downstream immediate riparian ecosystem with unknown consequences for amphibians, riparian trees, benthic macroinvertebrates and sensitive vegetation communities, especially considering the proposal to alter flows up to 5.6 cfs at any time within the next 80 years.

Chapter 4.10 – Noise and Vibration

- *Existing Sensitive Receptors, Page 4.10-4*

Agcy 1-47

CSP pointed out in our "General Comments" that the Park has been neglected to be included as a "sensitive receptor" in evaluation and analysis of Noise and Vibration impacts on the recreational users, park employees/residents, and wildlife resources within the nearest locations to both the Brunswick and Centennial facilities. CSP has noted though that Sensitive Receptor #8 on *Figure 4.10-2 Representative Sensitive Receptors* is located at the eastern border of the Bennett Street Grasslands and just outside the Park. CSP has little ability to evaluate and analyze potential noise and vibration impacts along the Union Hill trails within the Park, with the nearest Sensitive Receptor #30 located several hundred feet away, albeit closer in location to the Brunswick facility. The "Upstream Reach" of Park land located on East Bennett Road is nearby to Sensitive Receptor #9. Sensitive Receptor #9 has been identified as having a ***Daytime Noise Criteria Exceeded*** in *Table 4.10-11 Predicted Construction Noise Levels at Nearest Receptors*. Wildlife existent at the "Upstream Reach" will therefore be impacted by excessive noise and CSP is concerned about how this impact will affect wildlife health.

- *Impact 4.10-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, due to initial construction activities. Based on the analysis below, even with the implementation of mitigation, the impact would be considered significant and unavoidable.*

Agcy 1-48

  - CSP notes that this *significant and unavoidable* impact would affect Park lands in the "Upstream Reach" area adjacent to East Bennett Street nearby to Sensitive Receptor #9 which is unfortunate and may impact wildlife resources health, breeding, and foraging habits. Black bear, deer, amphibians, reptiles, and numerous avian species, which may include sensitive species are known from this area of the Park.

Chapter 4.13 – Wildfire

As owner, operator and manager of Empire Mine State Historic Park, wildfire potential within the region and nearby to the Park is of the utmost concern to CSP. Protecting natural and cultural resources, park recreational visitors, park employees/residents, and park infrastructure from the effects of wildfire, the health effects of wildfire smoke, is of the greatest interest to CSP. Although not fully evaluated within *Chapter 4.13* the Project proposed to install two 12,000 gallon diesel tanks, and use numerous flammable chemicals and explosives daily during both construction and operational phases. These Project constituents are inherently hazardous and can exacerbate wildfire potential if improperly handled and / or released. CSP recognizes that most of these issues were analyzed and evaluated within *Chapter 4.7 Hazards and Hazardous Materials*, but the relation to wildfire danger and potential is inherent to this chapter.

Agcy 1-49

Fuel Treatment Efforts

  - CSP notes that *Figure 4.13-2 Active, Completed, and Planned Fuel Treatment Projects* is missing fuel treatments that have occurred in the Union Hill area of Empire Mine State Historic Park from 2014-2021. This area of Union Hill is directly west uphill of the Brunswick facility and is located 450 feet away from the Brunswick boundary.

- *Impact 4.13-2 Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Based on the analysis below, and with implementation of mitigation, the impact is less than significant.*

Agcy 1-50

  - CSP notes both erroneous and speculative information on groundwater depletion in relation to plant community health and uptake of water in the discussion following: *Impact 4.13-2. Page 4.13-21* states: "In the areas away from the creeks and valleys, the depth to groundwater is typically greater than 10 feet and, in many cases, may be 100 feet or more. In addition, the normal seasonal fluctuation in the depth to groundwater may be 10 feet to 30 feet or more. Thus, in the areas away from the creeks, the existing groundwater surface is below the typical depth of rooted vegetation

and tap roots from trees, especially during the drier months when the depth to groundwater is at its greatest."

- CSP has noted that this information contradicts *Footnote 8* in *Appendix K.2*: "The most common tree in the project area is the Ponderosa Pine, with tap roots up to 36 feet deep, which is considered one of the deepest tap root systems among conifer trees. The second most common tree in the project area is the Incense Cedar, with tap roots up to 20 feet deep but averaging six to seven feet deep. Other trees in the area include the Douglas Fir, with tap roots up to 10 feet deep, and the California Black Oak, with tap roots three to four feet deep (Greg Matuzak, personal communication, October 24, 2020 electronic mail message to Ben Mossman, Rise Gold)."
    - CSP notes that ponderosa pine and incense cedar are the two most common tree species at the Park and are located in abundance throughout Union Hill area, which is nearest to the greatest groundwater potential drawdown areas. If these tree species are known to have tap roots from 20-36 feet deep, then these tree roots have great potential to be within the groundwater zone of "typically greater than 10 feet and, in many cases, may be 100 feet or more" even while being located "away from the creeks and valleys". CSP also notes that there is no reference or scale given to support the theory that groundwater is "typically greater than 10 feet and, in many cases, may be 100 feet or more" in areas away from valley and creek bottoms. CSP cannot evaluate impacts to vegetation based on speculation without reference.

Agcy 1-51

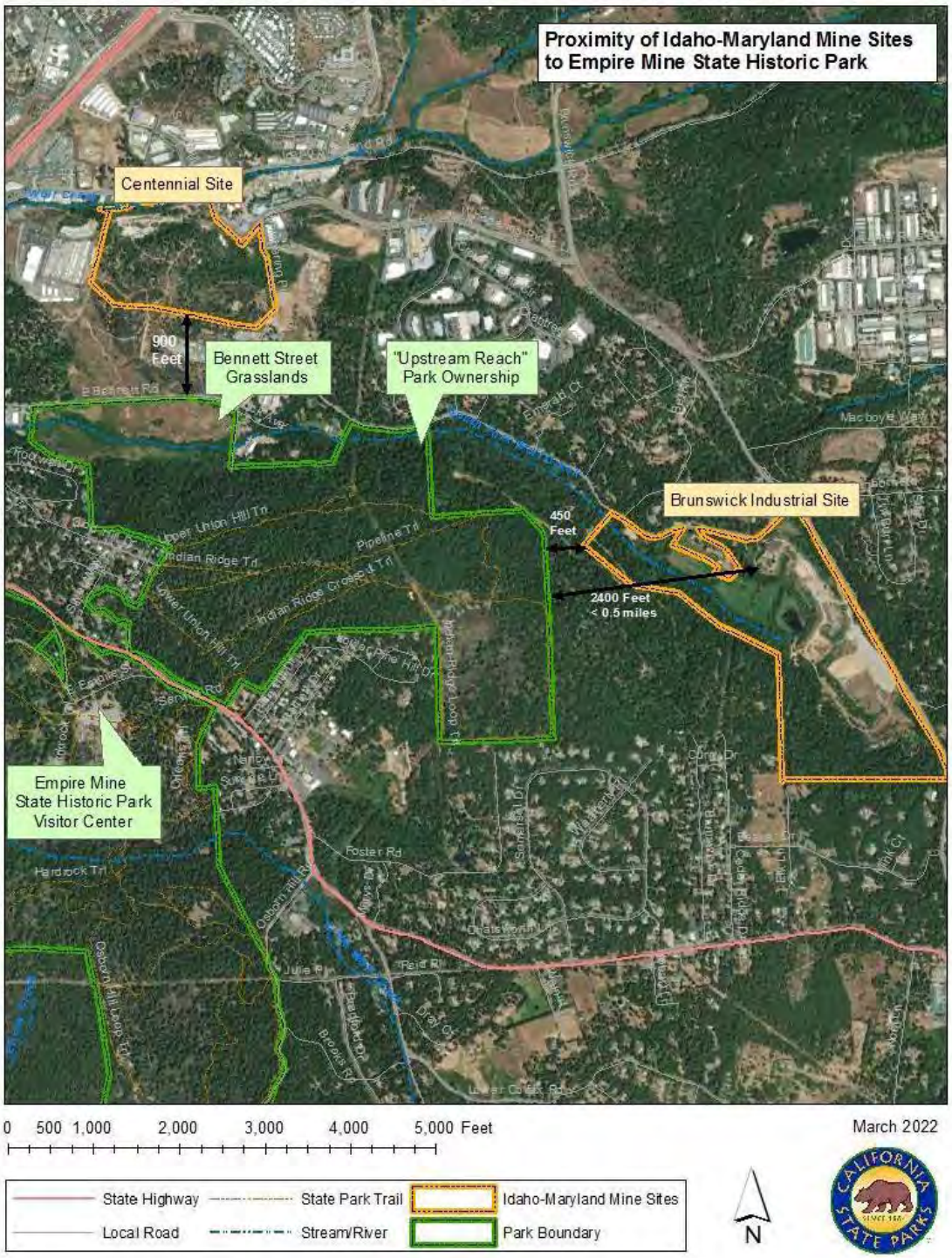
- CSP also notes the following paragraph on *Page 4.13-21* states: "Discharge of treated water to South Fork Wolf Creek would prevent the lowering of the groundwater levels along the reach of that creek because the full dewatering volume would be discharged to the creek, whereas only a small fraction of the groundwater that was removed from the subsurface would come from that area. Thus, the potential increased recharge due to the enhanced base flow in South Fork Wolf Creek would more than offset any effects from dewatering in the area near the creek."
    - CSP finds that this information supports the notion that only the immediate riparian area along South Fork Wolf Creek would receive groundwater recharge from extra mine dewatering. CSP believes this still leaves vegetation communities within the valley bottom, but away from the creek especially vulnerable to artificial groundwater depletion. Many of these vegetation communities exist at the Bennett Street Grasslands within the Park and may be potentially affected by groundwater depletion however minimal it may be. Vegetation communities drying out sooner not only threatens their long-term survival during the summer drought but can contribute to lower humidity levels within the plants and therefore higher flammability and ignition potential.

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Agcy 1-52

CSP also notes that the information on groundwater depletion in relation to the health of plant communities and tree survival was left out of *Chapter 4.8 Hydrology and Water Quality*. CSP noted within the comments to *Chapter 4.8* that evaluating impacts to vegetation communities due to groundwater depletion was of high concern for the Park in relation to "*Impact 4.8-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Based on the analysis below, with the implementation of mitigation the impact is less than significant.*"

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AGENCY LETTER 1: DANIEL LUBIN, CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Response to Comment Agcy 1-1

The commenter provides a description and information regarding the Empire Mine State Historic Park. Comment noted.

The commenter requested it be noted that an undisturbed historic "sulphurette works" is located on the "upstream Reach" of the Park, located 0.4-mile downstream of the Brunswick site on South Fork Wolf Creek but does not provide any information as to why this is relevant to the analysis of the DEIR. The comment is noted.

Response to Comment Agcy 1-2

The commenter states that the DEIR is inadequate in mitigations and several sections are unclear as to what the potential impacts may be. The commenter states that the project could affect the natural resources, recreational values, health and safety of Park visitors and employees and the general well-being of the Park, but does not provide specific examples in this comment. Responses to specific comments are provided below.

Response to Comment Agcy 1-3

The commenter believes that the project and the impacts and mitigations in the DEIR fail to adequately protect the South Fork of Wolf Creek, its riparian ecosystem, and its "Beneficial Uses". Specifically, the commenter asserts that the proposal to add 1.5 to 5.6 cfs to South Fork Wolf Creek threatens the riparian ecosystem, plant communities, benthic macroinvertebrates, may cause erosion and degradation of bank stability, discharge heavy metals, cause turbidity, and harm aquatic habitat and amphibians. The commenter asserts that the project conflicts with Policy 17.11 of the Nevada County General Plan due to increase in offsite water discharge to South Fork Wolf Creek which could be extremely detrimental to the downstream environment and water users of which include wildlife and riparian streams. Please see Master Responses 32 - Temperature of Mine Water Discharge, 33 - Groundwater Dependent Vegetation, 34 - Resident Fish, 35 - Discharge to South Fork Wolf Creek, 36 - Flows in South Fork Wolf Creek, 38 -Foothill Yellow Legged Frog and California Red Legged Frog, and Response to Comment Grp 31-12 regarding benthic macroinvertebrates.

Response to Comment Agcy 1-4

The commenter states that the Park users have been neglected to be considered a sensitive receptor regarding air quality. Please see Response to Comment Agcy 1-6.

The commenter states that the Park users have been neglected to be considered a sensitive receptor regarding noise. Please see Response to Comment Agcy 1-47 and Agcy 1-48.

Response to Comment Agcy 1-5

The commenter states that the CSP owns a large section of the free-flowing stretch of South Fork Wolf Creek downstream of the project. Comment noted.

The commenter requests extensive revisions to the DEIR to add discussions of the Empire State Historic Park. A revision to page 4.3-11 has been made to the DEIR (see Response to Comment Agcy 1-6) as reflected in the Final EIR. In addition, maps have been prepared that depict cancer and non-cancer health risk isopleths to clarify the location of the park and modeled health risk. Please see Dudek Memorandum HRA Isopleths included in the Final EIR as Appendix K. The park boundaries have been added to Sheet 16 which is attached to the Final EIR as Appendix L.

The Bennett Street Grasslands are discussed in Master Response 33 - Groundwater Dependent Vegetation. No other revisions regarding the Empire State Historic Park are required for the analysis of the DEIR.

Response to Comment Agcy 1-6

The commenter asserts that the air quality analysis used in the DEIR did not include parks and playgrounds in the definition of sensitive receptors and may have omitted analysis of recreational trail users on Empire Mine State Historic Park's trail system as sensitive receptors. Recreational parks have been added to the definition of Sensitive Receptors in Chapter 4.3 (Air Quality, Greenhouse Gas Emissions, and Energy) on page 4.3-11:

> Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Children, pregnant women, older adults, and people with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses where sensitive-receptor population groups are likely to be located such as hospitals, schools, childcare centers, residences, and retirement homes, are considered especially vulnerable. Recreational parks and uses are also areas that may have sensitive receptor visitors.

This definition would include the Empire Mine State Historic Park. Notably, however, based on proximity to the project, predominant wind direction, and duration of exposure, the maximally exposed individual described in the Health Risk Assessment (HRA), located north of the project site at UTM coordinates 671091 meter Easting /4342277 meters Northing (see page 27 of HRA included in Appendix E.1 of the DEIR) would not change.

Response to Comment Agcy 1-7

The commenter asserts that the DEIR did not properly assess silica exposure to sensitive receptors based on the threshold values established by OEHHA, and should evaluate silica exposure from the project to Empire Mine Park users and employees. OEHHA has established a chronic (i.e., long-term) reference exposure level (REL) for Crystalline silica (quartz, cristobalite, tridymite) of respirable size (defined as 4 micrometer particle aerodynamic diameter). According to OEHHA's *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (2015) (OEHHA's Guidelines):

> A REL is the concentration level at or below which no adverse non-cancer health effects are anticipated for the specified exposure duration. RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. RELs are designed to protect the most sensitive individuals in the population by the inclusion of factors that account for uncertainties as well as individual differences in human susceptibility to chemical exposures. The factors used in the calculation of RELs are meant to err on the side of public health protection in order to avoid underestimation of non-cancer hazards. Exceeding the REL does not automatically indicate an adverse health impact. However, increasing concentrations above the REL value increases the likelihood that the health effect will occur.

As discussed on page 4.3-79 and shown in Table 4.3-21 of the DEIR, the threshold of significance for chronic exposure is a Hazard Quotient of 1. The Chronic Hazard Quotient is equal to the annual average concentration at the receptor location divided by the Chronic REL. To determine if TACs exceed the Chronic Hazard Quotient, the annual mass emissions (in tons per year) of each applicable TAC, including silica, were converted to substance-specific emission rates (in grams/second) and then to annual average concentrations by multiplying the substance-specific emission rate by the "Chi over Q" ("X/Q") value estimated by the AERMOD dispersion model. As described in the Health Risk Assessment prepared for the project (Appendix E.1 of the EIR), "A

unit emission rate (1 gram per second [g/s]) was normalized over each unique source of emissions for the AERMOD run to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength, and is used as a way to simplify the representation of emissions from many sources." Based on these calculations, the Health Risk Assessment prepared for the project determined that the health risk to the maximally exposed sensitive receptor would be below the Hazard Quotient threshold and would result in a less than significant impact. In addition, maps have been prepared that depict cancer and non-cancer health risk isopleths to clarify the location of the park and modeled health risk, as further described below.

Several commenters requested visual representations of the results of the Health Risk Assessment (HRA) prepared for the project and attached to the DEIR as Appendix E.1. Based on public comments asking for visual exhibits and for more detail on exposure to workers, Dudek prepared a supplemental HRA ("Dudek Memo") to assess potential for impacts to workers near the project sites, and also to include visual representations of the residential receptors identified in the original HRA used in the DEIR's analysis. Please see Appendix K to this Final EIR for the Dudek Memo.

The Dudek Memo identifies the worker receptors shown on Exhibits A through D based on the supplemental HRA, but also includes the residential receptors, based on data from the original HRA used in the DEIR. There are no residential receptors in the proximity of the Centennial Industrial Site, so no residential receptors are indicated on the exhibits. The locations of residential and worker receptors are annotated on Exhibits A through D of the memo. In the case of the calculated worker health risk, no isopleths are shown at the Centennial Industrial Site because there is no location on-site or off-site where health risk exceeds a level of significance. The health risk to the maximally exposed individual worker (MEIW) is calculated in the memo. The MEIW is shown on Exhibit D and is located north of the Centennial Industrial Site. As described in the memo, all project emissions, including trucks, off-road equipment, underground/blasting/crushing, ore processing, fuel tank storage, backup diesel generators, and material handling, were incorporated into the worker HRA.

As shown in Table 1 of the Dudek Memo, the unmitigated and mitigated incremental cancer risk at the MEIW of 0.4 in 1 million (assuming exposure starts at age 16) from project construction and operation would not exceed the NSAQMD threshold of 10 in 1 million. The unmitigated and mitigated chronic hazard index would be 0.4 and 0.4 at the MEIW, respectively, which would be below the NSAQMD threshold of 1.0. The unmitigated and mitigated acute hazard index would be 0.04 and 0.04 at the MEIW, respectively, which would be below the NSAQMD threshold of 1.0.

Response to Comment Agcy 1-8

The commenter asserts that it could not find information in the DEIR related to the threshold values for exposure to metal in dust emissions, and therefore cannot assess risks to park employees and visitors. Metal content of dust emissions are considered in the Health Risk Assessment prepared for the project based on sampling and material ratios presented in Section 4.4 of Appendix K.2 to the DEIR. Metals can have cancer and/or non-cancer health risk, and both types of risk were assessed in the DEIR. As described in the Health Risk Assessment for the project:

> In March 2015, the OEHHA approved the 2015 Risk Assessment Guidelines Manual (OEHHA 2015) [termed the "OEHHA Guidelines" in these response to comments]. The construction and operational HRA was prepared following the 2015 Risk Assessment Guidelines Manual. Cancer and noncancer health risk calculations were performed for the project using ground-level unity emission concentration (X/Q) input from AERMOD. This

> modeling established the emissions dispersion field to the existing sensitive receptors from atmospheric influence of the stationary source emissions. Plot files generated in AERMOD were then imported into HARP2, with ground level concentrations determined by multiplication of emission rates and X/Q values for each source of emissions. HARP2 then assessed resulting cancer and noncancer risk at the existing receptors from exposure to TAC emissions using the OEHHA derived calculation method.

This Health Risk Assessment methodology described above is important since the commenter's requested "exact threshold values for each of the above state heavy metals" are automatically incorporated into the California Air Resources Board HARP2 model, which was used to determine the resultant health risk impacts of the project. These values are based on the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* (last updated in 2020)[1], which the commenter can review if they would like each of the heavy metal health values. Notably, however, the Health Risk Assessment used conservative assumptions of metal content in fugitive dust and concluded that the exposure to the maximally exposed sensitive receptor would be less than relevant thresholds for cancer health risk and chronic health risk. In addition, maps have been prepared that depict cancer and non-cancer health risk isopleths to clarify the location of the park and modeled health risk. The health risk to existing worker receptors was calculated in order to plot the isopleths for the Centennial site, which is surrounded by worker receptors rather than residential receptors. Please see Response to Comment Agcy 1-7 and the Dudek Memorandum HRA Isopleths included in the Final EIR as Appendix K. As shown in Exhibits A through D, the isopleths of significant health risk are not within or near the park boundaries and park users would not be subject to significant health risk from the proposed project. Please see Master Response 20 - Conservatism of Metals Assumptions for additional detailed information.

Response to Comment Agcy 1-9

The commenter cites to language from the DEIR that notes measures to protect underground workers from asbestos exposure under MSHA permissible exposure level (PEL) requirements would also serve to limit emissions of aboveground asbestos exposure, and questions how the PELs will limit aboveground exposure.

While the DEIR correctly points out that measures to reduce airborne asbestos particles in the underground mine will consequently reduce airborne asbestos particles emitted aboveground from the mine, the MSHA PEL is not used by the DEIR as part of the impact analysis to determine the health risk of the public from exposure to airborne asbestos. Rather, the concentrations of asbestos at receptor locations are modelled and the health risk is calculated in accordance with OEHAA guidelines. OEHHA is the lead state agency for the assessment of health risks posed by environmental contaminants in California.

The Health Risk Assessment is based on conservative assumptions. Please see Master Response 22 – Conservatism of Asbestos Assumptions.

The threshold of significance for health risk from exposure to air pollutants including asbestos is an increased cancer risk of >10 cases per million persons. The Health Risk Assessment prepared for the project concludes that the health risk to the most sensitive receptor located north of the project site at UTM coordinates 671091 meter Easting /4342277 meters Northing (see page 27 of HRA included in Appendix E.1 of the DEIR), which would receive a greater exposure than visitors or employees at the Empire Mine Park, will be below this threshold.

[1] https://ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable.pdf

Response to Comment Agcy 1-10

The commenter states that the DEIR does not include an adequate map disclosing the dispersion of air pollutants from the project sites. A map has been prepared to clarify the location of the park and modelled health risk. The health risk to existing worker receptors was calculated in order to plot the isopleths for the Centennial site, which is surrounded by worker receptors rather than residential receptors. Please see Dudek Memorandum HRA Isopleths included in the Final EIR as Appendix K. As shown in Exhibits A through D, the isopleths of significant health risk are not within or near the park boundaries and park users would not be subject to significant health risk from the proposed project.

Response to Comment Agcy 1-11

The commenter states that the DEIR does not include an adequate map disclosing the dispersion of air pollutants from the project sites as relates to the Empire Mine Park. A map has been prepared to clarify the location of the park and modelled health risk. The health risk to existing worker receptors was calculated in order to plot the isopleths for the Centennial site, which is surrounded by worker receptors rather than residential receptors. Please see Dudek Memorandum HRA Isopleths included in the Final EIR as Appendix K. As shown in Exhibits A through D, the isopleths of significant health risk are not within or near the park boundaries and park users would not be subject to significant health risk from the proposed project. The threshold of significance for health risk from exposure to air pollutants including asbestos is an increased cancer risk of >10 cases per million persons. The Health Risk Assessment prepared for the project concludes that the health risk to the most sensitive receptor located north of the project site at UTM coordinates 671091 meter Easting /4342277 meters Northing (see page 27 of HRA included in Appendix E.1 of the DEIR), which would receive a greater exposure than visitors or employees at the Empire Mine Park, will be below this threshold. The commenter requests a map or grid showing the specific plumes applicable to the park area. This information is not necessary for the DEIR's analysis as it is not directly related to the threshold of significance for the health risk assessment. The maps provided in the Dudek Memorandum HRA Isopleths included in the Final EIR as Appendix K, provides sufficient detail to inform the public and the commenter regarding the project's health risk impacts

Response to Comment Agcy 1-12

The project would use polymers as a chemical stabilizer to reduce haul road dust. These chemicals are not toxic air contaminants and therefore do not require evaluation in the Health Risk Assessment. Research by the US EPA has shown that these types of dust suppressant products have minimal to no adverse impacts on water quality and aquatic life relative to the use of water alone. Please see Master Response 12 – Chemical Dust Stabilizers.

Response to Comment Agcy 1-13

The commenter expresses support for the Ozone Attainment Plan. As discussed on page 4.3-41 of the DEIR, the NSAQMD established thresholds of significance for CEQA purposes to achieve and maintain the National and California Ambient Air Quality Standards (AAQS). Because an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, a project that complies with the thresholds established by a local air district, such as the NSAQMD, would not result in adverse effects to human health related to criteria pollutant emissions. Notably, the NSAQMD thresholds used for criteria air pollutants for the project are the same thresholds used by the commenter in

the Empire Mine State Historic Park Site Characterization and Remediation Draft Program EIR in 2009.[2]

Response to Comment Agcy 1-14

The commenter questions how applicant proposed emissions reduction measures can reduce emissions impacts, when those measures were already assumed as part of the "unmitigated emissions" inventory. However, the commenter's question is based on a typo in the DEIR, as the applicant proposed emission reduction measures were not actually included in the unmitigated emissions inventory. Page 4.3-73 of the DEIR had an error, which reads:

"The emission data presented in Table 4.3-17 (i.e., unmitigated emissions) reflect the reductions that would occur with implementation of APM-AQ-1 and APM-AQ-2."

The word "with" was intended to be "without". This error has been corrected in the Final EIR. The unmitigated emissions do not reflect the use of Tier 4F engines; thus, the use of Tier 4F engines does achieve a reduction in emissions as compared to the unmitigated emissions. The typo is hereby corrected on page 4.3-73 of the DEIR:

> Mitigation Measure(s)
>
> The emission data presented in Table 4.3-17 (i.e., unmitigated emissions) reflect the reductions that would occur without implementation of APM-AQ-1 and APM-AQ-2. Table 4.3-19 shows the estimated maximum daily mitigated emissions associated with construction, operation, and reclamation of the project, accounting for additional emissions reductions associated with Mitigation Measure 4.3-1(b), which would result in a reduction in construction contractors' equipment exhaust criteria air pollutants during project construction (year 2021).

The above minor change serves to clarify the DEIR text, and there is no change to the analysis in the DEIR and the impact significance conclusion from the DEIR.

Response to Comment Agcy 1-15

The commenter asserts that the project should be considered to have a significant and unavoidable impact even after mitigation, regarding Impact 4.3-1. Please see Master Response 19 – NSAQMD Criteria Pollution Thresholds during Operations. As discussed in Master Response 19 - the DEIR imposes all mitigation measures required by the NSAQMD to reduce the project's impacts addressed in Impact 4.3-1 to less than significant.

Response to Comment Agcy 1-16

The commenter asserts that the DEIR contains a typo, which refers to Mitigation Measure 4.3-1[b] rather than 4.3-1(a). The commenter is correct and page 4.3-73 of the DEIR is hereby revised as follows:

> According to the NSAQMD, implementation of recommended mitigation measures for Level A and B thresholds (included as Mitigation Measure 4.3-1[~~b~~a] below) would reduce project impacts to a *less-than-significant* level during all years of project construction, operations, and reclamation.

The above minor change is for clarification purposes and does not change the analysis or conclusions in the DEIR.

[2] https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/6747547984/Aug%202009%20Empire%20Mine%20Draft%20PEIR.pdf, p. 4.2-20.

Response to Comment Agcy 1-17

The commenter asserts that the project's ROG, NOx, and PM_{10} emissions should be considered "potentially significant" after mitigation; however, the commenter misunderstands the NSAQMD guidelines. The NSAQMD requires implementation of certain mitigation measures for each defined level of emissions volumes (A, B, C) to achieve an impact determination of less-than-significant impact. As stated on page 4.3-41 of the DEIR, the NSAQMD has developed a tiered approach to significance levels. The tiered thresholds for Levels A, B, and C are given in Table 4.3-5 for a project's estimated emissions of criteria pollutants in pounds per day. A project with emissions qualifying it for Level A thresholds (i.e., all projects with emissions greater than zero) requires the most basic mitigation. Projects that qualify for Level B require more extensive mitigation, and projects that qualify for Level C require the most extensive application of mitigation. If unmitigated emissions of ROG, NOx, and/or PM10 exceed 136 pounds per day (Level C), then there is a potentially significant impact and mitigation is required; if mitigated emissions of ROG, NOx, and/or PM10 still exceed 136 pounds per day (Level C) after implementation of mitigation, then a significant and unavoidable impact would occur. Unmitigated emissions below Level C would result in an impact that is potentially significant, and mitigation is required; following implementation of mitigation (as specified separately for Level A and Level B by NSAQMD), emissions would be less than significant. The DEIR imposes the NSAQMD recommended mitigation measures for the project's ROG, NOx, and PM_{10} emissions, and therefore achieves a less than significant impact, per NSAQMD guidance. (DEIR, p. 4.3-73.) Notably, the NSAQMD thresholds used for criteria air pollutants for the project are the same thresholds used by the commenter in the Empire Mine State Historic Park Site Characterization and Remediation Draft Program EIR in 2009.[3] While the commenter asserts that emissions meeting NSAQMD level B thresholds should be considered "potentially significant" after mitigation, the commenter's 2009 EIR stated that the park project's NOx emissions, which were shown to meet NSAQMD level B thresholds, were "less than significant" after implementation of standard dust control mitigation, similar to the standard mitigation used in the project's DEIR. (See Empire Mine State Historic Park Site Characterization and Remediation Draft Program EIR, pp. 4.2-31 to 4.2-35.) In the Park's EIR, the analysis also relied on the standard NSAQMD mitigation and rules to conclude that emissions impacts would be less than significant, when stating as follows: "To ensure that criteria pollutant emissions are less than significant, the Project Proponents will comply with all applicable NSAQMD and State Rules and Regulations (where applicable) during the execution of Project Actions." (Id. at 4.2-34.) As such, the project's DEIR follows the same methodology for implementation of the NSAQMD's Guidelines For Assessing And Mitigating Air Quality Impacts Of Land Use Projects as was used by the commenter for its own EIR in 2009. Importantly, the DEIR's implementation of the NSAQMD's thresholds is consistent with NSAQMD guidance and implementation of those thresholds by the County on other projects.

Response to Comment Agcy 1-18

The commenter notes that some of the NSAQMD recommended mitigation measures would not achieve emissions reductions because they are designed for different types of land use projects as compared to an underground mine. The commenter then states that given the mismatch of some of the NSAQMD mitigation measures, the County should require other more project-specific mitigation measures. The DEIR already imposes Mitigation Measure 4-3-1(b), which requires a Construction Exhaust Emissions Minimization Plan that requires the use of Tier 4 Final engines or alternative sources of power. This mitigation measure is, as suggested by the commenter, a

[3] https://www.envirostor.dtsc.ca.gov/public/deliverable_documents/6747547984/Aug%202009%20Empire%20Mine%20Draft%20PEIR.pdf, p. 4.2-20.

measure that is project-specific and beyond the standard measures required by the NSAQMD. The mitigated emissions identified in the DEIR reflect the lower emissions that would be achieved by this mitigation measure. Please see Master Response 19 – NSAQMD Criteria Pollution Thresholds during Operations. Also see Response to Comment Agcy 1-17.

Response to Comment Agcy 1-19

A map has been prepared to clarify the location of the park and modelled health risk. Please see Dudek Memorandum HRA Isopleths included in the Final EIR as Appendix K. The park boundary is not within, nor close to, the 10 per million cancer risk isopleth which is the boundary for the threshold of significance for health risk. The health risk assessment used in the DEIR already analyzed the health impacts of toxic air contaminant exposure to a maximally exposed individual resident (MEIR) who is much closer to the project site, located north of the project site at UTM coordinates 671091 meter Easting /4342277 meters Northing (see page 27 of HRA included in Appendix E.1 of the DEIR) and would therefore receive higher exposure than the Empire Mine visitors and employees. The air quality analysis prepared for the DEIR found that the MEIR would not be subject to a chronic hazard quotient of 1.0 or greater, and would not be subject to a 10 per million cancer risk, so no significant health impact related to air pollutant exposure is reasonably anticipated at the Empire Mine Park for visitors or employees. Note that the toxic air contaminants contained in particulate matter (PM_{10}) emitted by the project's activities are considered in the Health Risk Assessment.

As discussed on page 4.3-2 of the DEIR, pollutants for which ambient air quality standards (AAQS) have been established are called "criteria" pollutants. Criteria pollutants are listed in Table 4.3.1 of the DEIR. NOx and PM_{10} are criteria air pollutants. As discussed on page 4.3-41 of the DEIR, the NSAQMD established thresholds of significance for CEQA purposes to achieve and maintain the National and California Ambient Air Quality Standards (AAQS). Because an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, a project that complies with the thresholds established by a local air district, such as the NSAQMD, would not result in adverse effects to human health related to criteria pollutant emissions. The project complies with the thresholds set by the NSAQMD, applies all required mitigation measures, and therefore would not cause significant health impacts at the Empire Mine Park due to criteria pollutants.

Response to Comment Agcy 1-20

The commenter expresses concern with health impacts to Empire Mine Park visitors and employees relating to toxic air contaminant and criteria air pollutant emissions from the project, and also asserts that APM-AQ-2 has been factored into the pre-mitigation emissions values in Table 4.3-17 of the DEIR. As discussed in Response to Comment Agcy 1-14 above, the DEIR contains a typo which states that Table 4.3-17 of the DEIR already includes application of APM-AQ-2; however, that table representing unmitigated emissions actually does not include application of APM-AQ-2. That typo has been corrected in the Final EIR.

Further, as discussed on page 4.3-2 of the DEIR, pollutants for which ambient air quality standards (AAQS) have been established are called "criteria" pollutants. Criteria pollutants are listed in Table 4.3.1 of the DEIR. NOx is a criteria air pollutant. As discussed on page 4.3-41 of the DEIR, the NSAQMD established thresholds of significance for CEQA purposes to achieve and maintain the National and California Ambient Air Quality Standards (AAQS). Because an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, a project that complies with the thresholds established by a local air district, such as the NSAQMD, would not result in adverse

effects to human health related to criteria pollutant emissions. Accordingly, these impacts are properly considered less than significant after implementation of mitigation. (DEIR, p. 4.3-73.)

Response to Comment Agcy 1-21

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog, and Master Response 37 - Birds and Raptors, regarding potential impacts to these species. In addition, please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Agcy 1-22

Please see Master Response 37 - Birds and Raptors, regarding potential impacts to the Willow Flycatcher. Please see Master Response 33 - Groundwater Dependent Vegetation, regarding dewatering impacts to riparian zones. Noise and vibration impacts to species was analyzed in DEIR Section 4.4.4, Impact 4.4-2, and considered less than significant.

Response to Comment Agcy 1-23

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog. Since publication of the DEIR, a second Foothill Yellow Legged Frog survey was conducted which did not identify any special status amphibian species.

Response to Comment Agcy 1-24

As discussed on page 4.8-45 of the DEIR, during mining, groundwater inflow into the underground workings would require dewatering. The dewatering would continue at a rate equal to the groundwater inflow into the mine, ranging from approximately 500 gpm to 1,200 gpm seasonally and averaging approximately 850 gpm or about 1.9 cfs. The maximum discharge rate permitted would be 2,500 gpm or 5.6 cfs, which would allow flexibility for unexpected seasonal inflows, operational issues. These fluctuations are substantially less than fluctuations resulting from seasonal storm events and NID discharge (see Appendix K.1 and K.2 of the DEIR). Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. Regarding the Foothill Yellow Legged Frog see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Agcy 1-25

Please see Response Agcy 1-24 above.

Response to Comment Agcy 1-26

Noise and vibration impacts to species was analyzed in DEIR Section 4.4.4, Impact 4.4-2, and considered less than significant. The commenter requests a specific noise impact study on wildlife but does not provide any specific reasoning or evidence disputing the conclusions in the DEIR. It should be noted, Brunswick Industrial Site increases in daytime and nighttime ambient noise level increases do not extend to the Empire Mine State Park (EMSP) boundary (see DEIR figure 4.10-7). Engineered fill placement at the Centennial Industrial Site is the closest project activity to the EMSP and could last approximately 6 years. The nearest receptor to the EMSP is number 8 (see DEIR Figure 4.10-3) and the closest noise and vibration measurement location is number 7 and 8 (see Figure 4.10-3). As shown in DEIR Table 4.10-12, Centennial Industrial Site engineered fill activity does not exceed existing baseline noise levels (see Table 4.10-6). As a result, wildlife

species that may use the EMSP should not experience an increase in noise levels and therefore, such impacts would be considered less than significant.

Response to Comment Agcy 1-27

Please see Response Agcy 1-24 above.

Response to Comment Agcy 1-28

Please see Response Agcy 1-24 above.

Response to Comment Agcy 1-29

The commenter states that the specific process by which explosives will be received, documented, and transferred to storage in the surface shaft is not described in the DEIR. However, a robust description of the transfer of explosives underground, and relevant regulations, is provided in Chapter 4.7 of the DEIR. More specific details are not required for the analysis of the DEIR.

The commenter believes that the quantity and frequency of explosives deliveries has not been evaluated in the DEIR and that the impact should be changed to potentially significant. The commenter states that transportation of explosives and potential for accidents, particularly as a potential source of wildfire ignition, and that they cannot understand the risks and the DEIR cannot mitigate the potential significant impact. As stated on page 4.7-24 of the DEIR, during operations, explosives would be transported to the Brunswick Industrial Site a maximum of once a week and a minimum of once every three weeks. During initial underground construction, explosives may be transported to the site more frequently. As stated on page 4.7-25 of the DEIR, the transportation of explosives in the United States has resulted in only a limited number of incidents. A review of DOT incident reports for highway transportation of class 1.1B, 1.4B, 1.1D, and 1.5D materials shows 149 incidents over the past 30 years in the United States. The majority of these incidents were vehicle accidents resulting in no release or spillages. No fatalities were reported in any incidents and only 1 incident resulted in injuries. However, as stated on page 4.7-31 of the DEIR it is already concluded that the proposed project could result in a significant impact related to the routine transport, storage, and use of explosives and mitigation measures are proposed in the DEIR to reduce the impact to a less than significant level.

Response to Comment Agcy 1-30

The commenter states that it disputes the peak flow rates during storm events which are cited in the DEIR from a 1986 report by Cranmar Engineering. This information was provided by the City of Grass Valley to the applicant during the preparation of the Use Permit application. The calculations used by the City of Grass Valley for their Storm Drainage Master Plan have not been confirmed nor are required to be evaluated in the analysis presented in the DEIR. However, based on other information presented in the DEIR, the Cranmar Engineering report's estimated magnitude of peak flow rates during a 10-year storm is not unreasonable. For example, as shown in Table 4.8-1 of the DEIR, the peak runoff from the Brunswick Industrial Site alone is estimated at 140 cfs during a 10-year storm. This calculation was performed by a registered civil engineer using the unit-hydrograph method consistent with Nevada County standards. The peak storm flow in South Fork Wolf Creek at the location of Empire State Park would be greater due to the larger catchment area at that location. Additionally, Balance Hydrologics, using a regional regression equation, estimated peak flow in South Fork Wolf Creek below Ophir Street (Reach F) at 350 cfs for a 10-year flood. (See page 28 of Appendix K.1). Therefore, peak flows in South Fork Wolf Creek during a 10-year storm event will be much larger than the 20 cfs theorized by the commenter.

Response to Comment Agcy 1-31

The commenter cites flow volume data observed on the South Fork Wolf Creek and theorizes that peak flows as high as 20 cfs are common every few years. The County concurs that peak storm flows of 20 cfs are expected to occur in South Fork Wolf Creek. A moderate stormflow on January 25-26, 2020, at Reach F was measured at 17.3 cfs in response to 1.25 inches of rainfall. (See page 28 of Appendix K.1). This amount of rainfall is less than a 24-hour one year storm of 3.66 inches, according to the NOAA Atlas Precipitation Frequency Estimate for Grass Valley.

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca

Response to Comment Agcy 1-32

The County agrees with the commenter that "Reach D" of South Fork Wolf Creek is within the boundaries of Empire State Park. The commenter correctly states that Figure 4.8-25 of the DEIR does not include a portion of the Empire Mine State Historic Park where the Bennett Street Grasslands are located. However, this figure is reproduced from Figure A-1 of the Geomorphic Assessment (Appendix K.1) and shows a historic overlay prior to the addition of the "Bennett Street Grasslands" to the Park, which explains the discrepancy noted by the commenter. The park boundaries as shown on that map merely reflect the boundaries at the time the historic overlay was created, and do not impact the analysis of the Geomorphic Assessment. Accordingly, the revision of this figure is not necessary.

Response to Comment Agcy 1-33

The commenter expresses appreciation for a DEIR excerpt explaining the Clean Water Act, and notes that a limited threat discharge permit is appropriate where there will be minimal or no harm or impairment to existing beneficial users or receiving waters. Comment noted.

Response to Comment Agcy 1-34

The commenter expresses appreciation for a DEIR excerpt regarding protection of aquatic resources from water degradation. Comment noted.

Response to Comment Agcy 1-35

The commentor expresses appreciation for the overview of the Basin Plan and explanation of beneficial uses provided in the DEIR. Comment noted.

Response to Comment Agcy 1-36

The commenter asserts that the project would conflict with Nevada General County Plan Policy FH-10.3.2 which states "avoid increases in downstream flooding potential by protecting natural drainage" due to the proposed release of 5.6 cfs of water. However, the project would not increase downstream flooding potential because of the proposed onsite detention pond; therefore, no increase in flooding potential is expected.

As stated on Page 4.8-70 of the DEIR, At the Brunswick Industrial Site, a detention basin would be constructed at the downstream toe of the engineered fill placement slopes, above South Fork Wolf Creek. The detention basin for the Brunswick Industrial Site is sized to detain storm flows to compensate for the quantity of treated mine water discharged to South Fork Wolf Creek, in addition to compensating for increased runoff from potential future industrial development of the site.

During larger storm events, the proposed detention pond on the Brunswick Industrial Site would reduce the peak flows within South Fork Wolf Creek by much more than 5.6 cfs, as shown in Table 4.8-4. Thus, under project conditions, the overall peak storm flows would be lower than they are under existing conditions, resulting in less potential for erosion and sediment transport than

under existing conditions. (See page 75 of the DEIR). As such the project would not conflict with Nevada General County Plan Policy FH-10.3.2.

Response to Comment Agcy 1-37

The commenter states that the DEIR does not include discussion of oil, grease and silt traps for the Brunswick site in connection with General Plan Policy 11.6A, Water Element – Goal 11.1. As stated on page 4.8-81 of the DEIR, industrial sites are required to have ongoing Industrial permits with the RWQCB that provide permanent water quality protection. Any new projects with Use Permits or Development Permits are required to record a stormwater maintenance covenant on their property prior to operations in conformance with General Plan Policy 3.19C. This provides a legally enforceable mechanism for long-term storm water facility maintenance. If the projects are one-acre or larger, they are also required to provide oil, grease and silt traps on the property pursuant to GP Policy 11.6A. These traps are maintained by the aforementioned storm water facility maintenance covenant.

The commentor states that a detailed Industrial Stormwater Pollution Prevention Plan is required as part of the DEIR. However, the details of this plan are not available because it must be approved by the Central Valley Regional Water Control Board as required in Mitigation Measure 4.8-1(c). The DEIR requires the project site to obtain a SWPPP; however, a SWPPP is submitted after project approval before operations begin, not for review during the CEQA process. Engineering level detail, such as this would be provided in the SWPPP, is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.)

Response to Comment Agcy 1-38

The commenter asserts that the project's discharge to South Fork Wolf Creek may be detrimental to the downstream environment or water users. Please see Response to Comment Agcy 1-36. As documented in the DEIR, the peak flood flows within South Fork Wolf Creek under the project would actually be less than current baseline flows due to the detention basin at the Brunswick Industrial Site (see page 4.8-70 of the DEIR). Please see Master Response 36 - Flows in South Fork Wolf Creek, and Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Agcy 1-39

The commenter states that it cannot assess the impact of groundwater depletion within the Empire Mine Park because figures are not included in the DEIR to illustrate the impact. Additionally, the commenter requests a separate impact evaluation for groundwater depletion relating to riparian forests, plant communities and ecosystems. This separate evaluation is not required because groundwater drawdown from mine dewatering would not affect riparian forests or plant communities and ecosystems, including those present inside the Empire Mine Park boundaries. Please see Master Response 33 – Groundwater Dependent Vegetation. Nonetheless, to clarify that groundwater drawdown induced from the mine would not impact groundwater dependant (phreatophytic) vegetation, Itasca Denver prepared a memo showing the simulated drawdown in selected meadows. These three meadows (Brunswick site, Empire Mine Park, and Loma Rica) would experience minimal drawdown, even without consideration of the minewater discharge to South Fork Wolf Creek. The Empire Park Meadow would experience no drawdown with the addition of 1.9 cfs (average maintenance dewatering rate) and less than 1 inch of drawdown with no added flow from mine dewatering. (See Itasca Memo – Simulated Drawdown of Selected Meadows attached to the Final EIR as Appendix H). If the addition of mine water discharge were considered, there would likely be even less impact. As such, these impacts are less than significant.

The park boundaries have been added to Sheet 16, as shown in Appendix L to the Final EIR.

Response to Comment Agcy 1-40

The commenter proposes additional water level monitoring wells within the Empire Mine Park, the Upstream Reach and within the Bennett Street Grasslands. However, the locations proposed for groundwater monitoring in this comment are in areas where the projected drawdown due to dewatering would be substantially less than normal seasonal fluctuations, and where discharge of treated water would more than offset any potential drawdown due to dewatering. Please see Response to Comment Agcy 1-39 and refer to Sheet 16 attached to the Final EIR as Appendix L. Please also see Itasca Memo – Simulated Drawdown of Selected Meadows, attached to the Final EIR as Appendix H. No significant impact due to dewatering is expected in the Empire Mine Park area, given the existing seasonal fluctuations, low level of drawdown and increased flow in the creek; therefore, monitoring wells within this area is not required.

Response to Comment Agcy 1-41

An analysis of groundwater drawdown, which includes the area in the boundaries of the park, has already been conducted (see Appendices K.2 and K.3 of the DEIR). Please see Response to Comments Agcy 1-39 and 1-40. Please also see Master Response 33 - Groundwater Dependent Vegetation.

Response to Comment Agcy 1-42

The commenter disagrees with the DEIR's conclusion that the threshold of bedload sediment mobility is 23 cfs, but seems to agree that bedload sediment mobility in South Fork Wolf Creek is above 17.3 cfs. This comment infers that the project would add 5.6 cfs to winter storm event flows. Please see Response to Comment Agcy 1-36. The detention basin at the Brunswick Industrial Site would reduce peak storm flows in South Fork Wolf Creek by more than 5.6 cfs.

As stated on page 4.8-69 of the DEIR, the analysis is to determine whether the project would result in substantial erosion or siltation. Calculations conducted by Balance indicate that bed sediment becomes mobilized at approximately 20 cfs in reaches of South Fork Wolf Creek that are susceptible to bed mobility. Filed measurements at streamflows up to 17.3 cfs in South Fork Wolf Creek showed no active bedload transport. Balance Hydraulics concluded that the threshold for causation of substantial erosion or sedimentation is greater than 23 cfs. (See page 39 of Appendix K.1.) As the detention basin at the Brunswick Industrial Site would reduce peak storm flows by more than 5.6 cfs, and non-storm flows would remain below even the commenter's suggested lower 17.3 cfs threshold, no significant impacts related to erosion or flooding are expected.

Response to Comment Agcy 1-43

The threshold for causation of substantial erosion or sedimentation is greater than 23 cfs. Please see Response to Comment Agcy 1-42.

This comment implies that the project would add 5.6 cfs to winter storm event flows. Please see Response to Comment Agcy 1-36. Rather than add to peak flows during storm events, the detention basin at the Brunswick Industrial Site would reduce peak storm flows by more than 5.6 cfs.

Response to Comment Agcy 1-44

The commenter asserts that the project's proposed discharge of up to 5.6 cfs of water to South Fork Wolf Creek would have a significant effect on turbidity in South Fork Wolf Creek. The commenter cites existing turbidity measured by Balance as evidence that the 5.6 cfs could increase turbidity, but the cited turbidity observations represent baseline conditions and do not point to a potential impact.

Mitigation Measure 4.8-1(a) requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. Water quality standards include total suspended solids and turbidity. Therefore, mine water discharge will not be turbid.

As stated on page 54 of Appendix K.2, turbidity values were also higher in the upstream location, at the proposed treated water discharge point, than they were at the downstream location. This finding suggests that there are existing sources of fine sediment located upstream of the proposed discharge location and additional runoff that enters South Fork Wolf Creek as the flow moves downstream tends to dilute the turbidity from upstream. As shown in Table 3-10 of Appendix K.2, turbidity at Reach B was 79 NTU at 9.7 cfs flow and at Reach F was 48 NTU at 17.3 cfs. As demonstrated by the data, the increase in flow, similar to the maximum proposed discharge, past the proposed discharged point (Reach B) decreased turbidity. As such, the data provided in the DEIR suggests that the maximum 5.6 cfs discharge into South Fork Wolf Creek, which will meet basin plan turbidity standards as required by the RWQCB, will dilute turbidity caused by upstream sources rather than add turbidity to the creek.

Response to Comment Agcy 1-45

The commenter requests that Impact 4.8.3 be revised to reflect that the project will result in significant turbidity impacts. As stated on page 4.8-69 of the DEIR, the analysis considers whether the project would result in substantial erosion or siltation, not merely the presence of any turbidity. Please see Response to Comment Agcy 1-42. As demonstrated by the data, the increase in flow, similar to the maximum proposed discharge, past the proposed discharged point (Reach B) decreased turbidity due to dilution of turbid water from upstream sources. Please see Response to Comment Agcy 1-44. Additionally, contrary to the commenter's assertion, peak storm flows would be lower than they are under existing conditions due to the construction of a storm water detention pond, resulting in less potential for erosion and sediment transport than under existing conditions during storm events. (See Response to Comment Agcy 1-36).

Response to Comment Agcy 1-46

The commenter suggests that the DEIR is incorrect in concluding that the project is consistent with the Nevada County General Plan, the California Water Code and the Sacramento and San Joaquin Basin Plan with regard to flooding potential, sustainable water resources and riparian habitats, land use conflicts, detrimental increase in off-site discharge, impacts to beneficial uses due to pollution, and impacts to the ecosystem due to increased turbidity and sedimentation. The commenter generally alleges that the project would conflict with the cited policies and laws, but does not specify how the project would conflict with each policy or law.

With regard to the policies addressing downstream flooding, the project would not increase downstream flooding impacts and would actually reduce peak storm flows due to the construction of a detention pond. Please see Response to Comment Agcy 1-36.

Further, the DEIR has already concluded that the project may have a potentially significant impact on water quality and has identified Mitigation Measure 4.8-1(a) to address these potential impacts. This mitigation measure requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. The NOI shall include evaluation of potential constituents of concern and demonstrate that water treatment plant (WTP) design shall successfully treat mine water to meet the water quality standards and treatment goals.

Groundwater drawdown from proposed mine dewatering would not impact groundwater dependent vegetation (riparian trees or sensitive vegetation communities); please see Master Response 33 - Groundwater Dependent Vegetation. As discussed in Appendix F.10, increased flows up to 5.6 cfs will not significantly affect amphibians or benthic macro invertebrates. Please see Master Response 36 - Flows in South Fork Wolf Creek.

Response to Comment Agcy 1-47

The commenter states that the Empire Mine Park should be considered a sensitive receptor for the purpose of assessing noise and vibration impacts, and also states that it is concerned that noise and vibration could impact wildlife at the park. The commenter is correct that the nearest trail within the Empire Mine SHP is approximately 850 feet from the boundary of the Brunswick Site. However, the distance from that nearest trail to the proposed project's noise-generating operations within the Brunswick Site is over 2,500 feet. And while the Bennet Street Grasslands are approximately 900 feet south of the Centennial Site, the nearest trail within the Empire Mine SHP is approximately 2,250 feet from the nearest proposed noise-generating activities within the Centennial Site. Because other sensitive receptors located much closer to the noise-generating aspects of the proposed project were evaluated and determined to be less than significantly impacted by project noise generation, and noise/vibration diminish by distance form the source, it follows that more distant receptors, including the Empire Mine SHP trail network, would similarly be less than significantly impacted by project noise generation. Examination of DEIR Figures 4.10-7 and 4.10-8 indicate that both daytime and nighttime noise generation of operations at the Brunswick Site would be well below 40 dBA at the Empire Mine site. DEIR Table 4.10-4 (General Plan Noise Element Exterior Noise Limits) shows that the County's noise standard applicable to recreation use is 70 dBA L_{eq} during the hours in which the park would be open to the public (i.e., 7 am - 7 pm). Therefore, the predicted project noise level of less than 40 dBA at the park site from Brunswick operations would be more than 30 dBA below the County's noise standard applicable to recreation uses. At the portions of the Empire Mine SHP nearest to the Centennial Site, predicted daytime noise levels are 27 dBA at the grasslands and 22 dBA at the nearest trail within the park. These predicted noise levels at both locations are well below the County's 70 dBA daytime noise level standard. As a result, the Empire Mine SHP would not be adversely impacted by noise from operations at the Centennial Site. This level of noise is significantly lower than the current daytime ambient noise in the grasslands area which is estimated to be 53 decibels (L_{eq}) at receptor location #8, located on the eastern boundary of the Bennett Street Grasslands and to be 58 decibels (L_{eq}) at receptor location #9 located near the “upstream reach” of the park. See Table 6 and Figure 3 of Appendix L in the DEIR. As stated on page 4.4-74 of the DEIR, in general, wildlife species have been shown to acclimate to the noise environment in which the species resides. Wildlife species in proximity to the E. Bennett Road would be considered acclimated to noise levels associated with greater sound levels as would be created by the activities at the Centennial site.

Response to Comment Agcy 1-48

Please see Response to Comment Agcy 1-26 above. The analysis of Impact 4.10-1 in the DEIR considers the noise impact to be significant and unavoidable to human sensitive receptors and not wildlife. As shown in Figure 3 and 4 of Appendix L, Sensitive Receptor Site 9 is between ambient noise and vibration measurements sites 7 and 8. The average ambient noise (Leq) at these sites during daytime hour ranges from 54 to 59 decibels as shown in Table 1 of Appendix L and the predicted noise from the construction of the potable water pipe along E. Bennett Road is predicted to be 58 decibels at receptor site 9. This is similar to the existing ambient noise from traffic at this location. As stated on page 4.4-74 of the DEIR, studies of the effects of noise on wildlife populations have shown that while some species can be negatively affected by traffic

noise and wildlife densities are generally inversely proportional to distance from roadways, many species of wildlife are unaffected by roadway noise. In general, wildlife species have been shown to acclimate to the noise environment in which the species resides. Wildlife species in proximity to the E. Bennett Road would be considered acclimated to noise levels associated with similar sound levels as would be created by the temporary construction activities for the pipeline.

Response to Comment Agcy 1-49

The commenter states that diesel fuel storage and use of numerous flammable chemicals daily by the project was not fully evaluated in the DEIR and that these constituents are inherently dangerous and can exacerbate wildfire if improperly handled and/or released. The commenter does not provide specifics as to why the DEIR does not fully evaluate these issues. Chapter 4.7 of the DEIR analyses hazardous materials and has proposed Mitigation Measures 4-7(a) through (d) which would reduce the risk from transport, storage, and use of hazardous materials to a less than significant level. Chapter 4.13 of the DEIR discuss and analyzes wildfire risk attributable to the proposed project. Please see Master Response 6 – Wildfire Impacts.

The commenter states that fuel treatment projects that have occurred in the Union Hill area of the Empire Mine State Historic Park from 2014-2021, located 450 feet west and uphill of the Brunswick site, are not included in Figure 4.13-2 of the DEIR. This comment is noted. The inclusion of this information would not change the significance conclusions of the DEIR in regard to wildfire**.**

Response to Comment Agcy 1-50

The park boundary and elevations have been added to Sheet #16, attached to the Final EIR as Appendix L. The elevation in this area is similar to wells in the Beaver Drive area and Cedar Ridge Area (W140-W144).

As shown in Table 4-2 of Appendix K.2, the depth to water (well depth minus water column) is estimated to average between 45 ft to 78 ft. As shown in Table 4-4 of Appendix K.2, the depth to water is estimated to average 40 feet in the Cedar Ridge area. The typical seasonal water level fluctuations for wells in the Beaver Drive area (1995 Well ID 4, 6, 7, 21, 85) are approximately 25 ft as shown in the hydrographs in Appendix B of Appendix K.2.

The depth to groundwater and seasonal fluctuation in this area of the Park is therefore consistent with the description provided in the DEIR. As discussed on page 4.13-21 of the DEIR, the depth to groundwater generally mimics the topography, but the depth is greater under ridges and drainage divides and closer to the surface near creeks and valleys. In the areas away from the creeks and valleys, the depth to groundwater is typically greater than 10 feet and, in many cases, may be 100 feet or more. In addition, the normal seasonal fluctuation in the depth to groundwater may be 10 feet to 30 feet or more. Thus, in the areas away from the creeks, the existing groundwater surface is below the typical depth of rooted vegetation and tap roots from trees, especially during the drier months when the depth to groundwater is at its greatest.

As discussed in Master Response 33, it should be noted that the root depths referred to in Appendix K.2 represent extreme cases and the analysis of impact to vegetation is therefore conservative. The terrestrial vegetation in the project area, including trees present in the Empire Mine State Park, have roots depths typically less than 6 feet, which is well within the unsaturated zone above the groundwater table. Please see Master Response 33 – Groundwater Dependent Vegetation.

Response to Comment Agcy 1-51

The park boundary and elevations have been added to Sheet #16, attached to the Final EIR as Appendix L. As shown, the simulated ground water drawdown for the flat meadow area north of South Fork Wolf Creek (the "valley bottom") is outside of the 1-foot drawdown contours and would be less than 1 foot of drawdown, and therefore negligible. The Ground Water Model did not simulate recharge from the additional mine water discharge and therefore the drawdown contours shown are conservative in the area adjacent to the creek. Please see Master Response 33 – Groundwater Dependent Vegetation.

Response to Comment 1-52

Groundwater drawdown and the impact to vegetation was discussed on pages 4.13-21 and page 4.13-21 in the DEIR. Please see Master Response 33 – Groundwater Dependent Vegetation.

Agency Letter 2

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 3
703 B STREET | MARYSVILLE, CA 95901-5556
(530) 513-0584 | FAX (530) 741-4245 TTY 711
www.dot.ca.gov/dist3

February 25, 2022

GTS# 03-NEV-2020-00215
SCH # 2020070378

Matt Kelley
Senior Planner
County of Nevada
950 Maidu Ave
Nevada City, CA 95959

Idaho Maryland Mine – Rise Grass Valley

Dear Matt:

Thank you for including the California Department of Transportation (Caltrans) in the Initial Consultation review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

Agcy 2-1

The proposed project of a combined application for a Conditional Use Permit and Reclamation Plan to re-initiate underground mining and gold mineralization processing of the Idaho-Maryland Mine within unincorporated Western Nevada County. The proposed project would be located on two properties owned by Rise Grass Valley is requesting comment on a Draft Environmental Impact Report (DEIR). The following feedback is based on the provided DEIR.

Traffic Operations – Highway Operations

Agcy 2-2

The applicant should specify if a portion of mitigation fees will be allocated for improvements at the State Route 20 (SR 20) on/off-ramps. With other future development in the area, Nevada County should continue to coordinate with Caltrans to determine appropriate solution(s) to the existing intersection at Brunswick Road and SR 174, which operates at LOS E per the Draft EIR in the SB direction on Brunswick Road in the PM peak hour.

Hydraulics

Agcy 2-3

The Watersheds areas on section 4.8 seem smaller than what the online USGS tool StreamStats found the Upper Wolf Creek and South Fork Wolf Creek at 2816 acres and 1472, respectively.

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Agcy 2-4

The 566 acre difference seems to be from StreamStats including an area NW SR-49. Please clarify why is there no consolidated document of all mitigations the draft EIR states on pages 4.8-52, 4.10-37, 4.10-45, and 4.10-58.

Agcy 2-5

The 200 heavy truck trips per day for transporting mining material (See page 4.10-35 of the Draft EIR) were not analyzed for impact to Hwy 49 or local roads for the lifespan of the road structure. The roads used by these trucks could potentially decrease the lifespan of the roadways.

Agcy 2-6

Please provide our office with copies of any further actions regarding this project or future development of the property. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any questions regarding these comments or require additional information, please contact Colin Fredrickson, by phone (530) 812-5049 or via email to colin.fredrickson@dot.ca.gov.

Sincerely,

Kevin Yount

KEVIN YOUNT, Branch Chief
Office of Transportation Planning
Regional Planning Branch—East

"Provide a safe and reliable transportation network that serves all people and respects the environment"

AGENCY LETTER 2: KEVIN YOUNT, CALIFORNIA DEPARTMENT OF TRANSPORTATION

Response to Comment Agcy 2-1

This is an introductory comment and does not address the DEIR. Comment noted.

Response to Comment Agcy 2-2

As stated on page 4.12-24 of the DEIR, The Nevada County Transportation Commission, in partnership with Nevada County, Nevada City, and the City of Grass Valley, established the Regional Transportation Mitigation Fee (RTMF) program in 2001. Under the RTMF program, development impact fees are collected to help fund construction of the regional system of roads, streets, and highways needed to accommodate growth in western Nevada County. The purpose of the RTMF is to establish a uniform, cooperative program to mitigate the cumulative indirect regional impacts of future developments on traffic conditions of regional roadways in Nevada County. The fees help fund improvements needed to maintain the target LOS in the face of the higher traffic volumes brought on by new developments.

The proponent would be required to pay the required RTMF based on the total thousand square feet of buildings constructed at the specified fee at the time of construction (see Mitigation Measure 4.12-1(a)). The allocation of these funds would be allocated to projects by the RTMF. Such allocations could include State Route 20 on/off ramps; however, the allocation of these funds would depend on the projects and priorities of the RTMF.

It is also noted that Mitigation Measure 4.12-1(b) of the DEIR requires the applicant to enter into a Traffic Mitigation Agreement with the County regarding the SR 174/Brunswick Road intersection. The Agreement shall require the applicant to pay the project's fair share contribution toward the improvements necessary to improve intersection operations to an acceptable level.

Response to Comment Agcy 2-3

Sheet 16 shows this missing area and is attached to the Final EIR as Appendix L. The area of the Upper Wolf Creek watershed on page 4.8-2 of the DEIR is hereby corrected to state the area at 2,820 acres.

> **Regional Hydrology**
>
> The project sites are located within two watershed areas. The Centennial Industrial Site is located in the Upper Wolf Creek watershed, which encompasses approximately ~~2,250~~2,820 acres upstream from the western end of the Centennial Industrial Site. The Brunswick Industrial Site is located in the South Fork Wolf Creek watershed, which encompasses approximately 1,450 acres and is upstream of a culvert where the creek passes underneath part of the City of Grass Valley.

The stated area of the South Creek Wolf Creek watershed of 1,450 acres is similar to the streamstats report from USGS. These watershed areas presented in Appendix K.2 are not used the analysis of the DEIR and therefore no other changes are required. Hydraulic analysis by Nevada City Engineering, Itasca, and Balance used the assumptions of watershed areas as stated in those technical reports.

Response to Comment Agcy 2-4

The consolidated mitigations are presented in Table 2-1, Summary of Impacts and Mitigation Measures, of the DEIR, and Chapter 4, Mitigation Monitoring and Reporting Program, of this Final EIR.

Response to Comment Agcy 2-5

The location of traffic counts used in the traffic analysis were vetted and approved by the Nevada County Public Works Department. Class and Volume counts were not conducted on SR49 or the ramps from Brunswick Road to the highway, which would allow a Traffic Index to be calculated. Furthermore, the Nevada County Traffic Impact Analysis Guidelines do not require an analysis of Traffic Index or impacts to lifespan of roadways. Truck traffic on state highway infrastructure is not an incompatible use that requires analysis under CEQA. Therefore, the analysis requested is not required for the EIR.

Response to Comment Agcy 2-6

Comment noted. Nevada County will provide the commenter with notifications regarding the proposed project.

Agency Letter 3

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

April 4, 2022

Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959
Idaho.MMEIR@co.nevada.ca.us

Dear Mr. Kelley:

Subject: IDAHO-MARYLAND MINE PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)
SCH# 2020070378

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Availability of a DEIR from Nevada County Planning Department (County) for the Idaho-Maryland Mine Project (Project) pursuant the California Environmental Quality Act (CEQA) statute and guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, native plants, and their habitat. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code.

Agcy 3-1

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources, and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Fish & G. Code., § 1802.) Similarly for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project is subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code is recommended. CDFW also administers the Native Plant Protection Act, Natural Community Conservation Act, and other provisions of the Fish and Game Code that afford protection to California's fish and wildlife resources.

PROJECT DESCRIPTION SUMMARY

The Project's surface components will be located on approximately 175.64 acres consisting of the Brunswick Industrial Site, the Centennial Industrial Site, and a 0.30-acre portion of East Bennett Road for off-site improvements associated with a potable water pipeline easement. The Project would also involve underground mining within an approximately 2,585-acre mineral rights boundary owned by the Rise Grass Valley.

Agcy 3-2

The Project consists of re-initiating underground mining and gold mineralization processing for the Idaho-Maryland Mine over an 80-year period. Following completion of mining and processing activities, the Project sites would be reclaimed to open space and industrial uses. The Project would involve: (1) dewatering of the underground mine workings; (2) construction and operation of aboveground processing and water treatment facilities at the Brunswick Industrial Site; (3) engineered fill placement for potential future industrial pad development at the Centennial and Brunswick Industrial Sites; (4) installation of a potable water pipeline for residential potable water supply; and (5) reclamation of the Project sites in accordance with the Project's proposed Reclamation Plan. From the total of 175.64 acres included in the Project sites, approximately 104 acres would be disturbed as a result of construction of the facilities proposed to support dewatering, mining, and processing at the Idaho-Maryland Mine, as well as engineered fill placement.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below, in addition to the comments in Attachment 1, to assist the County in adequately identifying and, where appropriate, mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources.

Agcy 3-3

CDFW is primarily concerned with the Project impacts to existing fish and wildlife resources including brown trout (*Salmo trutta*), foothill yellow-legged frog (*Rana boylii*) (FYLF), California red legged frog (*Rana draytonii*), Pine Hill flannelbush (*Fremontodendron californicum ssp. decumbens*), California black rail (*Laterallus jamaicensis coturniculus*), willow flycatcher (*Empidonax traillii*), and other aquatic and terrestrial plant and wildlife species. CDFW is also concerned with impacts from the discharge of water on riparian habitat, impacts to downstream aquatic resources from mining activities, and dewatering impacts on water temperature, nutrient concentrations, and turbidity. CDFW provides the attached and following comments for the County's consideration:

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Agcy 3-4

1. On page 2-30, Measure 4.4-1(a) for Pine Hill flannelbush (*Fremontodendron californicum ssp. decumbens)* lists Project-specific mitigation measures to be implemented on the Centennial Industrial Site. Some of these measures include seed collection, transplantation, and creating a Habitat Management Plan (HMP). Pine hill flannelbush is listed as rare under the Native Plant Protection Act (NPPA) (Fish & G. Code § 1900 et seq.). The NPPA prohibits the take or possession of state-listed rare and endangered plants, including any part or product thereof, unless authorized by CDFW or in certain limited circumstances. Please see comment 3 for Incidental Take Permit (ITP) recommendations.

Agcy 3-5

2. On page 2-34, two of the special status plants that mitigation measure 4.4-1(b) refers to, are listed as state endangered, the Stebbin's morning glory (*Calystegia stebbinsii*) and the Scaddel Flat checkerbloom (*Sidalcea stipularis*). Measures indicated to be included in the HMP as currently described in the DEIR would result in take. Measures resulting in take include, but are not limited to, on page 2-37 *"remove bulbs of individual plants to be directly impacted during the dormant season; relocate the bulbs to a site with similar soil, hydrologic, vegetation type and aspect as the portion of the project site where the plants are found; and identify the location(s) for dormant season relocation and site selection for transplantation."* As stated above, take of state-listed plants due to Project activities may only be permitted under an appropriate CESA take authorization. Please see comment 3 for ITP recommendations.

Agcy 3-6

Additionally, the DEIR should cover a range of possibilities for mitigation. The use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species are generally experimental in nature and largely unsuccessful. Therefore, the DEIR should describe additional mitigation measures utilizing habitat restoration, conservation, and/or preservation, in addition to avoidance and minimization measures, if it is determined that there may be impacts to rare, threatened, or endangered species.

Agcy 3-7

3. CDFW recommends that an ITP be obtained where the Project has the potential to result in take of a species state-listed as rare, candidate, threatened, or endangered under CESA or NPPA, either through construction or over the life of the Project. Plant species not listed as rare, threatened, endangered, or candidates for listing under CESA or NPPA may nevertheless meet the definition of rare or endangered provided in CEQA (Cal. Code Regs., tit. 14, § 15380, subd. (b).). Please note that mitigation measures that are adequate to reduce impacts to a less-than significant level to meet CEQA requirements may not be enough for the issuance of an ITP. To issue an ITP, CDFW must demonstrate that the impacts of the authorized take will be minimized and fully mitigated (Fish & G. Code § 2081 (b)). To facilitate the issuance of an ITP, CDFW recommends the DEIR include species specific measures to minimize and fully mitigate the impacts to any state-listed species the Project activities have the potential to take.

Agcy 3-8

4. On page 2-38, the FYLF pre-construction survey and avoidance and minimization measures as laid out in measure 4.4-2(a), details Visual Encounter Surveys (VES) to be conducted. However, given that there are sightings of FYLF within five miles, both to

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the north at Deer Creek, and to the East at Greenhorn Creek, the limited historic survey data available in the immediate Project vicinity, and the lack of information regarding the distribution and extent of the current FYLF population within the Project area, CDFW recommends FYLF surveys and habitat assessments be conducted throughout the Project Study Area and include the results in the DEIR. CDFW recommends that surveys be conducted in accordance with CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (2018), available here: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157562&inline. CDFW recommends the following survey and species considerations be incorporated into the DEIR for Project implementation:

a. As described in the CDFW's *Considerations for Conserving the Foothill Yellow-Legged Frog* (2018) document, VES conducted during the late summer are often the easiest method for determining presence; subadults and occasionally adults are often observed along river margins, and subadult and adult frogs will likely also be observed in tributary streams (Crump and Scott 1994).

b. To increase the likelihood of detection, surveys should include at least one VES during the breeding and/or oviposition period (generally April – June), a tadpole survey four to eight weeks after the breeding survey(s), a subadult survey in late summer/early fall (generally late August to early October), and a final VES within 3 to 5 days prior to starting work.

    i. It is important to understand that frogs are ectothermic, so ambient temperature affects the likelihood of detection. Whether the life form is larval or subadult, both stages will shelter in place under substrate and emerge and become active with warmth (i.e., detection probability increases with temperature).

c. If a survey fails to detect foothill yellow-legged frogs within suitable habitat, a follow-up survey should be conducted two to four weeks after the initial survey.

d. Develop measures to avoid incidental take on a site- and project-specific basis.

    i. For example, measures may vary based on the type and extent of disturbance, duration and timing of disturbance, and influence of environmental factors. A season of operation that completely avoids foothill yellow-legged frog presence does not exist; if frogs are present and breeding, they may be encountered in various life stages year-round. However, in locations having periodic dry conditions, especially prolonged dry conditions, foothill yellow-legged frogs are unlikely to be encountered. Under dry conditions, foothill yellow-legged frogs usually seek refuge in wetted tributaries (or any wetted feature).

Agcy 3-9

In March 2020, the California Fish and Game Commission recognized two clades of the FYLF (*Rana boylii*) as threatened under the CESA. The Northeast/Northern Sierra clade was one of those clades. Therefore, please revise Table 4.4-6 to reflect Foothill

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yellow-legged frog status as threatened under CESA. Please see comment 3 for ITP recommendations.

5. On pages 2-43 through 2-45, the California black rail 4.4-2(d) pre-construction survey and avoidance and minimization measures indicate that a call-back/response survey will be done to detect evidence of this species. The California black rail is a fully protected species (Fish & G. Code § 3511). Fully protected species may not be taken or possessed at any time. The DEIR should state that the qualified biologist will obtain the proper permits prior to implementing call-back/response surveys. This may include the need for a Memorandum of Understanding (Fish & G. Code § 2081(a)) from CDFW prior to conducting the surveys to ensure the species scientific research is executed appropriately and the data is reported accurately.

Agcy 3-10

Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the County include in the analysis how appropriate avoidance, minimization, and mitigation measures will reduce indirect impacts and avoid take of fully protected species.

6. The DEIR has identified perennial, intermittent, and ephemeral rivers, streams, and other hydrologically connected aquatic features. The DEIR did not analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-mentioned aquatic features and associated biological resources/habitats that may occur because of the Project. Therefore, the DEIR should propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level including but not limited to Project impacts to water temperature, water nutrient concentrations, and turbidity.

Agcy 3-11

The DEIR has identified Project activities that will require notification to CDFW pursuant to Section 1602 of the Fish and Game Code. Notification is required for any activity that may do one or more of the following:

- Substantially divert or obstruct the natural flow of any river, stream, or lake,
- Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or
- Deposit debris, waste, or other materials where it may pass into any river, stream or lake.

Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. Upon receipt of a complete notification, CDFW will determine if the Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. The Project as currently

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proposed in the DEIR will require a LSA Agreement. A LSA Agreement will include measures necessary to protect existing fish and wildlife resources.

CDFW's issuance of a LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of a LSA Agreement, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, minimization, mitigation, and monitoring and reporting commitments.

7. The DEIR does not include a discussion of the Project's effects of mining operations on resident fish in Wolf Creek or South Fork Wolf Creek. On March 8, 2022, CDFW staff performed a spot electrofishing survey within South Fork Wolf Creek. The survey included three electrofishing locations within Reaches C and D as shown in Appendix K.1, Figure A1, of the DEIR. The efforts identified the presence of multiple life stages of resident brown trout (*Salmo Trutta*) at each of the survey locations (Memorandum: Electrofishing at South Fork Wolf Creek, Nevada County, March 8, 2022). The DEIR should discuss resident fish in South Fork Wolf Creek and Wolf Creek and analyze potential fisheries impacts that may occur as a result of the Project and propose ways to avoid, minimize, or mitigate any potentially significant impacts to a less-than-significant level.

Agcy 3-12

8. In Appendix K-2, the DEIR estimates that initial dewatering will involve pumping groundwater from the mine works at a rate of approximately 2,500 gallons per minute (gpm) for six months, with ongoing dewatering of 850 gpm during mine operation. As a result of the dewatering, there is a predicted groundwater drawdown of up to 10 feet. The DEIR identifies the different types of vegetation within the Project site, including riparian vegetation, but does not characterize the vegetation's potential reliance on groundwater or interconnected surface waters. The DEIR does not include a discussion of the potential impacts of lowering the groundwater table on environmental users of groundwater, such as groundwater dependent ecosystems or environmental users of interconnected surface waters.

Page 121 of Appendix K.2 of the DEIR states that in higher topographic areas, the depth to groundwater is already below typical rooting depths and that in lower areas, the flow releases to South Fork Wolf Creek would increase recharge to support groundwater levels. Appendix K.2 does not provide sufficient detail about the location of vegetation that may be reliant on groundwater or interconnected surface waters, the depth to groundwater underlying those areas, or evidence that increased flows in South Fork Wolf Creek would provide enough groundwater recharge to maintain groundwater

levels to support existing vegetation. Additionally, Appendix K.2 states that because projected groundwater drawdown is within the range of historic fluctuations, impacts would be less-than-significant. However, maintaining groundwater at the projected maximum drawdown level, or any reduced groundwater level, for sustained mine operations over 80 years without the reprieve of historical seasonal groundwater highs may result in temporary or permanent impacts to environmental users of groundwater, including groundwater dependent vegetation.

Agcy 3-13

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The DEIR should include a more detailed analysis of the impacts of initial and continued dewatering on environmental users of groundwater, including groundwater dependent ecosystems and users of interconnected surface waters. The analysis should include figures displaying the locations of potential groundwater dependent ecosystems or riparian or other vegetation that relies on interconnected surface waters, the depth to groundwater underlying the groundwater dependent ecosystems and riparian vegetation in Project and non-Project scenarios, and additional discussion of the projected increase in recharge as a result of the discharge of treated water into South Fork Wolf Creek, including the interconnectivity between groundwater and South Fork Wolf Creek surface water. If this more detailed analysis identifies any potentially significant impacts, the DEIR should state how the Project will avoid, minimize, or mitigate any these impacts to a less-than-significant level.

9. The DEIR does not discuss Project impacts on water temperature in South Fork Wolf Creek or Wolf Creek. Initial and continued dewatering of the mine works will reduce groundwater discharge into the surface water bodies where groundwater-surface water connectivity exists in proximity to the mine. Groundwater inflows to surface water typically maintain lower surface water temperatures. Where mine operations reduce groundwater contributions to South Fork Wolf Creek by altering the subsurface hydraulic gradients, mine operations can impact creek temperature. The DEIR should analyze the impacts of mine dewatering on surface water temperature in South Fork Wolf Creek and Wolf Creek and the aquatic species therein. If this analysis identifies any potentially significant impacts, the DEIR should state how the Project will avoid, minimize, or mitigate any these impacts to a less-than-significant level.

Agcy 3-14

The DEIR also does not discuss the temperature of the on-site treated water that will be discharged into South Fork Wolf Creek, which has the potential to significantly alter instream temperatures and affect resident aquatic species, including brown trout (see above comment on resident fish). The DEIR should include an analysis of Project impacts on instream water temperatures of South Fork Wolf Creek and Wolf Creek. The analysis should consider both the temperature of on-site treated water discharges into South Fork Wolf Creek as well as the projected reduction of groundwater discharges to baseflow in the surface water bodies. If this analysis identifies any potentially significant impacts, the DEIR should state how the Project will avoid, minimize, or mitigate any these impacts to a less-than-significant level.

10. The DEIR states that the Project, in combination with the cumulative list of projects, would result in a less-than-significant cumulative impact to water quality, drainage patterns, and groundwater resources. The cumulative impacts discussion does not include a discussion of the impacts to environmental users of groundwater, habitats, or aquatic resources that would occur during the 80-year operational timeline for the Project. The 80-year duration of the Project would essentially create a new hydrologic baseline in the Project area and in upstream and downstream interconnected hydrology. The DEIR does not discuss the shifting ecological baseline that would occur during the Project, nor does it account for impacts that would occur at the end of the Project or the restoration timeline for a return to the pre-Project baseline conditions.

Agcy 3-15

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The cumulative impacts discussion should consider the ecological impacts of the 80-year Project implementation timeline and the resulting adaptation of ecosystems and species to long-term altered hydrology. The DEIR should also evaluate impacts to hydrology in the Project area during the period of time in which recharge is refilling the previously dewatered mine works for potential impacts to surface water bodies, aquatic species, and groundwater dependent and riparian vegetation.

Agcy 3-16

11. South Fork Wolf Creek and Wolf Creek are tributary to the Bear River, which has existing beneficial uses of warm and cold freshwater habitat, and wildlife habitat. The DEIR does not discuss potential downstream impacts to the Bear River and its beneficial uses as a result of the Project and associated impacts on upstream hydrology. The DEIR should discuss and assess potential downstream impacts to the Bear River and its existing beneficial uses.

Agcy 3-17

Please see *Attachment 1: Additional CDFW Comments on Idaho-Maryland Mine DEIR April 4, 2022*, for all additional CDFW comments on this DEIR.

ENVIRONMENTAL DATA

Agcy 3-18

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

Agcy 3-19

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Agcy 3-20

Pursuant to Public Resources Code §21092 and §21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the proposed Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670 or emailed to r2CEQA@wildlife.ca.gov.

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CDFW appreciates the opportunity to comment on the DEIR to assist in identifying and mitigating Project impacts on biological resources. CDFW personnel are available for consultation regarding biological resources and strategies to minimize and/or mitigate impacts. Questions regarding this letter or further coordination should be directed to Caitlyn Oswalt, Environmental Scientist at (916)358-4315 or Caitlyn.Oswalt@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Kevin Thomas
A2A0A9C574C3445...
Kevin Thomas
Regional Manager

Attachment

1. Attachment 1: Additional CDFW Comments on Idaho-Maryland Mine DEIR April 4, 2022

Enclosure

1. Memorandum: Electrofishing at South Fork Wolf Creek, Nevada County, March 8, 2022

ec: Caitlyn Oswalt, Environmental Scientist
Billie Wilson, Senior Environmental Scientist (Supervisory)
Briana Seapy, Senior Environmental Scientist (Supervisory)
Bridget Gibbons, Senior Environmental Scientist (Specialist)
Mitch Lockhart, District Fisheries Biologist
Kelley Barker, Environmental Program Manager
CEQACommentLetters
Department of Fish and Wildlife

Office of Planning and Research, State Clearinghouse, Sacramento

REFERENCES

Considerations for Conserving the Foothill Yellow-Legged Frog (CDFW 2018) https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157562&inline

	Attachment 1: Additional CDFW Comments on Idaho-Maryland Mine DEIR April 4, 2022					
	Comment #	Section	Print Page #	PDF Page #	Issue / Comment	Solution / Suggested Fix
Agcy 3-21	1	2	1-2	32	Under the Project Components section, it says "the proposed project would reinitiate underground mining and gold mineralization processing for the Idaho-Maryland Mine over an 80-year permit with gold mineralization processing and underground exploration and underground exploration and mining proposed to operate 24 hours a day, 7 days a week during full operations."	Please specify which permit or permits that are being referred to in this statement.
Agcy 3-22	2	2	2-3	53	The DEIR does not include details on what developments are proposed within the Management Plan to allow for development within the required 100-foot setback from the Riparian Areas of the Perennial Watercourses, pursuant to the Nevada County LUDC, Section L-II 4.3.17, at the Brunswick and Centennial Industrial Sites.	CDFW recommends to detail what development is proposed and the impacts those development projects will have on Wolf Creek, South Forth Wolf Creek, the communities that rely on these waterways, and the riparian vegetation.
Agcy 3-23	3	2	2-31	81	Mitigation measure 4.4-1(a) for Pinehill flannelbush (*Fremontodendron californicum ssp. decumbence*) details in the event project actions that will directly impact Pinehill flannelbush, seed collection and banking will be done to ensure the future replacement and recovery efforts pursuant to the requirements of Section 6.2 of the HMP.	Please clarify when and how many seeds will be collected. Once the seeds have been collected, which seed bank will be used and how long will they be stored?
Agcy 3-24	4	2	2-36	86	In mitigation measure 4.4-1(b) it states: "weekly site monitoring by a qualified biologist to ensure that the special-status plants are being protected during site disturbance and construction."	CDFW recommends revising this to, "A qualified biologist shall be onsite during all vegetation and ground disturbing activities that are within the vicinity of special status plants and weekly monitoring of the protective fencing along the buffer zone." This will help ensure that special-status plants are being protected during site disturbance and construction.
Agcy 3-25	5	2	2-38	88	There are multiple CNPS listed plants with a ranking of 1B with the potential to occur within the Project site. In mitigation measure 4.4-1(b) for Other Special-Status Plant Species it states: "If the 80 percent survival is not established after two years, transplants of individuals grown from seed shall be planted at a location with similar soil, hydrologic, vegetation type and aspect as the portion of the site where they are found. Transplantation shall occur in the season deemed to have the greatest potential for success, generally the fall, after rains have commenced. Transplants shall be monitored every month for the first six months, then every two months for a minimum of two years. After two summer seasons of monitoring identifies successful establishment of 50 percent of the initial transplants, transplant seedlings will be deemed successful."	Measure 4.4-1(b) applies to multiple special status plant species with a CNPS ranking of 1B with the probability to occur within the project site. Therefore, CDFW recommends the DEIR detail species specific measures and success criteria that will result in no net loss for all special status species. CDFW recommends the Qualified Biologist obtains a scientific collecting permit for any special status plant species that may be impacted by this project. Plant species not listed as rare, threatened, endangered, or candidates for listing under CESA or NPPA may meet the definition of rare or endangered provided in CEQA (Cal. Code Regs., tit. 14, § 15380, subd. (b).).
Agcy 3-26	6	2	2-40	90	4.4-2(b) Western Pond Turtle Pre-construction survey and avoidance and minimization measures.	The western pond turtle (*Actinemys marmorata*) is a species of special concern. Movement out of harm's way must be authorized by CDFW under a scientific collecting permit or a Lake and Streambed Alteration Agreement. The DEIR should state that the Qualified Biologist should have all required permits before commencing species specific surveys.
Agcy 3-27	7	2	2-46	96	Coast Horned Lizard 4.4-2(e) "...If the species is documented during pre-construction survey(s), a qualified wildlife biologist (approved by CDFW) shall move individual coast horned lizards outside of the proposed disturbance area(s) in order to avoid an impact to this species."	For species of special concern, a Scientific Collecting Permit may be required to move individual Coast Horned Lizards out of harm's way. The DEIR should state that the Qualified Biologist should have all required permits before commencing species specific surveys.
Agcy 3-28	8	2	2-47	97	Pre-construction surveys for special-status bats in measure 4.4-2(f) should keep in mind the time of year and avoid starting construction in sensitive bat habitat during maternal rooting season.	To reduce the biological impacts to special status bat species, CDFW recommends conducting bat surveys between March 1 to July 31 by a qualified biologist with experience with bats in the year prior to the removal of any oak trees, buildings and structures, or dewatering of the mines. Bats are at their most vulnerable in buildings during the summer, when large numbers may be gathered together and young bats, unable to fly, may be present. Operations to known breeding sites should therefore be timed to avoid the summer months, therefore work should be sufficiently advanced by May or June for returning bats to be dissuaded from breeding in that site for that year. If no bat roosts are detected, then no further action is required if the trees are removed prior to the next breeding season. If removal is delayed, then an additional pre-construction survey shall be conducted 30 days prior to removal to ensure that a new colony has not established itself.



Agcy 3-29		9	2	2-47	97	Special-Status Bats 4.4-2(f) "...Furthermore, if a maternal (breeding) roost is documented, no disturbance shall occur until the breeding roost has dispersed from the structure or riparian and forested woodlands they are found in."	In order to ensure the maternal roost has fully dispersed CDFW recommends changing this language to: "...Furthermore, if a maternal (breeding) roost is documented, no disturbance shall occur until a qualified bat biologist has determined the young bats are no longer roosting and the breeding roost has dispersed from the structure or riparian and forested woodlands they are found in." Additionally, if presence is documented within structures that will be removed on the Centennial Industrial site or the Brunswick Industrial site, along with potential presence within the mine shaft, may result in potentially significant impacts that need to be analyzed and mitigated for accordingly and included in the DEIR.
Agcy 3-30		10	4.4	4.4-73	470	The DEIR does not discuss the potential for additional roosting habitat that may be created from the dewatering of the Idaho-Maryland Mine and the impacts that mining operations could potentially have on bats.	CDFW recommends the DEIR analyze the potential for the Project to impact bats, especially the on going mining activities within the Idaho-Maryland Mine should bats move into the mines once they are dewatered. If potentially significant impacts are identified, the DEIR should describe how the Project will avoid, minimize, and mitigate to a less than significant level.
Agcy 3-31		11				The DEIR lists a number of mitigation measures for biological resources that rely on future approvals or agreements as a means to bring identified significant environmental effects to below a level of significance.	CEQA Guidelines §15126.4 (a)(1)(B) states that formulation of mitigation measures should not be deferred until some future time. Because there is no guarantee that these approvals or cooperation with all of the involved entities will ultimately occur, the mitigation measures are unenforceable and do not reduce the impacts to biological resources to a less than-significant level. CDFW recommends forming mitigation measures that are actionable and enforceable.
Agcy 3-32		12	2	2-54	104	Under mitigation measure 4.4-3(b) "Place staging areas and other work areas outside of the 50-foot non-disturbance buffers of ephemeral and intermittent aquatic resources and 100-foot nondisturbance buffers of perennial aquatic resources." Staging areas should be adequately distanced from sensitive resources.	Under F&G code 5652, CDFW recommends a 150 foot buffer from the high water mark for all staging areas to prevent unlawfully depositing or placing debris or waste where it can pass into the waters of the state. CDFW recommends including staging areas and other work areas in the Project's subsequent notification pursuant to Section 1602 of the Fish and Game Code to ensure their inclusion in any Lake and Streambed Alteration (LSA) Agreement that may be needed prior to commencing any activity that could deposit debris, waste or other materials where it may pass into any river, stream or lake.
Agcy 3-33		13	2	2-56	106	4.4-3(c) "... Compensatory mitigation can include but is not limited to the following: onsite and/or offsite wetland creation and/or restoration, purchase or placement of conservation easements, payment of an in-lieu fee, and/or purchase of mitigation credits at an approved Corps wetland mitigation or conservation bank."	CDFW is not currently signatory to any in-lieu fee programs and therefore will not likely accept participation in these programs as compensatory mitigation for temporary or permanent loss of wetland habitat. Additionally, any credits purchased should be from a CDFW-approved mitigation or conservation bank to avoid needing to buy credits from multiple banks. CDFW recommends coordinating with all regulatory permitting agencies early and concurrently in the process to reduce the need to mitigate separately for each agency.
Agcy 3-34		14	4.4	4.4-84	481	In Figure 4-4.10 for the Brunswick Industrial Site, it shows the South Fork Wolf Creek flowing near the Water Treatment Pond and a wetland abutting the pond to the northwest.	Please identify how the treatment pond will be constructed to ensure high rain events will not result in untreated water passing into the abutting wetland or South Fork Wolf Creek.
Agcy 3-35		15	4.4	4.4-20	417	Table 4.4-5 has Pine Hill flannelbush (*Fremontodendron decumbens*) potential for presence on the Centennial Industrial Site as High. There have been multiple confirmed cases of presence on the Centennial Industrial Site from the 2019 Pine Hill flannelbush protocol-level surveys and on CNDDB.	CDFW recommends changing the potential status from 'high' to 'present' for the Centennial Industrial Site.

State of California
Department of Fish and Wildlife

Memorandum

Date: March 23, 2022

To: Briana Seapy
Water Program Supervisor
Department of Fish and Wildlife
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

Cc: CDFW North Central Region Fish Files

From: Mitch Lockhart; Environmental Scientist
Department of Fish and Wildlife
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

Subject: Electrofishing Sample at South Fork Wolf Creek, Nevada County, March 8, 2022

Agcy 3-36

In January of 2022, California Department of Fish and Wildlife (CDFW; Department) received a Notice of Availability of a Draft Environmental Impact Report (EIR) and Notice of Public Meeting to Provide Comments on the Idaho-Maryland Mine Draft EIR Project (https://www.mynevadacounty.com/3195/Idaho-Maryland-Mine---Rise-Grass-Valley). Upon review of the Draft EIR, Department staff found that potential impacts to the finfish of South Fork Wolf Creek were not addressed with the same rigor afforded other species of concern. Moreover, the Department did not have reliable and current information about the species of fish present in South Fork Wolf Creek. As a result, Department staff sampled South Fork Wolf Creek in three locations downstream of the proposed project to identify the species and life stages of finfish present in an effort to inform the Department's comments regarding the Draft EIR.

On March 8, 2022, CDFW Water Program Supervisor, Brianna Seapy, and two Environmental Scientists, Bridget Gibbons, and Mitch Lockhart, sampled South Fork Wolf Creek at three locations along East Bennet Road, Grass Valley, CA, (**Figure 1**) using a single Smith-Root backpack electrofisher. Mitch Lockhart selected sites that were downstream of the project, accessible via public land, and representative of South Fork Wolf Creek's diversity of instream habitats. The Smith-Root backpack electrofisher was set at 30 hertz, 20% duty cycle, and 350 volts. All fish captured were identified to species, measured to the nearest millimeter, and released near the point of capture.

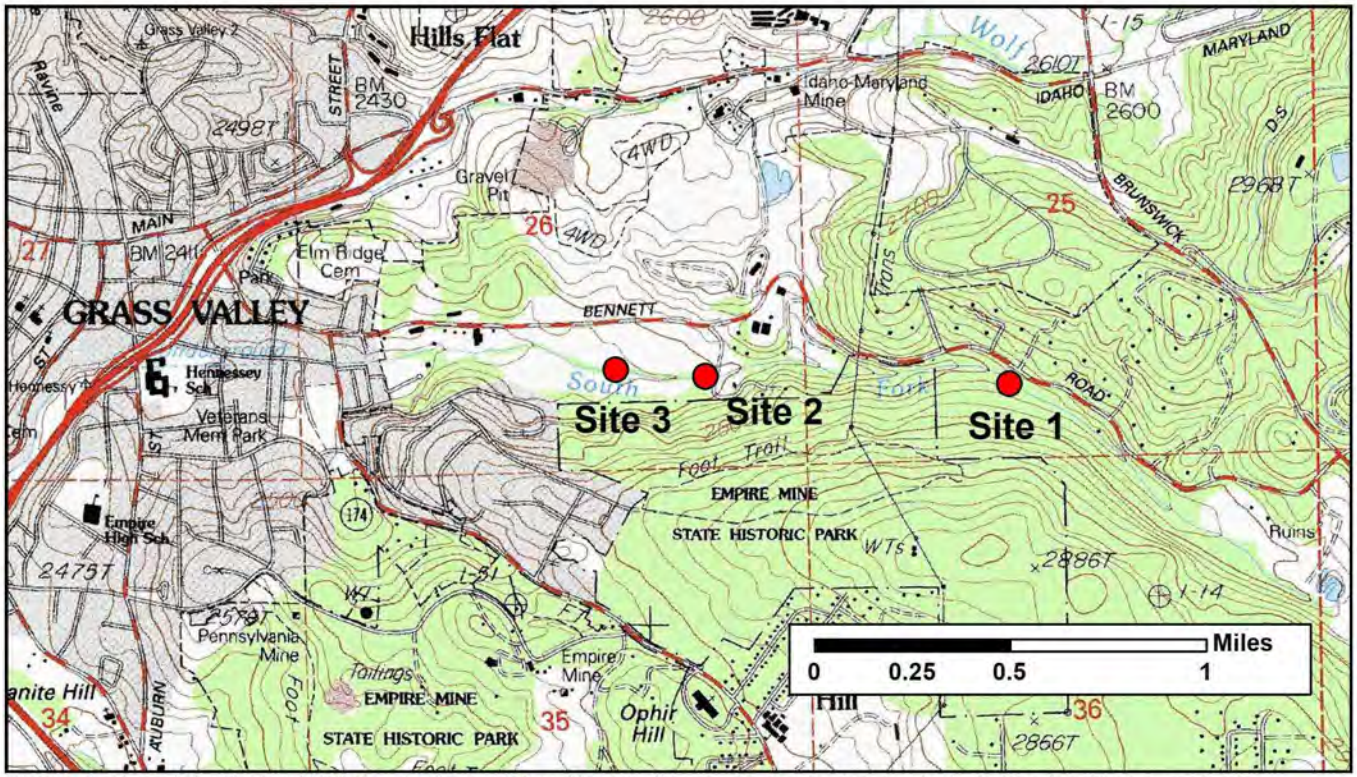


Figure 1: *Map of South Fork Wolf Creek, Grass Valley, Nevada County. Red dots denote electrofishing locations sampled by Department staff on March 8, 2022.*

Table 1: Fish data from South Fork Wolf Creek, March 8, 2022.

Site	Species	Total Length (mm)	Total Length (inch)
Site 1	Brown Trout	129	5.1
Site 1	Brown Trout	143	5.6
Site 1	Brown Trout	145	5.7
Site 2	Bluegill	52	2.0
Site 2	Bluegill	100	3.9
Site 2	Brown Trout	86	3.4
Site 2	Brown Trout	93	3.7
Site 2	Brown Trout	95	3.7
Site 2	Brown Trout	98	3.9
Site 2	Brown Trout	100	3.9
Site 2	Brown Trout	104	4.1
Site 2	Brown Trout	107	4.2
Site 2	Brown Trout	114	4.5
Site 2	Brown Trout	144	5.7
Site 2	Brown Trout	171	6.7
Site 2	Brown Trout	195	7.7
Site 2	Brown Trout	230	9.1
Site 3	Bluegill	98	3.9
Site 3	Brown Trout	105	4.1
Site 3	Brown Trout	109	4.3

The sampling data are summarized in **Table 1**. Site 1 is a step pool system characterized by bedrock substrate and significant woody debris. Gravel and cobble substrates are limited to pool tails and small riffles between steps. Department staff captured three Brown Trout (*Salmo trutta*). Fish captured in Site 1 had damaged and worn caudal and dorsal fins and were of poor body condition (**Figure 2**). Fish were thinly distributed, only occupying the most oxygenated step pools with plenty of unoccupied habitat between fish occurrences. These preliminary data suggest that Brown Trout migrate into this site from more ideal spawning and rearing habitats downstream.

Site 2 is a well-oxygenated riffle over cobble and gravel substrate, with well-covered, slow-moving, holding habitats. Department staff captured twelve BN and two Bluegill (*Lepomis macrochirus*). Fish captured in Site 2 were of good body condition with healthy fins and no visible signs of disease (**Figure 2**). Site 2 had the highest fish density and diversity of Brown Trout sizes suggesting that Site 2 is a spawning and rearing location for Brown Trout.

Site 3 is a slow-moving set of two deep pools characterized by silt substrate and woody debris. Department staff captured two Brown Trout and one Bluegill. The pools provide ideal holding habitat, but do not offer any gravel substrate for spawning, nor any source of oxygenated water. Fish captured in Site 3 were of good body condition with healthy fins and no visible signs of disease. The pools were too deep to sample effectively with a single backpack electrofisher. As a result, fish density may have been higher at Site 3 then the data reflect.

Agcy 3-37

These preliminary data clearly indicate South Fork Wolf Creek supports a wild and self-sustaining population of Brown Trout and non-native sunfish. Further surveys are necessary to estimate the size of the Brown Trout population, and to delineate habitats critical to Brown Trout reproduction and rearing.



Figure 2: *Photos of two Brown Trout (Salmo trutta) captured from South Fork Wolf Creek, Grass Valley, Nevada County, by backpack electrofisher on March 8, 2020. The left panel is a Brown Trout with poor body condition captured in Site 1 and can be contrasted against the Brown Trout in the right panel with good body condition captured in Site 2.*

AGENCY LETTER 3: SHAUNDRA CASHDOLLAR, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

Response to Comment Agcy 3-1
Comment noted. This is an introductory statement regarding CDFW's role as a responsible agency and does not provide a comment regarding the adequacy of the DEIR.

Response to Comment Agcy 3-2
Comment noted. This is an introductory comment summarizing CDFW's understanding of the project and does not provide a comment regarding the adequacy of the DEIR.

Response to Comment Agcy 3-3
This is an introductory comment broadly outlining concerns detailed in the comment letter. Please see the following master responses addressing these issues:

- Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog;
- Master Response 36 - Flows in South Wolf Creek;
- Master Response 32 -Temperature of Mine Water Discharge;
- Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts;
- Master Response 34 - Resident Fish;
- Master Response 37 - Birds and Raptors; and
- Master Response 31 - Rare Plants.

Response to Comment Agcy 3-4
This comment provides general information regarding the requirements of the Native Plant Protection Act and refers to comment Agcy 3-7.

Response to Comment Agcy 3-5
Comment noted. Mitigation Measure 4.4-1(b) outlines the requirements for preparation of a County required Habitat Management Plan if special-status plant species are identified onsite. The County Habitat Management Plan is not intended to supersede state and/or federal take requirements associated with any special-status species. The applicant would obtain approval of an ITP, as necessary, for take of any California-listed special-status species. In order to provide this clarification, Mitigation Measure 4.4-1(a), on page 4.4-64 of the DEIR, has been revised in this Final EIR. Please see Response to Comment Grp 12-34.

Additionally, the third paragraph of Mitigation Measure 4.4-1(b) has been revised to read as follows:

> *If any special-status plant species are found, ~~protection of such plant shall include complete avoidance, transplantation, or on- or off-site restoration of the special-status plant species that could be impacted by site disturbance. These protective measures for such plants shall be included as part of the required development of a Habitat Management Plan (HMP) as part of compliance with the Nevada County Land Use and Development Code, Section L-II 4.3.12, which includes regulations intended to avoid the impact of development on rare, threatened, endangered, and special-status species and their habitat, or where avoidance is not possible, to minimize or compensate for such impacts and to retain their habitat as non-disturbance open space.~~ and they are located in an area where impacts are proposed, then the special-status plants shall be completely avoided until a Habitat Management Plan*

> *(HMP) is developed and approved by the Nevada County Planning Department. If the plant is listed on the federal or state Endangered Species lists or is state listed as rare, then development of this plan shall be conducted in consultation with USFWS and/or CDFW, respectively, and a BO and/or an ITP shall be obtained prior to impacts. The HMP shall include the avoidance, minimization, and mitigation measures outlined below as part of compliance with the Nevada County Land Use and Development Code, Section L-II 4.3.12. Note that transplantation and monitoring specifics are examples only, and final details will be developed based on the species to be impacted, if any.*

The changes to Mitigation Measures 4.4-1(a) and (b) are provided for clarification purposes in Response to Comment Agcy 3-5 and do not affect the adequacy of the analysis contained in the DEIR, nor alter the conclusions therein.

Response to Comment Agcy 3-6

The commenter states that the project should include a variety of mitigation strategies, including conservation, preservation, restoration, habitat enhancement, and avoidance. Restoration is included as a major aspect of the mitigation for impacts to this species as outlined in Mitigation Measure 4.4-1. The DEIR includes a variety of mitigation measures depending on the potential impacts, local, state or federal permitting requirements, and specifics of that particular species. For example, Mitigation Measure 4.4-1(a) for the Pine Hill flannelbush includes transplant and seed collection measures (if feasible), habitat enhancement, and conservation easement in order to mitigate project impacts. Impact 4.4-2, analyzing project impacts to special-status species, includes mitigation measures requiring preconstruction surveys and preparation of County required management plans. In addition, depending on the species, if identified onsite, consultation with the appropriate state or federal agency may be required. Finally, impacts to waters and wetlands in Impact 4.4-3 are mitigated through subsequent permitting with various state and federal agencies. As demonstrated, a variety of mitigation measures, many with numerous steps and tiered requirements depending on the specie or survey results, will be implemented to reduce project biological impacts to a less than significant level.

Response to Comment Agcy 3-7

This comment provides general information on the Incidental Take Permit requirements in the event project activities require application for and issuance by CDFW. The DEIR Mitigation Measures for state-listed wildlife species already require approval of an ITP, as necessary for take of any California-listed special status species. As shown in Response to Comment Agcy 3-5, the Final EIR mitigation measures for plants have been revised to require approval of an ITP for state-listed plant species.

Response to Comment Agcy 3-8

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Agcy 3-9

Comment noted. For clarification purposes, Table 4.4-6 of the DEIR has been revised accordingly:

Foothill yellow-legged frog *Rana boylii*	SCT/S<u>T</u>~~CC~~

The above minor change is for clarification purposes and does not affect the analysis, nor conclusions, in the DEIR.

Response to Comment Agcy 3-10

A callback survey is not considered a "take" under Fish and Game Code Section 86 based on the plain language of the Fish and Game Code and the legal authorities interpreting the definition of "take" under state and federal laws. Fish and Game Code Section 86 states that "'Take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A prerequisite for a take to occur under CESA (Fish & Game Code § 2050 et seq.) is that an act actually kills or injures wildlife. (78 Ops. Cal. Atty. Gen. 137 at p. *3 (May 15, 1995).) Callback surveys are not listed in, and do not involve activities that would meet, the definition of "take" in Fish and Game Code Section 86. In addition, the callback survey is implemented for the detection of a species, and does not involve the killing or injuring of animals, therefore is not considered take. The DEIR has analyzed project-specific impacts to special-status species and their habitats in DEIR Chapter 4.4 and recommended mitigation measures where a potential impact was identified. Many of these mitigation measures recommended avoidance where feasible. Note that California Black Rail was considered to have a "very low" likelihood of being found onsite in the DEIR. If California Black Rail is found onsite, the applicant will consult with CDFW to avoid take of this species. Note that the DEIR reflected that California Black Rail is California Threatened, but it is also considered California Fully Protected. The DEIR has been amended to reflect the Fully Protected status for this species. Additionally, Mitigation Measure 4.4-2(d) has been amended to remove reference to an ITP being obtained for take of California Black Rail. As this species is considered to have a very low potential to be found onsite, surveys will be conducted prior to site disturbance, and consultation with CDFW and avoidance shall be required in the case of species presence; this impact is still considered less than significant.

The following clarifications to Chapter 4.4, Biological Resources, of the DEIR are hereby implemented in response to the comment:

Table 4.4-6 is hereby revised as follows:

California black rail *Laterallus jamaicensis coturiculus*	--/CT California Fully Protected

Page 4.4-39 (description of California black rail) is hereby revised as follows:

> California black rail (*Laterallus jamaicensis coturiculus*) – CA State Threatened and CA State Fully Protected
>
> California black rail inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. The species requires water depths of approximately one inch that does not fluctuate during the year and dense vegetation for nesting habitat.

Mitigation Measure 4.4-2(d), pertaining to California black rail, is hereby revised as follows:

> *California Black Rail*
>
> *4.4-2(d) Pre-construction Survey and Avoidance and Minimization Measures. Pre-construction surveys for California black rail shall be conducted by a qualified biologist prior to the implementation of any ground disturbance within or directly adjacent to any perennial marsh and wet meadow habitat within the Centennial and Brunswick Industrial Sites. The pre-construction surveys for this species shall occur no more than fourteen (14) days prior to any such disturbance within or directly adjacent to the species habitat. The pre-construction surveys shall include conducting call back/response surveys. This species is most active between two*

hours before and three hours after sunrise; therefore, surveys shall start at sunrise and continue no later than 0930. If evening surveys are to be conducted, they shall be paired with a morning survey, and all sites shall have surveys conducted at both time periods. The preferred method for conducting surveys via the call-back/response protocol of Evens et al (1991). If the pre-construction survey does not detect evidence of California black rail, a letter report documenting the results of the survey shall be provided to the Nevada County Planning Department, and additional measures are not required. If a positive call back is identified during the surveys, then the species is assumed to be present and the area shall be avoided from disturbance in order to avoid impacts to individuals of the species, if feasible.

Given the species is a CESA listed species, coordination with CDFW shall occur if a positive response to the call-back/response surveys occurs and if any proposed disturbance may impact the species. Any area containing this species would likely need to be avoided in order to avoid impacts to and take of this species, if feasible, or additional mitigation measures would be required in coordination with CDFW to minimize and avoid impacts to such species. Additional avoidance measures could include, but may not be limited to the following: environmental awareness training, daily construction monitoring by a CDFW qualified biologist when disturbance related activities occur within or directly adjacent to the species habitat, and exclusionary fencing installation between the species habitat and the proposed disturbance areas. ~~Additionally, an ITP could be required by CDFW if complete avoidance of the species is not feasible.~~ Areas where no positive response to the call-back/response surveys are assumed to not contain individuals of the species and therefore, disturbance in those areas would have no impact on this species.

Watercourse/Wetlands/Riparian Areas Management Plans. The applicant shall implement the mitigation measures identified in the Aquatic Resources Management Plans for the Centennial and Brunswick Industrial Sites, pursuant to Mitigation Measure 4.4-3, which include measures designed to protect aquatic resources and the biological resources they support. Such measures generally include, but are not limited to, mitigation for encroachment into non-disturbance buffers, restoration of impacted areas within stream zones, implementation of BMPs during construction, and post construction erosion control.

The above minor changes are for clarification purposes and do not affect the analysis, nor conclusions, in the DEIR regarding California black rail.

Response to Comment Agcy 3-11

The commentor generally notes not all potential impacts to aquatic features were analyzed but does not specifically provide what impacts were not analyzed. DEIR Chapter 4.4, analyzed potential biological impacts including impacts to aquatics features and associated habitat. This impact analysis was based on eleven different technical studies prepared by experts in their fields, and followed up by a County peer review using a independent biology firm. Technical studies specifically included aquatic resources determinations for both the Centennial and Brunswick Industrial sites and draft County management plans for potential impacts to watercourses/wetlands/riparian areas. DEIR Impact 4.4-3 analyzed the project's potential to impact state or federally protected waters and wetlands and determined this impact was potentially significant. Mitigation measures 4.4-3(a-d) were identified that reduce this impact to a less than significant level. Mitigation Measure 4.4-3(d) specifically requires the applicant to apply for a CDFW 1600 Streambed Alteration Agreement. The impact analysis and mitigation measures comprehensively address potential project impacts to waters and wetlands on the project site.

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Agcy 3-12

The commenter asserts that the DEIR should provide further analysis of impacts and mitigation for impacts to Brown Trout found in South Fork Wolf Creek; however, Brown Trout are an invasive species, and even if they were not an invasive species, there is no evidence provided by commenter that any impact will occur. Please see Master Response 34 - Resident Fish. Furthermore, CEQA does not require an analysis of impacts to all resident fish, but only to those considered special-status pursuant to CEQA guidelines. The only fish that have been documented in Wolf Creek and South Fork Wolf Creek are non-native fish (brown trout and bluegill). As such, no analysis of impacts to "resident fish" is appropriate under CEQA.

Response to Comment Agcy 3-13

The DEIR does include a discussion of potential impacts of lowering the groundwater table on vegetation in the context of wildfire (see page 4.13-21). Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Please also see Master 33 - Groundwater Dependent Vegetation, regarding potential groundwater drawdown impacts to surface vegetation. Further, in order to clarify that groundwater drawdown induced from the mine would not impact groundwater dependent (phreatophytic) vegetation, Itasca Denver prepared a memo showing the simulated drawdown in selected meadows. These three meadows (Brunswick site, Empire Mine Park, and Loma Rica) would experience minimal drawdown, even without consideration of the minewater discharge to South Fork Wolf Creek. The Empire Park Meadow would experience no drawdown with the addition of 1.9 cfs (average maintenance dewatering rate) and less than 1 inch of drawdown with no added flow from mine dewatering. (See Itasca Memo – Simulated Drawdown of Selected Meadows attached to the Final EIR as Appendix H). If the addition of mine water discharge were considered, there would likely be even less impact. As such, this impact to groundwater dependent vegetation is still considered less than significant.

Response to Comment Agcy 3-14

Please see Master Response 32 - Temperature of Mine Water Discharge, regarding the temperature of treated water discharge into South Wolf Creek.

As discussed on page 4.8-66 of the DEIR, the total flow reduction in base flow to Wolf Creek from the project is minimal and barely perceptible compared to the existing base flow. Furthermore, Wolf Creek will be considered a COLD water body for the application of water quality objectives. The water currently draining from the mine (0.13 to 0.28 cfs) is warmer than Wolf Creek during all seasons (See Table 3-5 and 3.8 of Appendix K.2). Therefore, elimination of the drainage will not increase water temperature in Wolf Creek. The base flow of Wolf Creek would be reduced by 0.75 cfs due to reduction in groundwater discharge to the creek. This groundwater would be warmer than surface water during winter months and cooler in summer months. During the summer months, high flows are present in Wolf Creek (approximately 40 cfs). Any potential loss of cooling from groundwater would be minimal as the observed baseflow in Wolf Creek at the Centennial Drive bridge ranges from about 40 to 100 times greater than the projected decrease of 0.75 cfs. In addition, please see Master Response 36 - Flows in South Fork Wolf Creek and Wolf Creek.

Response to Comment Agcy 3-15

The commenter states that the DEIR should analyze the cumulative impacts of the project's proposed hydrological changes on ecosystems. The DEIR already analyzed the project's cumulative impacts on biological resources and concluded that the project could have a cumulatively considerable impact, absent mitigation. (DEIR, p. 4.4-96.) The DEIR then concludes that after implementation of Mitigation Measures 4.4-1(a-b), 4.4-2(a-g), and 4.4-3(a-d), the project's incremental contribution to cumulative biological resources impacts would be reduced to a less than cumulatively considerable level.

The DEIR has already concluded that the project may have a potentially significant impact on water quality and has identified Mitigation Measure 4.8-1(a) to address these potential impacts. This mitigation measure requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. The NOI shall include evaluation of potential constituents of concern and demonstrate that water treatment plant (WTP) design shall successfully treat mine water to meet the water quality standards and treatment goals.

As stated on Page 11 of NPDES CAG995002 ORDER R5-2022-0006, the requirements of the Order are specifically drafted to implement the Basin Plan's policies and objectives. The Basin Plan considers all beneficial uses including environmental uses. (See Response to Comment Agcy 3-16).

The mitigation measure therefore ensures the protection of beneficial uses. This includes the preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates (COLD). This includes uses of water that support terrestrial or wetland ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats or wetlands, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources (WILD).

As discussed in Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependent Vegetation, Master Response 34 - Resident Fish, Master Response 35 - Discharge to South Fork Wolf Creek, and Master Response 36 - Flows in South Fork Wolf Creek, the project's impacts on the ecosystem and riparian habitats due to groundwater drawdown and the discharge into South Fork Wolf Creek will not be significant, and may be beneficial for some species due to the increased flows of approximately 1.9 to 5.6 cfs of clean water that meets CVRWQCB standards. Likewise, impacts to groundwater dependent vegetation are shown to be very small (e.g., only an inch of drawdown in the Empire Park Meadow, without even considering the additional recharge from increased flows) and are therefore expected to be less than significant. With regard to the commenter's question on the closure of the mine and the return to baseline conditions, it is expected that refilling of the mine will only take a few years (1 to 2 years), and therefore will quickly return to pre-project conditions without any long-term effect. As stated on page 4.8-51 of the DEIR, once mining is completed, dewatering ceases, and the underground workings are allowed to flood with groundwater, the same reducing conditions that occur under existing conditions within the mine workings would develop again, preventing oxidation of sulfide minerals. Water quality in the re-flooded mine workings would then have the same general pH, TDS, and other water quality conditions that occur under existing conditions. The underground workings are anticipated to refill over the next several years (1 to 2 years). Thus, any seepage from drains and fractures within the bedrock would have a comparable water quality to the discharge from the drains along Wolf Creek under existing conditions. During the refilling of the mine, the drawdown impacts from dewatering will gradually return to pre-project conditions while the increased flow conditions in South Fork Wolf Creek will cease. This refilling period will

not cause an impact as it will represent a return to pre-project baseline conditions and is temporary.

The project itself will not cause a significant impact to the ecosystem due to changed hydrology, and the project combined with the cumulative list of projects is not expected to cause a cumulatively considerable impact to the environmental users of groundwater, habitats or aquatic resources during the life of the project.

Response to Comment Agcy 3-16

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. Given that the project will not significantly impact beneficial uses to South Fork Wolf Creek, as discussed in the abovementioned Master Responses, the project's much smaller contribution to overall flow in Wolf Creek, as compared to South Fork Wolf Creek, is also not expected to impact beneficial uses in Wolf Creek.

The Regional Water Board adopted a Water Quality Control Plan, Fifth Edition, for the Sacramento and San Joaquin River Basins (hereinafter "Basin Plan") that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan at page 2.3 states that the "…beneficial uses of any specifically identified water body generally apply to its tributary streams." The Basin Plan does not specifically identify beneficial uses for South Fork of Wolf Creek but does identify present and potential uses for the Bear River, to which the South Fork of Wolf Creek and Wolf Creek are tributary. As discussed on page 4.8-31 of the DEIR, the beneficial uses of Bear River and South Fork Wolf Creek are identical and therefore the potential downstream impacts to the Bear River are already analyzed in the DEIR.

As discussed on page 15 of Appendix K.2, much of the flow within Wolf Creek is due to releases of water by Nevada Irrigation District (NID). In 2018, the releases to Wolf Creek averaged approximately 36 cfs. On April 17, 2019, EMKO measured the flow in Wolf Creek at the Centennial Drive bridge (at the intersection with Idaho-Maryland Road) at approximately 50 cfs. EMKO also measured the flow in Wolf Creek at the Centennial Drive bridge on August 8, 2019. At that time, the flow was estimated to be approximately 75 cfs. The flow of the Bear River is not discussed in the DEIR. However, a USGS gage station is located on the Bear River downstream of Rollins Reservoir (USGS Station 11422500, Bear River below Rollins Reservoir, Near Colfax). Mean water flow in the Bear River at this station ranges from approximately 110 cfs to 1,000 cfs over the previous 10 water years.

https://waterdata.usgs.gov/nwis/annual?referred_module=sw&site_no=11422500&por_11422500_216838=2209688,00060,216838,1912,2021&year_type=W&format=html_table&date_format=YYYY-MM-DD&rdb_compression=file&submitted_form=parameter_selection_list

Response to Comment Agcy 3-17

Comment noted. Responses to Attachment 1 are provided in Responses to Comments Agcy 3-21 through 3-37.

Response to Comment Agcy 3-18

The comment does not provide a comment regarding the adequacy of the DEIR. Comment noted.

Response to Comment Agcy 3-19

The comment does not provide a comment regarding the adequacy of the DEIR. Comment noted.

Response to Comment Agcy 3-20

The comment does not provide a comment regarding the adequacy of the DEIR. Comment noted. The County will continue to provide CDFW with project notifications.

Response to Comment Agcy 3-21

A list of potential permits and approvals is provided in DEIR section 3.8, Requested Discretionary Actions.

Response to Comment Agcy 3-22

Draft management plans detailing potential disturbance within the 100-foot setback from riparian areas were provided in Appendix F.5, F.8, and K.6 to the DEIR.

Response to Comment Agcy 3-23

Please see Appendix F.4 detailing seed collection techniques for the Pine Hill Flannelbush, including information on how many seeds will be collected as requested by the commenter. As stated on page 6-2 of Appendix F.4, approximately 30-100 seeds per plant were collected from four plants in 2019 and are stored in the seedbank of UC Santa Cruz. Additional seeds will be collected to have enough seed and it is recommended that up to 400 seeds should be collected from each plant to be destroyed or planted to have sufficient buffers for future propagation efforts and for seed banking.

Response to Comment Agcy 3-24

In response to the comment, Mitigation Measure 4.4-1(b), paragraph four, fifth bullet, is hereby revised as follows:

> *At a minimum, the HMP shall include the following protective measures for special-status plant species with the potential to be impacted by the proposed disturbance:*
>
> - *a map of the location of special-status species that may be disturbed or need to be protected;*
> - *location of environmental protection fencing to be placed around the individual plants to be protected;*
> - *identification of the location of protected plants on design and construction drawings;*
> - *environmental awareness training for all personnel working on the project during initial site disturbance to discuss the location of the protected plants and the measures to be taken to avoid impacts to them; and*
> - *a qualified biologist shall be onsite during all vegetation and ground disturbing activities that are within the vicinity of special-status plants and weekly ~~site~~ monitoring of the protective fencing along fencing along the buffer zone~~by a qualified biologist to ensure that the special-status plants are being protected during site disturbance and construction~~.*

The above minor revisions are made in response to the comment and do not affect the adequacy of the analysis, nor the conclusions in the DEIR.

Response to Comment Agcy 3-25

As detailed in DEIR Impact 4.4-1, other than Pine Hill flannelbush, no other List 1 or 2 plant species were identified onsite during rare plant surveys. It would be premature at this time to identify specific measures for potential rare plants to occur. As detailed in Mitigation Measure 4.4-1(b), if List 1 or 2 rare plants are identified during follow-up surveys, a management plan will be prepared consistent with Nevada County Land Use and Development Code, Section L-II 4.3.12.

Response to Comment Agcy 3-26

Mitigation measure 4.4-2(b) states the qualified biologist shall have a CDFW handling permit.

Response to Comment Agcy 3-27

Mitigation Measure 4.4-2(e) has been clarified per the commenter's suggestion, as follows:

> *Coast Horned Lizard*
>
> *4.4-2(e)* *Pre-construction Survey and Avoidance and Minimization Measures. A pre-construction survey shall be conducted by a qualified biologist no more than seven (7) days prior to disturbance within the areas of the Centennial and Brunswick Industrial Sites that contain disturbed or developed surfaces and annual grassland vegetation community. If the pre-construction survey does not show evidence of coast horned lizard, a letter report documenting the results of the survey shall be provided to the Nevada County Planning Department, and additional measures are not required.*
>
> *If the species is documented during pre-construction survey(s), a qualified wildlife biologist (approved by CDFW) shall move individual coast horned lizards outside of the proposed disturbance area(s) in order to avoid an impact to this species. The qualified biologist shall have all required permits before commencing species specific surveys. Once the coast horned lizard(s) have been removed from the disturbance area(s) and out of harm's way, the proposed work would no longer pose a risk to individuals of the species.*

The above minor revision is made in response to the comment and does not affect the adequacy of the analysis, nor the conclusions in the DEIR.

Response to Comment Agcy 3-28

The commenter provides recommendations for timing of pre-construction bat surveys required in Mitigation Measure 4.4-2(f) of the DEIR. The comment will be considered by the qualified biologist during implementation of said mitigation. Comment noted.

Response to Comment Agcy 3-29

Mitigation Measure 4.4-2(f) has been clarified per the commenter's suggestion, as shown below. The Brunswick shaft is currently sealed with a steel cover and no special species bats are present in the mine shaft. As discussed on page 4.4-73 of the DEIR, the potential for species to occur at the Brunswick Area is considered low. The migration to, and presence of, special species bats in the future dewatered and operating underground mine and constructed headframes is speculative and CEQA does not require that an EIR analyze speculative impacts. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence."

Mitigation Measure 4.4-2(f) is hereby revised as follows:

Special-Status Bats

4.4-2(f) *Pre-construction Survey and Avoidance and Minimization Measures. A pre-construction bat roosting survey shall be conducted by a qualified biologist no more than seven (7) days prior to disturbance of any structures or riparian and forested woodlands within the Centennial Industrial Site and Brunswick Area to identify the presence or absence of roosting bats. If the pre-construction survey does not show evidence of roosting bats, a letter report documenting the results of the survey shall be provided to the Nevada County Planning Department, and additional measures are not required.*

If any Townsend's big-eared bats (or any other species of bat, including the hoary and pallid bat) are identified during roosting surveys, passive removal of the roosting bats prior to disturbance to structures and riparian and forested woodlands shall be implemented to avoid impacts to this species. Passive removal includes allowing roosting bats to freely leave the roost site (riparian and forested woodlands and any structure). Once the roosting bats have been passively removed from the structure(s) and riparian and forested woodlands, the structure(s) would be closed off from recurring bat roosting within the structure(s) and the proposed work within the structure(s) would no longer pose a risk to individuals of the species. For riparian and forested woodlands containing bat roosts, the removal of trees associated with such woodlands would only occur once the bats leave the day roosts. Furthermore, if a maternal (breeding) roost is documented, no disturbance shall occur until a qualified bat biologist has determined the young bats are no longer roosting and the breeding roost has dispersed from the structure or riparian and forested woodlands they are found in.

The above minor revision is made in response to the comment and does not affect the adequacy of the analysis, nor the conclusions in the DEIR.

Response to Comment Agcy 3-30

As discussed on page 4.4-73 of the DEIR, the potential for species to occur at the Brunswick Area is considered low. The migration to, and presence of, special species bats in the future dewatered and operating underground mine and constructed headframe is speculative and CEQA does not require that an EIR analyze speculative impacts. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence."

Response to Comment Agcy 3-31

Commenter states generally that the mitigation measures may constitute deferred mitigation but does not provide any specific examples. In this case, the provided mitigation has clear, enforceable performance standards and is not deferred mitigation. Compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (CEQA Guidelines Section 15126.4.) In the case *Center for Biological Diversity v. California Department of Conservation, etc*. (2019), the court explains that "[g]enerally, it is improper to defer the formulation of mitigation measures…However, an exception to this general rule applies when the agency has committed itself to specific performance criteria for evaluating the efficacy of the

measures to be implemented in the future, and the future mitigation measures are formulated and operational before the project activity that they regulate begins." (36 Cal.App.5th 210, 239.) The court determined both conditions were met and upheld the deferred mitigation measures. Similarly, the mitigation measures presented in the DEIR require compliance with specific performance standards and regulatory requirements, and also require implementation prior to project activities begin.

Response to Comment Agcy 3-32

The commenter recommends a 150ft buffer from perennial streams for placement of staging areas, based on Fish and Game Code Section 5652. However, Fish and Game Code Section 5652 states that it is "unlawful to deposit, permit to pass into, or place where it can pass into the waters of the state, or to abandon, dispose of, or throw away, within 150 feet of the high water mark of the waters of the state, any cans, bottles, garbage, motor vehicle or parts thereof, rubbish, litter, refuse, waste, debris, or the viscera or carcass of any dead mammal, or the carcass of any dead bird." The project does not propose to dispose of any of the listed items into the stream or to dispose of any such item within 150 feet of the stream. Rather, a staging area may be placed no closer than 100 feet from the perennial stream, and items would not be disposed of within 150 feet of the high water mark of the stream, in compliance with the cited Fish and Game Code Section 5562. The applicant is required to comply with California Fish and Game Code Section 5652, regardless of the mitigation measure's buffer size. The comment is noted.

Response to Comment 3-33

The comment is noted and will be considered by the qualified biologist and applicant during mitigation compliance.

Response to Comment Agcy 3-34

The water treatment pond is an existing site feature with a 40-acre foot capacity. Please see DEIR Impact 4.8-3 analyzing the capacity of the water treatment pond and determining sufficient capacity exists based on the storm events modelled. Please also see Appendix K.5 detailing Brunswick Industrial Site drainage and stormwater facility sizing.

Response to Comment Agcy 3-35

Table 4.4-5 of Chapter 4.4 has been updated per the commenter's suggestion, as shown on the following page. The minor change is for clarification purposes and does not alter the analysis, nor conclusions, within the DEIR.

Response to Comment Agcy 3-36

Comment noted. Please see Master Response 34 - Resident Fish.

Response to Comment Agcy 3-37

Comment noted. Please see Master Response 34 - Resident Fish.

Pine Hill flannelbush *Fremontodendron ecumbens*	FE/CR/1B.2	Chaparral, cismontane woodland on serpentinite and gabbroic substrates, from 1,390 – 2,495 feet.	Apr-July	**Centennial Industrial Site** ~~**High**~~**Present**. ~~Potential for occurrence in~~Species identified within openings and under chaparral in gabbroic soils in Idaho Maryland study area. Known from CNDDB Occurrence #14. Protocol level field surveys in 2019 expanded boundaries of known occurrence. **Brunswick Area** **Low.** Known from two miles to the north. Gabbroic soils not present in study area. Was not observed during 2019 protocol level field surveys.

Agency Letter 4





Central Valley Regional Water Quality Control Board



9 March 2022

Matt Kelley
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-8617
Idaho.MMEIR@co.nevada.ca.us

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, IDAHO-MARYLAND MINE PROJECT, SCH#2020070378, NEVADA COUNTY

Agcy 4-1

Pursuant to the State Clearinghouse's 3 January 2022 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report* for the Idaho-Maryland Mine Project, located in Nevada County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

Agcy 4-2

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of



Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations
All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit
Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Agcy 4-3

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification
If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4709 or Greg.Hendricks@waterboards.ca.gov.

Greg Hendricks
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

AGENCY LETTER 4: GREG HENDRICKS, CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

Response to Comment Agcy 4-1

This is an introductory comment. The County acknowledges that the Central Valley Regional Water Quality Control Board is delegated with the responsibility of protecting the quality of surface and groundwaters of the state. Comment noted.

Response to Comment Agcy 4-2

The commenter describes the overall Basin Plan policies and states that the antidegradation analysis is a mandatory element in the NPDES and WDR permitting process. Comment noted. The commenter states that the DEIR should evaluate potential impacts to both surface and groundwater quality. These impacts are analyzed in detail in Chapter 4.8 of the DEIR.

Response to Comment Agcy 4-3

The commenter provides information on permitting requirements, which are addressed in Sections 4.4 and 4.8 of the DEIR, including the commenter's referenced Construction Storm Water General Permit (pages 4.8-27, 4.8-52), Industrial Storm Water General Permit (pages 4.8-30, 4.8-53), Clean Water Act Section 404 Permit (pages 4.4-40, 4.4-91), Clean Water Act Section 401 Permit – Water Quality Certification (page 4.4-91), Waste Discharge Requirements (pages 4.8-29, 4.8-52), Dewatering Permit (page 4.8-31), and Limited Threat General NPDES Permit (pages 4.8-30, 4.8-52). Comment noted.

Agency Letter 5

California Water Boards

Gavin Newsom, Governor
Jared Blumenfeld, Secretary for Environmental Protection

Central Valley Regional Water Quality Control Board

4 April 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902

Via email
Idaho.MMEIR@co.nevada.ca.us

COMMENTS ON DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)
IDAHO-MARYLAND MINE PROJECT, NEVADA COUNTY

Agcy 5-1

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff reviewed the December 2021 Draft Environmental Impact Report (Draft EIR) Volume I of X (Chapters 1-8) for the Idaho-Maryland Mine Project (the Project). The Regional Water Quality Control Boards are delegated with the responsibility of protecting the quality of surface and groundwaters of the state.

Central Valley Water Board staff assumes that the project applicant, Rise Grass Valley, Inc., (Rise Grass Valley) will continue to proceed with County permits and authorizations prior to seeking the necessary approval/permits from the Central Valley Water Board. Therefore, our comments address the adequacy of the Draft EIR as a responsible agency and provide clarification of potential Central Valley Water Board concerns and regulatory requirements regarding water quality.

Central Valley Water Board staff have the following comments.

Agcy 5-2

1. **Approach to Centennial Industrial Site Baseline**. Pages 1-3 through 1-7. The California Department of Toxic Substances Control (DTSC) is the lead regulatory agency for the Centennial Industrial Site Cleanup. Central Valley Water Board staff will assist DTSC with ensuring that the Centennial Industrial Site investigation and cleanup proceeds regardless of the status of the proposed Project.

Agcy 5-3

2. **RoWD and WDRs.** Pages 2-78-81. As indicated in Table 2-1 Mitigation Measures 4.8-1(a), (b), (c), (d) and 4.8-1(e), Rise Grass Valley will need to obtain several different permits from the Central Valley Water Board prior to beginning operations. This includes a permit for the water treatment plant discharge via submittal of a Notice of Intent (NOI) and obtaining a Notice of Applicability (NOA) in the Limited Threat Discharge Permit, submittal of a Report of Waste Discharge (RoWD) and obtaining Waste Discharge Requirements (WDRs) for both the surface impoundment and construction of the engineered fill areas prior to

discharging any mining waste[1], and submitting a NOI for coverage under the Industrial General Permit and prepare a Industrial Stormwater Pollution Prevention Plan. After receipt of the NOIs and RoWDs, Central Valley Water Board staff will evaluate the documents and their applicability for the appropriate permits when they are submitted. The Central Valley Water Board may require modifications to the water treatment system, surface impoundment and mining operations as well as monitoring to ensure the protection of water quality. All permitting requirements are expressly noted in the Draft EIR as mitigation measures. Under Water Code §13263.1, the Central Valley Water Board must determine that the proposed mining waste discharge is consistent with a waste management strategy that prevents the pollution or contamination of the waters of the state, particularly after closure of any waste management unit for mining waste, before issuing any permits.

3. **Ongoing Waste Characterization.** Under Water Code §13260(k), the RoWD must also include a report on the physical and chemical characteristics of the waste that could affect its potential to cause pollution or contamination as well as a report that evaluates the potential of the discharge of the mining waste to produce, over the long term, acid mine drainage, the discharge or leaching of heavy metals, or the release of other hazardous substances. The WDRs will require continuous and routine characterization and classification (Cal. Code Regs., Tit. 27 §22480(b)) of the mining waste to evaluate any possible changes in the geological or geochemical nature of the waste. Rise Grass Valley will need to address any changes in waste classification.

Agcy 5-4

Central Valley Water Board staff anticipate that to comply with Water Code §13260(k) and ensure protection of water quality as part of the RoWD/WDR process, the Central Valley Water Board will require Rise Grass Valley to prepare and implement a Waste Characterization Plan (Characterization Plan) comparable to the ASUR Plan[2] identified in the Draft EIR. The purpose of the Characterization Plan is to continually evaluate the different forms of mining wastes and to appropriately classify these wastes as Group A, Group B, or Group C based on an assessment of the potential risk of water quality degradation posed by each waste. Through the WDRs, these wastes will be required to be managed, treated, stored, or disposed of in a manner that is protective of water quality.

[1] The Mining Waste Management Regulations define "mining waste" as "waste from the mining and processing of ores and mineral commodities. Mining waste includes: (1) overburden; (2) natural geologic material which have been removed or relocated but have not been processed (waste rock); and (3) the solid residues, sludges, and liquids from the processing of ores and mineral commodities." Cal. Code Regs., tit. 27, § 22480(a).
[2] Asbestos, Serpentinite, and Ultramafic Rock Management Plan (ASUR Plan). See page 3-19 of the Draft EIR.

Mining waste that is characterized and classified as Group C (i.e., discharge of these wastes would be in compliance with water quality objectives other than turbidity) could be used as engineered fill[3] with limited regulatory restrictions. During the RoWD/WDR process, the Central Valley Water Board will establish the specific methods, volumes, and frequency of characterization and determine the appropriate requirements for the WDR.

4. **Engineered Fill.** Page 3-29 of the Draft EIR indicates that mining waste used as engineered fill would be considered a Group C mining waste. The language leaves the reviewer with the impression that because mining waste is used as engineered fill, it is considered a Group C mining waste. This is not correct. Mitigation Measure 4.8-1(e) provides a better summation of the accepted regulatory approach.

Agcy 5-5

Sand tailings, waste rock, backfill material, or other combinations being proposed for engineered fill will need to be characterized as Group C mining waste (e.g. page 4.8-50) prior to its use as engineered fill. Rise Grass Valley will need to characterize and classify mining waste in its correct California Code of Regulations Title 27 waste group, which will dictate how the waste must be managed, contained, or used. The Draft EIR should be revised to address this comment.

5. **Off-Site Sales of Waste Rock.** Page 1-7 of the Draft EIR states that "…*this EIR anticipates that waste rock from the Brunswick Industrial Site could also be sold as engineered fill to local and regional markets to be used as aggregate in roadway and construction projects*. For mining waste to be used for off-site purposes, Rise Grass Valley would first need to confirm that the waste would not pose a threat to water quality or that the potential threat to water quality could be mitigated (Cal. Code Regs., Tit. 27 §22480(c) and §22480(d)) for its proposed use. Rise Grass Valley will need to use the anticipated Characterization Plan to address this issue.

Agcy 5-6

Central Valley Water Board staff is somewhat concerned with the general assumption in the Draft EIR that a significant volume of the mining waste produced during the life of the Project will be suitable for off-site sale and use in local and regional markets as construction aggregate with limited regulatory restrictions (i.e., Group C mining waste). While the geochemical nature of the mining waste may prove to be suitable for construction aggregates, the alternative scenario that the mining waste is not suitable for off-site use should be examined. How would this affect the economic or operational aspects of the

[3] The use of mining waste as engineered fill is proposed for potential industrial pad development at the Centennial and Brunswick Industrial sites (Draft EIR, page 1-2) for the first 10-11 years of the Project and for local and regional markets for sale as construction aggregate and fill (Draft EIR, page 1-3) for the remainder of the Project.

Project? Rise Grass Valley should assess any operational constraints, such as not mining geological material that may produce water quality issues, challenges associated with the expanded use of cemented paste backfill[4] as a method of waste disposal, and the anticipated operational or economic costs resulting from the inability to utilize mining waste for off-site sale as construction aggregate. The Draft EIR should be revised to address this comment.

Agcy 5-7

6. **Clay Lined Settling Pond.** The Draft EIR indicates that the existing clay lined pond can be covered with a geomembrane liner to ensure seepage does not occur from the pond (Draft EIR, pages 2-79 and 3-17). While this proposal may meet minimum California Code of Regulations Title 27 prescriptive standards, it may not meet the potentially more stringent California Code of Regulations Title 27 performance standards. The Central Valley Water Board may require a more stringent design in a case where it concludes that the minimum design will not provide adequate protection to a given body of groundwater. The Central Valley Water Board will address this issue during the RoWD/WDR phase.

Agcy 5-8

7. **Water Quality Specific Financial Assurances.** While the Draft EIR references requirements for California's Surface Mining and Reclamation Act (SMARA) financial assurance(s), there will be water quality specific financial assurances for closure and post-closure maintenance of mining units as required by Title 27, section 22510. Although there is some discussion of potential overlap between the SMARA financial assurances (Draft EIR, page 4.8-30), water quality specific financial assurances will focus on water within the mine workings, groundwater, and mine water that ultimately discharges from the Project after mine closure. This may include the need for long-term water treatment of mine-related discharges. These financial assurances are separate and distinct from the SMARA financial assurances discussed in pages 3-42, 3-47, 4.8-30, and 4.9-20. This issue will be addressed during the RoWD/WDR phase.

Agcy 5-9

8. **Temporary or Short-Term Shutdowns.** Staff could not locate a discussion in the Draft EIR of temporary or short-term shutdown plans (Short-Term Shutdown Plan). Rise Grass Valley should anticipate temporary or short-term shutdowns over the life of the Project due to changes in economic conditions, technical issues, changes in management, etc. The WDRs will require that Rise Grass Valley prepare a Short-Term Shutdown Plan that identifies mitigation measures to protect water quality and the environment. The plan will include financial assurances to ensure that there are adequate funds to perform basic operations and maintenance until mining resumes or closure takes place.

Agcy 5-10

9. Staff could not locate a discussion in the Draft EIR on how the applicant intends to address/mitigate/ or take responsibility for any post-mining water quality issues. The Draft EIR should be revised to address anticipated post-mining

[4] Cemented paste backfill may/could be considered treatment under Title 27, section 22480(d).

water quality issues and whether the mine will require long-term oversight to ensure water quality conditions comply with applicable regulatory requirements.

Agcy 5-11

10. The Low-threat permit referenced throughout the Draft EIR has been rescinded. General Waste Discharge Requirements/NPDES Permit for Limited Threat Discharges to Surface Waters, Order R5-2022-0006/NPDES Permit No. CAG995002 was adopted on 17 February 2022.[5]

Please contact Jeff Huggins at (916) 464-4639 or Jeff.Huggins@waterboards.ca.gov with any questions regarding the contents of this letter. We are available to meet with you if you would like to discuss applicable Water Board requirements or potentially applicable permits.

John J. Baum

John Baum, P.E.
Assistant Executive Officer

cc: (by email only)

Ben Mossman, Chief Executive Officer Rise Grass Valley

[5] R5-2022-0006 Limited Threat Discharges to Surface Water - General Order (ca.gov)

AGENCY LETTER 5: JEFF HUGGINS, CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

Response to Comment Agcy 5-1

The comment is introductory and correctly assumes that the applicant will continue to proceed with County permits prior to seeking the necessary approval/permits from the Central Valley Water Board. Comment Noted.

Response to Comment Agcy 5-2

Comment Noted. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Agcy 5-3

The comment is informational in nature, generally summarizing the permitting requirements for the project and acknowledging that the requirements are identified in the EIR as mitigation measures. The County and applicant understand the Central Valley Water Board's role in the process and appreciate the comments.

Response to Comment Agcy 5-4

Report of Waste Discharge (RoWD) permitting requirements are set forth in Mitigation Measure 4.8-1(e) of the DEIR. In response to the comment, Mitigation Measure 4.8-1(e) is hereby modified in the Final EIR to include the commenter's clarifications on the requirements for ongoing waste characterization in the approved WDR.

Page 4.8-53, Mitigation Measure 4.8-1(e), is hereby revised, as follows:

> 4.8-1(e) The applicant shall submit a RoWD and obtain WDRs from the Central Valley RWQCB for construction of the engineered fill areas. The WDR permit shall be received by the applicant prior to initiating any engineered fill placement activities at the Centennial or Brunswick Industrial Sites. Proof of coverage shall be provided to the Nevada County Public Works Department. As part of this process, the RWQCB will determine the appropriate mining waste classification for the proposed engineered fill, and will consider the following factors: (1) whether the waste contains hazardous constituents only at low concentrations; (2) whether the waste has no or low acid generating potential; and (3) whether, because of its intrinsic properties, the waste is readily containable by less stringent measures. The engineered fill areas shall be constructed in accordance with the Title 27 specifications, pursuant to the mining waste classification determined by the RWQCB. The applicant shall submit to the Nevada County Planning Department a copy of the RoWD and evidence of the applicant's receipt of WDRs prior to the placement of fill or fill site preparation disturbance at the Brunswick Industrial Site and Centennial Industrial Site. <u>The RoWD must also include a report on the physical and chemical characteristics of the waste, in compliance with Water Code section 13260(k), that could affect its potential to cause pollution or contamination as well as a report that evaluates the potential of the discharge of mining waste to produce, over the long term, acid mine drainage, the discharge or leaching of heavy metals, or the release of other hazardous substances. The WDR's will require continuous and routine characterization and classification (Cal Code regs Title 27 section 22480(b)) of the mining waste to evaluate any possible changes in the geological or geochemical nature of the waste. The applicant shall prepare and implement a Waste Characterization Plan (Characterization Plan) which shall be incorporated into the approved WDR. The purpose of the Characterization Plan is to</u>

> continually evaluate the different forms of mining wastes and to appropriately classify these wastes as Group A, Group B, or Group C based on an assessment of the potential risk of water quality degradation posed by each waste. Through the WDR these wastes shall be managed, treated, stored, or disposed of in a manner that is protective of water quality. The applicant shall not sell or utilize waste rock and tailings from the Project for construction aggregate or fill purposes offsite (i.e. sites other than the applicant's Brunswick and Centennial sites) unless such material has been tested and confirmed to qualify as Group C mining waste under California Code of Regulations Section 22480 and the approved WDR. The specific methods, volumes and frequency of characterization shall be established in the approved WDR.

The above changes are provided in response to the comment for clarification purposes and do not alter the conclusions of the DEIR.

Response to Comment Agcy 5-5

Comment noted. Page 3-29 of the DEIR has been modified to delete the sentence, "as the engineered fill would be considered a Group C mining waste." , as shown below.

Mitigation Measure 4-8-1(e) has been modified to clarify the requirement that the applicant shall not sell or utilize waste rock and tailings from the project for construction aggregate or fill purposes offsite (i.e., sites other than the applicant's Brunswick and Centennial sites) unless such material has been tested and confirmed to qualify as Group C mining waste under California Code of Regulations Section 22480 and the approved WDR which will establish the specific methods, volumes and frequency of characterization. See revised language of Mitigation Measure 4.8-1(e) in Response to Comment Agcy 5-4 above.

Page 3-29 of the DEIR is hereby revised as follows:

> The applicant will be required as part of the project to submit a Report of Waste Discharge (RoWD) and obtain Waste Discharge Requirements (WDRs) from the Regional Water Quality Control Board (RWQCB) for construction of the engineered fill areas~~, as the engineered fill would be considered a Group C mining waste.~~[3] Percolation of precipitation into the fill areas is expected to be minimal because the engineered fill would be graded and compacted to allow runoff to be conveyed to the detention basins. The WDRs would specify appropriate monitoring and limitations to prevent the discharge of water containing any constituents outside of applicable water quality standards.

The above minor change is provided for clarification purposes and does not alter the analysis, nor conclusions in the DEIR.

Response to Comment Agcy 5-6

Mitigation Measure 4.8-1(e) has been modified to clarify the requirements for a Characterization Plan in the approved WDR and Group C mining waste requirement for offsite material (See Response to Comment Agcy 5-5, and Response to Comment Agcy 5-4 for the revised mitigation measure language).

Economic costs are not required to be analyzed under CEQA. Please see Master Response 1 - Non-EIR/Administrative Issues and Master Response 2 - Social and Economic Impacts. Testwork performed on rock samples from the project site, and the specific process used to produce sand tailings indicate that the project's waste rock and sand tailings will meet Class C Mining Waste standards, such that the situation posed by the commenter is not reasonably expected to occur. Moreover, the project's ASUR plan includes advanced mine planning such that the mine operator will have core samples of rock material prior to mining in new areas of the project site with a

different rock chemistry. As such, the mine operator will have advanced information on rock chemistry and thus will be able to avoid mining in rock material that is unsuitable for construction aggregate, if large amounts of unsuitable material are unexpectedly discovered.

Please also see Master Response 11 - Engineered Fill Utilized in Local and Regional Construction Markets.

Response to Comment Agcy 5-7

The comment does not address the adequacy of the DEIR. The County and applicant understand that the Central Valley Water Board will conduct review of the project, including the clay-lined pond, during the RoWD/DWR phase. Comment noted.

Response to Comment Agcy 5-8

The comment does not address the adequacy of the DEIR. The County and applicant understand that the Central Valley Water Board will conduct review of the project, including the noted financial assurances, during the RoWD/DWR phase. Comment noted.

Response to Comment Agcy 5-9

The comment does not address the adequacy of the DEIR. The County and applicant understand that the Central Valley Water Board will conduct review of the project, including the noted topic of temporary shutdowns, during the RoWD/DWR phase. Comment noted.

Response to Comment Agcy 5-10

As stated on page 4.8-51 of the DEIR, after mining is completed, and as underground mine workings fill with groundwater, water from the underground mine workings would begin to seep from the existing drains. The water that would seep from the underground workings is anticipated to have similar water quality to the water that currently discharges from the existing drains. Specifically, it may contain elevated levels of iron and manganese. Therefore, the conditions after mining is completed would be similar to existing, or baseline, conditions, such that re-activation of the seeps would not represent a potentially significant impact under CEQA. The mine operator will work with the CVRWQCB at the time of mine closure to implement any measures that may be required at that time to address re-activation of the existing baseline condition seeps.

Response to Comment Agcy 5-11

In response to the comment, relevant sections of Chapter 4.4, Hydrology and Water Quality, of the DEIR are hereby revised in this FEIR reference the current Order R5-20022-006 for NPDES Permit No. CAG995002, as follows:

Page 4.8-28, Section 4.8.3, Regulatory Context, is hereby revised as follows:

> General Permit for Limited Threat Discharges to Surface Waters
>
> The Limited Threat General Order (R5-~~2016-0076-01~~2022-0006) is a general Waste Discharge Requirements permit for Limited Threat Discharges to Surface Water. The discharge of treated water from the proposed mine into South Fork Wolf Creek is anticipated to be covered as a Tier 3 discharge of hard rock mine wastewater. Under Table 3 of the Limited Threat Discharge permit, Tier 3 discharges to surface water that are greater than 250,000 gpd (greater than 175 gpm) and/or that are longer than four months are allowed if the water to be discharged (with or without treatment) meets the applicable screening levels in the permit.
>
> Effluent limitations are listed in Section V and screening levels are listed in Attachment I of the Low Threat Discharge permit. Rise will be required to file a Notice of Intent (NOI) for

coverage under the Limited Threat Discharge permit, which will include a detailed description of the dewatering, treatment, and discharge components of the project. A Monitoring and Reporting Program (MRP) will also be required pursuant to the General Order, Attachment C. The MRP will specify monitoring station locations, sampling frequencies and methods, and monitoring report submittal requirements to the Regional Board.

Page 4.8-45, Section 4.8.4, Impacts and Mitigation Measures, Impact 4.8-1, is hereby revised as follows:

Ongoing monitoring of influent and effluent (i.e., treated water) will be required by the State, in order for the applicant to receive coverage under the State's Limited Threat Discharge Permit (General Order R5-~~2016-0076~~2022-0006; NPDES No. CAG995002). Monitoring of treated water would occur at a location specified by the State prior to the point of discharge at South Fork Wolf Creek. The owner will be required to submit quarterly monitoring reports to the State RWQCB, demonstrating compliance with the maximum daily effluent limitations specified in Section V of the NPDES permit. Compliance with the water quality standards and waste discharge requirements in Order No. R5-~~2016-0076~~2022-0006 would prevent any degradation of surface water quality due to dewatering.

Page 4.8-52, Mitigation Measure 4.8-1(a), first sentence, is hereby revised as follows:

4.8-1(a) *The applicant shall submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) for coverage under the Limited Threat Discharge permit (General Order R5-~~2016-0076~~2022-0006; NPDES No. CAG995002), at least six months prior to construction of the water treatment system; and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin and provided to Nevada County Planning Department.*

Page 4.8-79, Impact 4.8-6, first paragraph, is hereby revised as follows:

The current water quality control plan for the region is the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, which is also referred to as the Basin Plan (CVRWQCB, 2019). The project would be required to operate under an applicable WDR permit from the CVRWQCB for placement of any waste material on land. The dewatering discharge to South Fork Wolf Creek would also need to comply with the requirements of the applicable NPDES permit Order R5-~~2016-0076~~2022-0006 (NPDES No. CAG995002) for Limited Threat Discharges to Surface Water as a Tier 3 discharge. The WDR and NPDES requirements ensure that the project would not conflict with or obstruct implementation of the Basin Plan.

The above minor changes are for clarification purposes and do not alter the adequacy of the analysis contained in the DEIR, nor its conclusions.

Agency Letter 6

State of California **Transportation Agency**

M e m o r a n d u m

Governor's Office of Planning & Research
Feb 16 2022
STATE CLEARING HOUSE

Date: February 16, 2022

To: Special Projects Section

From: **DEPARTMENT OF CALIFORNIA HIGHWAY PATROL**
Grass Valley Area

File No.: 230.14307.

Subject: ENVIRONMENTAL DOCUMENT RESPONSE SCH# 2020070378

Agcy 6-1 After reviewing the draft environmental impact report for the Idaho-Maryland Mine project proposed for Nevada County, I do not believe there would be any impact to local Area operations or public safety. The general area may see a very slight increase in commercial vehicle traffic.

Agcy 6-2 The proposed underground mining operations would be offset from the roads and will primarily be operating within its own boundaries.

G. STEFFENSON, Lieutenant
Commander

Safety, Service, and Security ***An Internationally Accredited Agency***
CHP 51 (Rev. 03-11) OPI 076

AGENCY LETTER 6: G. STEFFENSON, DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

Response to Comment Agcy 6-1

The commenter states that the project would have no impact to local Area operations of the California Highway Patrol or public safety, and that the general area may see a very slight increase in commercial vehicle traffic. Comment noted.

Response to Comment Agcy 6-2

The commenter states that proposed underground mining operations would be offset from the roads and primarily operate within its own boundaries. Comment noted.

Agency Letter 7

Jared Blumenfeld
Secretary for
Environmental Protection

Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200

Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

March 30, 2022

Mr. Matt Kelley
Senior Planner
Nevada City
950 Maidu Avenue, Suite 170
Nevada City, CA 95959
Matt.Kelley@co.nevada.ca.us

COMMENT ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE IDAHO-MARYLAND MINE PROJECT – DATED DECEMBER 2021 (STATE CLEARINGHOUSE NUMBER: 2020070378)

Dear Mr. Kelley:

The Department of Toxic Substances Control (DTSC) received the Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine Project (Project). The Lead Agency is receiving this notice from DTSC because the Project includes the possible use of the nearby Centennial M-1 property as a repository for mine waste if the Project proceeds.

Agcy 7-1

The owner of the Centennial M-1 property is under a voluntary cleanup agreement with DTSC to address existing mine waste at this site via a remedial action plan that is currently under review. If approved, the cleanup of the Centennial M-1 site includes consolidating existing mine waste with contaminant concentrations above commercial/industrial cleanup levels and encapsulating this material on the property with on-site soils that are protective of human health under the anticipated commercial/industrial future use. In addition, the protective surface soils will be graded to ensure runoff is directed away from the encapsulated material and towards a retention basin that will also be constructed to protect Wolf Creek which is located nearby.

Agcy 7-2

To ensure the long-term safety and integrity of the proposed remediation, any waste rock brought to the Centennial M-1 site from the Idaho-Maryland Mine must be sampled to ensure it meets the cleanup levels for the Centennial M-1 site achieved during the

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cleanup effort. In addition, the material must be placed in such a way as to ensure the integrity and function of the cap to direct surface water away from the buried contamination. The protocol and frequency of sampling waste material from the Idaho-Maryland Mine and the frequency of inspections of the Centennial M-1 site have yet to be determined. These efforts may be outlined in the Operation and Maintenance (O&M) Agreement with DTSC that will be a part of the Centennial M-1 remediation or they be approved in a separate stand-alone document. Any specifications, work plans, or reports regarding placement of material on the Centennial M-1 must be reviewed and approved by DTSC under an O&M or other agreement with DTSC. DTSC is providing this letter to ensure the County is aware of these general requirements as they do not appear to be discussed in the DEIR.

DTSC appreciates the opportunity to review and comment on the DEIR for the Project. If you have any questions, please contact me at (916) 255-3591 or via email at Dean.Wright@dtsc.ca.gov.

Sincerely,

Dean Wright
Project Manager
Site Evaluation and Remediation Unit
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (via email)

Governor's Office of Planning and Research
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Ms. Lora Jameson, P.G., Chief
DTSC/Site Evaluation and Remediation Unit
Lora.Jameson@dtsc.ca.gov

Mr. Dave Kereazis
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

AGENCY LETTER 7: DEAN WRIGHT, DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Response to Comment Agcy 7-1

The commenter provides information on the voluntary cleanup agreement for the Centennial site. Comment noted. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Agcy 7-2

The commenter states that waste rock brought to the Centennial site by the project must be sampled to ensure it meets the cleanup levels for the Centennial site and that the material must be placed in such a way to ensure the integrity and function of the cap to direct surface water away from the buried contamination. The protocol and frequency of sampling waste material from the project will be outlined in the Operation and Maintenance (O&M) agreement between the applicant and DTSC. Comment noted. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Agency Letter 8

CITY OF GRASS VALLEY
Community Development Department
Thomas Last, Community Development Director

125 East Main Street
Grass Valley, CA 95945

Building Division
530-274-4340
Planning Division
530-274-4330
530-274-4399 fax

Date: March 30, 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902
Phone: 530-265-1423
Email: Idaho.MMEIR@co.nevada.ca.us

RE: COMMENTS ON THE IDAHO-MARYLAND MINE PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT (DECEMBER 2021) (SCH# 2020070378), NEVADA COUNTY, CALIFORNIA

Dear Mr. Kelley:

Agcy 8-1

The City of Grass Valley has completed review of the Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine Project (IMMP) and prepared the following comments. In summary, the DEIR is extraordinarily long (over 1,000 pages not including technical appendices), and much of its contents are very thorough. In addition to my review, the City was assisted in its review by Dr. Jeff Harvey, Ph.D., Principal & Senior Scientist with the Harvey Consulting Group for CEQA adequacy, Project Description, Hydrology and Alternatives topics. Paul Miller, Principal and Senior Air Quality and Noise Analyst, and Dan Jones, Senior Air Quality and Noise Analyst with The RCG Group for the Air Quality, Greenhouse Gas Emissions, Health Risks and Noise topics, and John Kain, AICP, Principal and Senior Transportation Planner, and Marlie Whiteman, P.E., Senior Transportation Engineer, with Urban Crossroads, Inc. for the Transportation and Vehicle Miles Travelled topics.

As detailed in our comments below, key aspects of this proposed 80-year mining and industrial development project – including air quality, greenhouse gases and traffic, and consideration of alternatives that may reduce or avoid potentially significant impacts to the City and surrounding County areas – are not accurately or adequately assessed. Corrections needed to these analyses are very likely to conclude with findings of greater impact levels than are now reported, and therefore a need for additional mitigation measures, and/or consideration of other project alternatives. This letter highlights technical inadequacies of the DEIR based on the CEQA statute, CEQA Guidelines and published court decisions interpreting CEQA.

CHAPTER 3: PROJECT DESCRIPTION

Agcy 8-2

PD-1) The applicant's request for an 80-year permit is extraordinary and makes this truly a multi-generational project. It is reasonable to expect that a lot is going to change in 80 years, possibly including mining methods, regulatory standards, market demand for gold, transportation methods and more. The County needs to consider a shorter permit time period, with an ability to renew the permit based upon an updated environmental review that reflects conditions and standards decades in the future. We suggest 30-years maximum permit period, which is still a major commitment to a single large industrial use. In addition, the County should consider a condition of approval requiring an Adaptive Management Process under which the project gets reviewed periodically (every 10 years), with additional environmental compliance and mitigation requirements added to the permit conditions as needed.

Agcy 8-3

PD-2) Likewise, the size of the project needs to be reconsidered. The 1,000 tons per day goal may be optimal for the applicant, but it is not optimal for the community as it requires off-site hauling through community areas and the City in 20 to 25 ton trucks from 6:00 AM to 10:00 PM seven days per week for 80 years. We recommend a cap of 500 tons per day or less, and no nighttime hauling activity. This would reduce truck traffic generation, noise, air quality and greenhouse gas emissions, energy and fuel use, and the volume of residual material to be disposed of by half – a very significant reduction in the impacts of this proposed industrial operation.

Agcy 8-4

PD-3) The proposed hauling operations need to clearly note that this part of the operation will include the loading, dumping, spreading, and compacting of waste materials. (See related comment in the Noise section below). Page 3-40 of the DEIR states "Hauling and dumping of engineered fill at the Centennial Industrial Site would occur between 6:00 AM – 10:00 PM." The hauling and dumping of engineered fill are construction activities that are intended to create industrial development pads rather than a mining activity, and as such, should be limited to the construction hours of the City's Noise Ordinance (prohibits construction noise between the hours of 7 pm and 7 am, or on Sundays) and should discuss how this proposed plan affects the goals of the Safety and Noise Elements of the County's General Plan, rather than just mentioning it on page 3-2.

Agcy 8-5

PD-4) The County may also consider splitting the Centennial Site operations off as a separate project and conduct environmental review and permitting independently. If the engineered fill can be used for deep mine backfill or transported to local and regional markets for use in construction projects (DEIR, page 3-26), the backfill at the Centennial Industrial Site does not need to be a component of the mining operation.



Agcy 8-6	PD-5)	On page 3-18 in the discussion of the water treatment process and system it is noted that monitoring reports are required to be submitted quarterly. Please include the timing intervals for monitoring samples to be obtained. We suggest that at a minimum sampling should be done monthly for at least the first year, and quarterly thereafter if the first-year results demonstrate compliance with the maximum daily effluent limitations.
Agcy 8-7	PD-6)	On page 3-19 in the third paragraph of the discussion of Mine Development (Tunneling) it is stated that the underground transport of barren rock will be done using electric or diesel-powered load/haul/dump vehicles. We suggest that the County should require all such vehicles to be electric-powered so that diesel exhaust emissions underground are eliminated.
Agcy 8-8	PD-7)	On page 3-19 in the second paragraph of the discussion of Gold Mineralization Production, it is stated that 50 percent of mineralization would be returned to the underground mine as backfill, and the remainder would be used as engineered fill. This is not for the life of the project, as the engineered fill process only extends an estimated 5 to 12 years for the Centennial and Brunswick sites. Please describe what happens to the additional 50 percent (over 150,000 tons per year) for the tens of decades after the engineered fill is completed.
Agcy 8-9	PD-8)	On page 3-21 in the second paragraph of the discussion of the ventilation exhaust system and underground support systems, please confirm that these include back-up generators and an alarm system in the event of a power outage.
Agcy 8-10	PD-9)	Starting on page 3-26 in the discussion of Engineered Fill Transport, it is stated that engineered fill would be stored at the Brunswick site and/or transported to local and regional construction markets. Like gold, the market for engineered fill can fluctuate substantially over periods of years. There needs to some defined maximum volume that can be stored at the Brunswick site, the storage method described, and a discussion of what happens when "local and regional construction markets" have low demand for these fill materials for a prolonged period of time.
Agcy 8-11	PD-10)	On page 3-28 in the first paragraph of the discussion of explosives, it is stated that the explosives supplier will have a "sufficient" insurance policy. Please define the term "sufficient" in this context and provide details regarding the events that will be covered so the sufficiency of the insurance may be accurately assessed.
Agcy 8-12	PD-11)	On page 3-33 in the first paragraph of the discussion of the Potable Water Pipeline, please confirm that the pipeline construction and extensions to willing residents will occur prior to the commencement of dewatering of the mine.

Agcy 8-13

PD-12) On page 3-42 in the discussion of Mine Rescue and Emergency Response, please confirm that the mine-rescue team will be a part of the mining workforce on site.

Agcy 8-14

PD-13) On page 3-42 in the discussion of the Reclamation Plan, (and in Table 3-10 on page 3-46) the County should require that reclamation include demolition and removal of the above ground facilities and structures, subject to review if the buildings are inspected and determined to be of commercial value. These facilities and structures will be decades old at the time of reclamation and are unlikely to be in a condition that supports unknowable post-mining industrial uses of the property.

Agcy 8-15

PD-14) On page 3-52 in Table 3-11, a fact check: we believe that the RWQCB rather than the SWRCB Division of Water Rights has jurisdiction for all six of the permits listed for those agencies.

CHAPTER 4.3: AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Agcy 8-16

AQ-1) The DEIR and Health Risk Assessment lack details of sensitive receptors that were considered for evaluating potential localized health impacts from the project. Page 4.3-11 of the DEIR states "At the Brunswick Industrial Site, rural residences are located to the north, west, east, and south. The nearest residence is north of East Bennett Road, approximately 100 feet from the Brunswick Industrial." Page 4.3-79 of the DEIR states "The maximally exposed receptor was estimated to be the nearest existing residence, which is north of the Brunswick Industrial Site." However, there is no map, figure, or other detailed information showing the sensitive receptors that were considered for evaluating potential localized health impacts from the Project in the DEIR or in the Air Quality and Greenhouse Gas Emissions Analysis Technical Report (Dudek, 2020). This information should be added in the Recirculated Draft EIR.

Agcy 8-17

AQ-2) The analysis of whether the project would result in wasteful, inefficient, or unnecessary use of energy is inadequate. CEQA Guidelines Section 15126.2, regarding the discussion of energy impacts, states: "*This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation.*" The discussion of Impact 4.3-4 (beginning on page 4.3-86) of the DEIR does not disclose the estimated fuel usage (gasoline and diesel) from mobile sources (off-road equipment and on-road transportation sources) associated with construction and operation of the Project. This information should be included to disclose the scale of the Project's usage of petroleum fuel sources. (See Ukiah Citizens for Safety First v. City of Ukiah, (2016) 248 Cal.App.4th 256). The discussion of Impact 4.3-4 should be enhanced to discuss whether this amount of energy usage would be considered wasteful, inefficient, or unnecessary.

AQ-3) The analysis of whether the project would conflict with a State or local plan for renewable energy or energy efficiency is inadequate. Page 4.3-88 of the DEIR states that that the Project would consume approximately 50,000 MWh annually during the 80-year operational life of the Project. Page 4.3-88 of the DEIR states that the Project would be served primarily by grid-supplied electricity, except under conditions when emergency power is required, and standby diesel generators would be used.

Agcy 8-18

According to the Nevada County Energy Action Plan (EAP), Nevada County's total consumption in 2017 was approximately 344,000 MWh.[1] The Project's annual energy use would represent an increase of approximately 15 percent in County-wide electricity usage for a single industrial use. As noted on Page 4.3-40 of the DEIR, "*One of the central goals of the EAP is to reduce the projected annual grid supplied electricity use in 2035 by 51 percent…compared to a baseline from the year 2005*." The Project would result in a substantial long-term increase in grid supplied electricity consumption in the County which conflicts with the Nevada County EAP. This energy use should be recognized as a significant impact of the proposed project and mitigation should be incorporated to reduce this impact.

AQ-4) The cumulative energy use impact discussed in 4.3-9 (Page 4.3-102) of the DEIR is difficult to differentiate from the project-level energy analyses (Impacts 4.3-4 and 4.3-5). The impact heading and significance determination statements are written as if they are discussing project-level impacts. The discussion needs to be enhanced to describe the potential cumulative energy use impacts of the Project when viewed together with the energy use of past, present, and reasonably foreseeable future projects.

Agcy 8-19

AQ-5) The DEIR lacks mitigation measures for project operations. Page 4.3-67 of the DEIR states "*According to the NSAQMD, unmitigated project generated emissions of ROG NO_X and PM10 that are greater than zero are potentially significant and require mitigation.*" Table 4.3-17 (Maximum Unmitigated Daily Project Emissions) notes that all operational phases of the Project would be potentially significant for ROG, NO_X and PM10 and Page 4.3-70 of the DEIR states "*As shown in Table 4.3-17, daily unmitigated emissions of ROG, NOx and PM10 would be potentially significant (Level A or B) according to the NSAQMD significance criteria; therefore, mitigation is required.*"

Agcy 8-20

However, no mitigation measures were implemented for the operational phases of the Project. The NSAQMD states in their *Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects* (*Guidelines*) that "*The lead agency should contact the District office to discuss the mitigations before the lead agency*

[1] Nevada County Energy Action Plan, Accepted by Board of Supervisors 5-0 February 12th, 2019, accessed at: https://www.mynevadacounty.com/DocumentCenter/View/35183/Nevada-County-Energy-Action-Plan

commits to a final mitigation plan for each project." Since the Idaho-Mine Project is not a typical land use project for which the *Guidelines* are intended for and no mitigation measures from the *Guidelines* are applicable to the operational phases of the Project, the NSAQMD should have been (and should be) consulted to discuss mitigation measures that could be applicable to Project operation. The DEIR does not cite any correspondence with the NSAQMD. Thus, it is unclear if the Project will implement mitigation required to reduce potentially significant operational air quality impacts to less than a significant level or require a statement of overriding considerations.

Agcy 8-21

AQ-6) The issues addressed above need to be corrected in the Recirculated DEIR as the corrections will result in "Significant New Information" per Section 15088.5 of the CEQA Guidelines.

CHAPTER 4.8: HYDROLOGY AND STORMWATER

Agcy 8-22

HS-1) The City of Grass Valley is concerned about stormwater flows in the South Fork of Wolf Creek channel that extends through the City and has very limited capacity under baseline conditions. In the discussion of surface water runoff beginning on page 4.8-69, it states: "*The proposed detention basins would hold back the peak flows and release the water at a lower rate and at a later time than currently occurs from those site areas. As a result, the project would reduce peak storm flows in both Wolf Creek and South Fork Wolf Creek.*" This conclusion is based upon a preliminary hydrology assessment and a peer review of that assessment and appears to have been well done. The potential stormwater impact is recognized as significant, and the mitigation measure 4.8-3 (page 4.8-76) is formulated to reduce the potential to "less than significant". The measure requires development of a "Final Drainage Report" which shall be submitted to the Nevada County Planning Department and "*…shall demonstrate that the on-site storm drain systems are sized such that site runoff (in addition to treated mine discharge for the Brunswick Industrial Site) under the post-development condition will not exceed predevelopment levels in the downstream channel(s) during the design storm events.*" Due to the importance of this issue to the City, and the significance of this potential impact, we request the County add a requirement for the Final Drainage Report to also be submitted to the City's Engineer for review and comment.

CHAPTER 4.9 LAND USE

Agcy 8-23

LU -1) The DEIR fails to acknowledge the applicable City's General Plan as required by Nevada County General Plan Land Use Policies 1.8.1, 1.8.3, 1.8.5, and 1.8.6., and needs to acknowledge that the proposed project is located within the City's adopted Sphere of Influence. The DEIR, which mentions the County's General Plan on page 3-2, should have discussed and analyzed the above-noted policies and the City's General Plan to determine whether those County policies will conflict with, or result in significant land use impacts on, the City.

CHAPTER 4.10: NOISE AND VIBRATION

Agcy 8-24

NV-1) The noise and vibration mitigation measures lack timing. Mitigation Measure 4.10-4 lacks specific timing requirements for implementation. Mitigation Measure 4.10-4 should be revised to include timing for implementation and require the Ground Vibration Monitoring Program to be developed prior to operation of the mine. The Ground Vibration Monitoring Program should require seismographs to be placed in accordance with the recommendations of the Blasting Report prepared by Precision Blasting Services (i.e., different requirements for different blasting depths). Furthermore, the results of the Ground Vibration Monitoring Program should be required to be submitted to the Nevada County Planning Department for review in a timely manner, reasonable to the County and applicant, to allow for adjustments in project conditions of approval, if warranted by the monitoring data.

Agcy 8-25

NV-2) A Recirculated DEIR needs to acknowledge that the hauling operations will include loading and dumping of trucks, and the spreading and compacting of this material. Those are standard construction operations that are tied to the proposed development of pad sites for future industrial use and would occur well beyond standard construction operational hours in most communities and be in violation with the City's noise ordinance that prohibits construction activities that generate significant noise between the hours of 7 pm and 7 am, or on Sundays within 500 feet of a residential zone. Although there are no residential zones within 500 feet of the Centennial site, there are homes in the area and the loading and unloading of material will generate noise. A Recirculated DEIR needs to address any potential conflict with the County's General Plan Safety and Noise Element adopted in October 2014 and the City's Noise Ordinance to adequately address the noise levels to be generated by the full hauling operations. The DEIR needs to fully disclose that the Centennial site operations and site preparation will occur well beyond any typical construction operation and likewise the resulting long-term noise impacts.

Agcy 8-26

NV-3) A five or more years-long operation that is active seven days a week and 16+ hours a day cannot be reasonably dismissed as a "temporary noise impact" as it is in section 4.10-1 and on page 4.10-32. It is only short term relative to the requested 80-year mining permit. These noises will reverberate thought the adjacent valleys and hills every day and for many years when other construction activities are not allowed or limited. The impacts must be articulated and mitigated

Agcy 8-27

NV-4) Table 4.10-6 is listing Leq values as Lmax and vice versa, for Baseline Ambient Conditions for the Nighttime Column.

CHAPTER 4.12 TRANSPORTATION

EIR TRAFFIC SECTION COMMENTS

Agcy 8-28

T-1) ***Figure 4.12-4 and related LOS analysis / tables*** incorporate stop signs on Idaho Maryland Road that don't exist (intersection 20) – these are also included in the LOS analysis. Please update the figures in the EIR and TIA, along with the LOS analysis and related tables.

Agcy 8-29

T-2) ***Vehicle Miles Traveled Standard of Significance*** (page 4.12-27) indicates that VMT impact may be considered less than significant if the Project total weekday VMT / Service Population is equal to or less than 14.3 percent below the subarea mean under baseline conditions and the Project is consistent with the jurisdiction's General Plan. Grass Valley was used as the subarea, which has a Home-Based VMT per worker of 18.6. The 18.6 Grass Valley VMT standard (Table 4.12-4) appears to be sourced from Table A-3 of the Senate Bill 743 Vehicle Miles Traveled Implementation (Fehr & Peers, July 6, 2020). However, the Home-Based Attraction VMT per Employee presented in Table A-4 of the same document which addresses "issues with trip lengths for trips with origins or destinations outside the model" and other known trip issues is 13.1 for Grass Valley. Because the 13.1 value addresses trip issues, please update the standard to reflect this value.

Agcy 8-30

T-3) ***Table 4.12-8*** presents Project Trip Generation which includes automobiles and trucks but does not reflect passenger car equivalents (PCEs). To represent the impact that large trucks, buses and recreational vehicles have on traffic flow; trucks should be converted into PCEs. By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and decelerate is also much longer than for passenger cars and varies depending on the type of vehicle and number of axles, particularly when considering the topography of the roads proposed for the haul route. Typical PCE factors are 1.5 for 2-axle trucks, 2.0 for 3-axle trucks and 3.0 for 4+-axle trucks. Please update trip generation to reflect truck PCEs.

Agcy 8-31

T-4) The issues addressed above need to be corrected in the Recirculated DEIR as the corrections will result in "Significant New Information" and are very likely to identify "A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance." per Section 15088.5 of the CEQA Guidelines.

Agcy 8-32

T-5) Page 4.12-35: The Existing Plus Approved Projects Conditions assumption fails to mention two approved projects in the City. The City approved Loma Rica Specific Plan amendments in 2019 and the Dorsey Marketplace project in 2020, well before

the release of the NOP. The City specifically noted these projects in its March 18, 2020, letter to Nevada County (copy attached), and again requests these projects to be included and taken into consideration.

T-6) There is no mention within the Cumulative Impacts chapter or any traffic analysis of the City's General Plan Circulation Element's planned new road on the Centennial site that would connect Bennett and Idaho-Maryland Road. The City has requested this issue be addressed in multiple letters to the County (copies attached). This road connection is highly likely to change the impact conclusions in Impact 4.12-9.

Agcy 8-33

TIA COMMENTS

TIA-1) ***Table 11*** of the TIA references daily trips (maximum and average) but does not indicate any truck to automobile equivalency (passenger car equivalent) factors to represent the trucks heavy vehicle effect on the roadway system. Truck traffic should be adjusted to PCEs (or otherwise fully represented) for analysis purposes.

Agcy 8-34

TIA-2) Please convert trucks to PCEs for LOS analysis OR update heavy vehicle factors. Heavy vehicle percentages in the LOS worksheets indicate 2% to 5% heavy vehicles (most are 2%). The ***appendix page labeled HCM 6th Signalized Intersection Summary MITIG8 Cumulative plus Project PM Peak 14: E. Bennett Rd/Brunswick Rd*** includes 2% Heavy Vehicle factor. However, Section XI (Acceleration on Grade) states that along Brunswick Road:

"Trucks currently account for about 6% of all traffic between SR 49 and SR 174, with the truck traffic increasing to about 9% between Whispering Pines Lane and E. Bennett Road. Trucks also account for about 8% of traffic along Whispering Pines Lane. "

Agcy 8-35

TIA-3) ***Tables 14A, 14B, 17A, 17B, 20A, 20B, 23A, 23B, 26A, 26B*** should be updated to reflect LOS analysis results with trucks fully represented.

Agcy 8-36

TIA-4) ***Tables 15A, 15B, 18A, 18B, 21A, 21B, 24A, 24B, 27A, 27B***: should be updated to reflect queuing analysis once trucks are fully represented. The TIA indicates "It is assumed that one additional vehicle (25') can store in the available left or right turn taper and this occurs at six locations". Overflow trucks may be significantly longer than 25' – please update to fully account for trucks.

Agcy 8-37

TIA-5) ***Section II.4 Findings/Results of the TIA*** indicates the Project generated VMT result is 14.7 for 2012 Base Year and 13.9 for 2035 Future Year. The TIA states that because 13.9 is less than the 18.6 average for Grass Valley, there is no VMT impact. However, VMT impacts are calculated on baseline conditions.

Agcy 8-38

Interpolation between 14.7 for 2012 and 13.9 for 2035 indicates the Project generated VMT would be 14.4 in 2020. The Grass Valley VMT/SP is 13.1 (a reduction of 14.3% results in a threshold of 11.2). The interpolated 2020 VMT/SP of 14.4 is more than the threshold and an impact is found. Please update the VMT findings.

Agcy 8-39

TIA-6) ***Maps such as Figure 4.12-1*** of the EIR / Figure 3 of the TIA should be corrected/adjusted (ramps are missing). For example, the off ramp at intersection 9 is missing, as is the on-ramp at intersection 5. In addition, Bennett Street is misspelled.

Agcy 8-40

TIA-7) For the ***intersection graphics such as Figure 4.12-2*** which make up the bulk of the traffic figures, please clarify the orientation of street intersections. For example, at intersection 20, it appears that Idaho Maryland Road (the east/west street) is listed first, but at intersection 21, Sutton Way (the north/south street) is listed first.

CHAPTER 6: ALTERNATIVES ANALYSIS

Agcy 8-41

ALT-1) The City understands that the formulation of alternatives must consider the applicant's goals and objectives for the project, but that consideration is limited as explained in the CEQA Guidelines Section 15126.6[b]:

"*Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1),* ***the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*** (Emphasis added.)

In this case, the applicant's objective that the project's production rate should be 1,000 tons per day is a speculatively large number chosen by the applicant based upon estimates of recoverable gold that could be extracted over an 80-year time period. The County has no obligation to maximize production, and particularly if it can only be accomplished by decades of significant effects on the local community related to truck traffic generation, noise, air quality and greenhouse gas emissions, energy and fuel use, and a huge volume of disposed residual material. Because of this, the obvious environmentally superior alternative is the Reduced Throughput alternative with a production rate of 500 tons per day, which is still a very significant mining project, and would substantially lessen the significant effects of the project. The assumption that this alternative would result in an extension of the project's operations timeframe to "between 130-160 years" is unsubstantiated and is based entirely upon an assumption the mine can only be financially feasible if it

allows full development of the underground resources – an assumption for which there is no evidence in the record.

ALT-2) As noted in Project Description comments above, the applicant's objective that the project's permit term needs to be 80-years is extreme, and unprecedented in California. The County has no obligation to maximize the permit term due to the applicant's estimate of project feasibility recoverable gold to be extracted over 80-years. This is particularly so due to the nature and magnitude of significant effects on the local community related to truck traffic generation, noise, air quality and greenhouse gas emissions, energy and fuel use, and the volume of residual material to be generated and disposed. In this case, an obvious alternative to consider is a Reduced Throughput and Thirty-Year Permit alternative, which is still a very significant mining project, and would substantially lessen the long-term significant effects of the project.

Agcy 8-42

ALT-3) The assessment of alternatives 2 (Expansion of Brunswick Fill Pile) and 3 (Expansion of Centennial Fill Pile) is entirely predicated upon the assumption that the 1,000 tons per day objective needs to be attained, leading to conclusions that are inadequate and conclusory in nature. There is no support for the extraordinary expansion of fill piles. There is no need to expand the fill piles to the detriment of the benefits of the engineered fill if, as described elsewhere in the EIR, the materials can be used as backfill for the mine, and or transported "for use in local and regional construction markets" (DEIR, page 3-26).

Agcy 8-43

ALT-4) Page 6-3 aesthetics is listed as a less than significant impact, but on page 6-7, aesthetics is listed as a significant and unavoidable impact that cannot be fully mitigated, requiring the County to adopt a statement of overriding considerations if the project is to be approved.

Agcy 8-44

CONCLUSIONS

C-1) Collectively, the inadequacies identified in our review support our conclusion that rather than simply responding to comments, the County needs to substantially revise these analyses to repair the deficiencies, and prepare a Recirculated Draft EIR pursuant to CEQA Guidelines §15088.5, which states in part (applicable text in bold italics):

Agcy 8-45

15088.5. RECIRCULATION OF AN EIR PRIOR TO CERTIFICATION

(a) ***A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification.***

As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) ***A new significant environmental impact would result from the project*** or from a new mitigation measure proposed to be implemented.

(2) ***A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance***.

(3) ***A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.***

(4) ***The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded***. (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043)

[Note: Authority cited: Section 21083, Public Resources Code. Reference: Section 21092.1, Public Resources Code; *Laurel Heights Improvement Association v. Regents of the University of California* (1993) 6 Cal. 4th 1112.]

The issues addressed above need to be corrected in the Recirculated DEIR as the corrections will result in significant new information" per Section 15088.5 of the CEQA Guidelines, are likely to findings of a substantial increase in the severity of an environmental impact. The Recirculated DEIR should give serious consideration to a much shorter permit timeframe, reduced throughput, and with a condition of approval requiring an Adaptive Management Process under which the project gets reviewed periodically (every 10 years), with additional environmental compliance and mitigation requirements added to the permit conditions as needed. It should also consider treating the Centennial site backfill as a distinct project independent of the mining project.

We appreciate your serious consideration of our comments. As I am sure you are aware, this a very significant project that has the potential to affect the City of Grass Valley and the surrounding community in Nevada County through the end of this century. Please don't hesitate to call me if you have any questions or need additional information.

Sincerely.

Thomas Last
Community Development Director
City of Grass Valley

Phone: (530) 274-4711
Email: toml@cityofgrassvalley.com

Attachments:

A. Referenced City letters sent to the County regarding the IMMP
B. Technical Review Team Resumes

CITY OF GRASS VALLEY COMMENTS ON
THE IDAHO-MARYLAND MINE PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT
(DECEMBER 2021) (SCH# 2020070378)
NEVADA COUNTY, CALIFORNIA

ATTACHMENT A:

REFERENCED CITY LETTERS SENT TO THE COUNTY REGARDING THE IMMP

CITY OF GRASS VALLEY
Community Development Department
Thomas Last, Community Development Director

125 East Main Street
Grass Valley, CA 95945

Building Division
530-274-4340
Planning Division
530-274-4330
530-274-4399 fax

March 18, 2020

Matt Kelley, Senior Planner via email also
950 Maidu Avenue, Suite 170
Nevada City, CA 95959

RE: Comments on the Traffic Impact Analysis for the Rise Grass Valley mining project.

Dear Mr. Kelley:

Thank you for the opportunity to provide comments on the draft report. The following comments raise several concerns with the traffic study. Since this project will have many direct impacts on City streets and intersections, the City strongly encourages the County to consider and require these comments to be properly addressed.

1. In general, the report is extensive, and the City would like to have had more time to evaluate the report in more detail.
2. Traffic Index (TI) analysis for Whispering Pines requires further explanation. Even over a 5-year period a four-axle truck equates to 1470 ESAL according to the KDA chart. If there are 114 (4 axle) trucks per day this would be 167,580 ESAL which should easily move the TI up at least 0.5 Regardless Whispering Pines Rd was not constructed to handle heavy industrial traffic, let alone act as a haul route, and is nearing the end of its useful life already. Putting 114 heavily loaded trucks a day on this road will cause it to fail well before a 5-year period. This project needs to be conditioned to enter into an agreement with the City to ensure long-term pavement maintenance occurs on all haul road streets and to cover all costs associated with upgrading from the current TI on Whispering Pined Lane to an appropriate TI.
3. TI analysis for Brunswick requires further explanation. How can one section (E Bennett to Whispering Pines) show an increase, but not the other (Whispering Pines to SR49) that is already in a lower TI? How can 5880 ESAL x 114 trucks = 670,320 ESAL not increase the TI to at least the next step? As we have noted in previous letters, the applicant will be required to enter into a maintenance agreement with the City to pay for roadway maintenance and improvements and shall cover all costs associated with upgrading from the current TI to an appropriate TI.
4. LOS calculations are not consistent with any recently accepted traffic studies (Dorsey Marketplace or Loma Rica Specific Plan, specifically). The majority of intersections analyzed in the Rise Mine ITA are already failing or already identified to be failing under previous Existing plus Approved Projects scenarios.
5. The 3:30-4:30 time is not a typical study period included in the Grass Valley Model. Regardless, this period falls within PM peak hours (4-6 p.m.) so PM peak numbers must be utilized.

6. For all intersections that are expected to operate at an unacceptable LOS, the project shall either, pay their fair share contribution if the project is in the GVTIF, or shall construct the improvements and enter into a reimbursement agreement.
7. The City concurs with TJKM's Attachment 2: Traffic Mitigation Measures summary table and disagrees with nearly all responses that said intersections do not require mitigation. As noted, the majority of intersections are already failing under Cumulative conditions, thus the recommended mitigations listed will be required.
8. As it pertains to cumulative impacts, the study did not include approved projects that were approved by the City at the time the Notice of Preparation was routed, as required by the California Environmental Quality Act. Two specific projects, Loma Rica Specific Plan and Dorsey Marketplace need to be included in any cumulative analysis. Both of the traffic studies for those projects, conclude much different LOS impacts to multiple intersections (multiple cumulative D, E, and F intersections) than what is concluded in the mine project's cumulative impacts. This is a flaw in the study that needs to be resolved.
9. As it pertains to VMT methodology, the City has two concerns:
    a. Though heavy truck traffic is not included in the analysis and there is discussion as to why not, the City disagrees with not including this in the VMT. Heavy truck traffic is a key component to the project itself and without it the project cannot succeed. It is a critical and necessary part of the project and in a sense this is similar to a sand and gravel trucking operation, and therefore, cannot be discounted. If heavy truck traffic were not part of this project, the City would agree it does not need to be included.
    b. The City also disagrees with the VMT applied to employees. There are very limited housing opportunities within 20–30-mile radius of the mine site to accommodate the number of expected employees. The City strongly believes the 14.8 mile average is unrealistic based on current housing conditions in the region and the study needs to better explain the rationale for this number or provide a more reasonable and realistic assumption for employee VMT.
10. Sight distance calculations for new driveway shall be submitted for further review.

If you have any questions, please call me at 274-4711 or email at toml@cityofgrassvalley.com.

Sincerely,

Thomas Last
Community Development Director

CC: Tim Kiser, City Manager

CITY OF GRASS VALLEY
Community Development Department
Thomas Last, Community Development Director

125 East Main Street
Grass Valley, CA 95945

Building Division
530-274-4340
Planning Division
530-274-4330
530-274-4399 fax

August 5, 2020

Matt Kelley, Senior Planner via email
950 Maidu Avenue, Suite 170
Nevada City, CA 95959

RE: NOP for the CUP and Reclamation Plan for the Rise Grass Valley mining project.

Dear Mr. Kelley:

Though the City is perplexed why the NOP has been released when the application is still incomplete, we offer the following comments in response to the NOP. Furthermore, since the application is incomplete and there is a possibility that the project description could change, the City reserves the right to provide additional comments on the scope of the EIR once the application is complete.

1. Since December 2019, the City has provided a consistent request on multiple occasions to the applicant that we expect them submit a conceptual application to the City so we can provide a formal response on the annexation/lead agency question. This approach is supported within the City/County Tax Share Agreement, the City/County MOU on joint land use planning in the sphere of influence, and by County General Plan Policy 1.8.4. To date, the applicant has been unwilling to follow the City's and County's process for review of projects within the City Sphere of Influence.
2. The EIR must address service impacts on the City fire and police services. Due to mutual aid agreements with respective agencies and because of the location of City facilities, this project will have a significant impact on both police and fire services. It is likely that some of the buildings will need to rely on the City's fire apparatus (ladder truck) and the project needs to ensure access to those structures.
3. The EIR must address noise and vibration issues caused by underground blasting and above ground activities that could impact existing high-tech companies in the Whispering Pines area.
4. The EIR must adequately address the treatment of stormwater runoff and mine dewatering that leaves the site and eventually travels into the City limits.
5. Since the project proposes to dewater the mine and place it into the South Fork of Wolf Creek, the EIR must address the flooding and storm drain system issues associated with the increase in water flows into this creek and on the City infrastructure. There are several areas in the City that already experience flooding issues and adding more water into this creek must be addressed.

6. The EIR must address the traffic impacts to City roads. There are multiple intersections and road segments that will be impacted. Additionally, the EIR must address site distance issues and other safety concerns with the proposed haul route.
7. The City's General Plan shows a connecting road between Bennett and Idaho-Maryland Roads. The EIR needs to address this issue re the planning and potential realignment of Centennial Road with Springhill Road.
8. The City has concerns with the proposed truck routes to the Centennial Industrial site and impacts on City roads. The City will require a tonnage fee or other mechanism to be placed on the project to ensure proper long-term maintenance. The transport of material 16 hours a day 7 days a week will conflict with City noise limits for typical construction projects. The residents along Brunswick road could be severely impacted by the constant noise of trucks.
9. The EIR needs to address the decrease in water flows into Wolf Creek from the shaft along Idaho-Maryland Road created by dewatering.

If you have any questions, please call me at 274-4711 or email at toml@cityofgrassvalley.com.

Sincerely,

Thomas Last
Community Development Director

CC: Tim Kiser, City Manager

CITY OF GRASS VALLEY
Community Development Department
Thomas Last, Community Development Director

125 East Main Street
Grass Valley, CA 95945

Building Division
530-274-4340
Planning Division
530-274-4330
530-274-4399 fax

December 20, 2019

Matt Kelley, Senior Planner via email
950 Maidu Avenue, Suite 170
Nevada City, CA 95959

RE: Initial comments on CUP and Reclamation Plan for the Rise Grass Valley mining project.

Dear Mr. Kelley:

The following represents the City's preliminary comments and concerns on the above project. This is not to be considered an exhaustive review by the City. It also includes several recommendations I noted at the December 16, 2019, meeting at the County offices.

1. Though staff indicated the City is unlikely to be interested in annexation and processing of the application, the City is requesting the County and applicant follow past practice and have the applicant submit a conceptual application to the City so we can provide a formal response. As discussed at the meeting, staff would then submit this to the City Council to get its direction on processing the application due to the magnitude and complexity of this project.
2. If it is not processed in the City, the City requests the County and City enter into a Memorandum of Understanding (MOU). Since this project has the potential to create several significant impacts on the City, the purpose of the MOU would be to set up procedures that ensure impacts of the project on the City will be fully incorporated into the project. Some of the items raised at the meeting included impacts on: a) fire and police services; b) noise and vibration issues on existing high-tech companies in the Whispering Pines area; c) water treatment; impacts to City roads; d) the City's General Plan's that shows a connecting road between Bennett and Idaho-Maryland Roads - planning for and setting aside land for a realignment of Centennial Road with Springhill Road; e) storm water requirements (City system capacity, treatment standards, etc.) that meet City standards since the water will flow into the City.
3. I discussed the need for the applicant to pay the City to obtain assistance with its review of the project. The City understands the concern with duplicating consultants with the City and County, but we do not have staff resources to provide proper attention and review of the project.
4. As discussed at the meeting, the City hired a mining consultant, geochemist, and other specialized consultants beyond the EIR consultant when it processed the proposed Idaho-Maryland Mine project in 2005.

5. It is likely that some of the buildings will need to rely on the City's fire apparatus (ladder truck) and the project needs to ensure access to those structures.
6. The City has concerns with the proposed truck routes to the Centennial Industrial site and impacts on City roads. The City will require a tonnage fee to be placed on the project to ensure proper long-term maintenance. The transport of material 16 hours a day 7 days a week will conflict with City noise limits for typical construction projects. The residents along Brunswick road could be severely impacted by the constant noise of trucks.
7. As the design of the proposed fill site moves forward, the City would request the applicant work with the City on setting aside land for the Wolf Creek Trail for the property along Idaho-Maryland Road in addition to designing the fill to accommodate a realigned road noted above.
8. Since the applicant proposes to dewater the mine and place it into the South Fork of Wolf Creek, the EIR must address the flooding and storm drain system issues associated with the increase in water flows into this creek. There are several areas in town that already experience flooding issues and adding more water into this creek must be addressed.
9. Need to address the decrease in water flows into Wolf Creek from the shaft along Idaho-Maryland Road created by dewatering.
10. Also, the City has a Master Environmental Assessment, Draft EIR and multiple technical studies from the 2005 mine project we can share with the County. Though this project proposes the operations occurring on the New Brunswick site, our records can provide some insight on the issues and community concerns.

If you have any questions, please call me at 274-4711 or email at toml@cityofgrassvalley.com.

Sincerely,

Thomas Last
Community Development Director

CC: Tim Kiser, City Manager

CITY OF GRASS VALLEY COMMENTS ON
THE IDAHO-MARYLAND MINE PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT
(DECEMBER 2021) (SCH# 2020070378)
NEVADA COUNTY, CALIFORNIA

ATTACHMENT B:

TECHNICAL REVIEW TEAM RESUMES



Jeffrey G. Harvey, Ph.D.
Principal & Senior Scientist
Harvey Consulting Group
(916) 799-6065 (direct)
Harvey-Jeff@sbcglobal.net

Summary of Qualifications

Harvey Consulting Group provides environmental compliance and project development support services to clients throughout California for water resources, energy/transmission, mining and reclamation, and land development projects. Our primary services include project management and planning, public involvement, environmental impact assessment, policy development, and regulatory permitting. We are dedicated to providing outstanding client service, and technical and management expertise for complex and controversial projects.

The firm's principal, Dr. Jeffrey G. Harvey, has worked as an environmental consultant in California for more than 30 years. He has expertise in requirements of the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and related laws and regulations pertaining to water supply, water quality, land use planning, air quality, biological resources, cultural and historic resources, and natural resources conservation and management. He has organized and managed more than 300 projects, leading multi-disciplinary teams of scientists, engineers, lawyers, economists, and planners. Projects have included environmental assessments and permitting for water and energy development, mining, policy analysis of water resources and energy systems management, public infrastructure projects, industrial development and mining. As Senior Project Manager, he is responsible for client liaison, team coordination and task assignments, and for keeping projects on schedule and within budget. He also performs primary quality assurance / quality control functions for the team.

He has worked on western water, energy and related natural resources policy issues for most of his career, including water development, management, and planning, and analyses of land and agricultural water use practices and conservation, and power plant and hydroelectric power development. He worked on the San Joaquin Valley Drainage Program conducting resource management and policy studies of irrigated agriculture for the purpose of reducing toxic levels of selenium in drainage water, and to improve water use efficiency and water supply through improved on-farm water management.

Special emphasis has been placed on client representation, active coordination with agency staff and government decision-makers, and effective presentations and public testimony. In managing planning and document preparation, Dr. Harvey has streamlined the reporting and regulatory process through

development of detailed project objectives and focused identification of issues; effective consultation and liaison with regulatory agency staff and the applicant's representatives; and preparation of concise, organized, and readable reports. He has developed cost-effective mitigation strategies to resolve regulatory issues without impairing project goals and has prepared long term monitoring criteria to measure successful project implementation.

Education

Ph.D. in Geography
University of California, Los Angeles. Environmental Law and Policy, Hydrology and Water Resources, Natural Resources Management, and Impact Assessment.

M.A. in Geography
California State University, Chico. Environmental Planning, Water Resources Development, and Impact Analysis.

B.A. in Geography
California State University, Chico. Physical Geography; minor concentrations in Anthropology and Geology.

Professional Experience

2005 to present: *Harvey Consulting Group (HCG)*
Principal and Senior Scientist, private consulting practice providing professional services to local, state, and federal agencies, and private developers for water, power, mining and industrial land development projects.

1994 to 2005: *Greystone Environmental Consultants*
California General Manager, responsible for management of California offices in Sacramento and San Diego (for a company headquartered in Denver, Colorado); administrative and personnel management, business development, project management, client and public agency liaison.

1985 to 1994: *Research Associates*
Principal and Project Manager, private consulting practice providing professional services to local, state, and federal agencies, nonprofit environmental groups, and private developers.



Representative Mining Projects

The projects listed below include project management, regulatory permitting and environmental assessment spanning more than 30 years. References available for all projects within the past 10 years.

City of Grass Valley, Idaho-Maryland Mine Project DEIR

Project Manager as a subconsultant to ESA Associates for preparation of the Draft EIR for the proposed Idaho-Maryland Mine project. This multi-stage environmental review process included extensive community involvement and scoping. The proposal included reopening the historic Idaho-Maryland Mine to develop industrial and precious mineral deposits into gold and stone ceramic products. The project comprised three properties that encompassed a total of 138-acres of land. Project actions included dewatering and rehabilitating the historic Idaho-Maryland Mine workings, conducting underground resource exploration and development, developing the industrial mineral and gold ore deposits, processing mineral deposits to produce gold and manufactured stone and ceramic building products, operation and maintenance of these facilities, and performing reclamation activities at the project sites at the conclusion of the project. Primary responsibilities included scoping, public involvement and agency coordination, technical analyses of geology, hydrogeology, and geochemistry, and QA/QC of draft document sections. Project applicant withdrew their application and the project concluded at the Draft EIR stage.

Olive Pit Mining & Reclamation Operations and Long-Term Reuse Project

Environmental Impact Report to assess the extraction of all economically recoverable mineral resources from the 190-acre Olive Pit, and reclamation of the eastern 32 acres by filling to street level for future urban development. In partnership with the City of Irwindale, United Rock Products ("United Rock" or "Applicant") will resume mining operations at the Olive Pit and will reclaim the site concurrent with mining. The Proposed Project is expected to yield a minimum of 32-million tons of recoverable aggregate reserves that meet the quality standards of applicable California governmental agencies. Average production is anticipated to be 1 million tons of aggregate per year beginning in 2015. Mining will occur for a period of approximately 32 years with concurrent filling operations for reclamation commencing in the first of two phases. The remainder of the property will be reclaimed for the potential end land use of storm water retention and groundwater recharge, and/or flood control facility, and/or open space recreational land uses. Mining activities will utilize both dry and wet mining operations; and are subject to the City's guidelines for slope stability and public safety. Key issues involved traffic, noise, land use conflicts, air quality and biological resources.

United Rock Products Quarry and Reclamation Plan EIR

Senior Project Manager for preparation of an EIR for a quarry expansion project that involved 3 quarry locations, reclamation activities and post - reclamation land development projects. Key issues for the project included air quality related emissions of fugitive dust, geotechnical and slope concerns, groundwater exposure and contamination and underwater dredge activities. The impact analysis focused on current and future activities to the approximate horizon year of 2100 due to the protracted rate of



quarry reclamation activities. This was a fast-track project completed in five months after another consulting firm had failed to perform, leaving the City in a schedule bind and facing litigation. The EIR was successfully completed on the accelerated schedule, and litigation was avoided.

Vulcan Materials Company Mining and Reclamation Plan EIR
Project Manager for preparation of an EIR for a quarry expansion and reclamation project that included deepening and extending the life of two (2) aggregate quarries along with concurrent reclamation. The EIR included environmental review and analysis of an existing Class "U" Inert Debris Engineered Fill landfill; for both current operations and reclamation activities. The EIR assessed a programmatic evaluation of post-reclamation land uses for all three (3) project sites (Durbin Quarry, Reliance I Quarry, and Reliance II Landfill). Key issues for the project included fugitive dust, geotechnical and slope stability, groundwater exposure, contamination and underwater dredge activities, traffic, circulation, and roadway impacts, and post-reclamation land use planning.

Vulcan Materials Co. Mining & Reclamation Plan EIR Addenda 1, 2 &3
Project Manager for CEQA and SMARA compliance. These addendum documents to the Vulcan Materials Company Mining & Reclamation FEIR were prepared individually over a period of three years to evaluate proposed minor modifications to the Conditional Use Permit. Evaluations included the requested to modify conditions of approval at the Durbin and Reliance I Quarry sites, changing the hours of operation from 24 hours per day six days per week to 24 hours per day seven days per week, and to include the entire Reliance mine site under one reclamation plan with one State mine identification number (this mine is divided by the municipal boundaries of the cities of Irwindale and Azusa). Key issues included air quality, noise, and traffic/circulation. In each case, the proposed actions were concluded to be within the scope of the Vulcan FEIR and fulfilled the CEQA review necessary for an Addendum to an EIR.

Nu-Way Live Oak Inert Landfill Mitigated Negative Declaration
Project Manager for the preparation of an Initial Study and Mitigated Negative Declaration (MND) to allow for the closure and final reclamation of the Nu-Way Live Oak Inert Landfill. The Live Oak landfill is currently being reclaimed with inert material and was formerly operated as an aggregate quarry. A previously certified EIR for this landfill indicated that landfill reclamation would continue until street grade level was achieved. The operator of the landfill submitted a request to the City of Irwindale to allow for final reclamation, grading and closure to occur now which will result in site reclamation occurring to a level below that previously expected. The focus of the CEQA MND was to evaluate the difference in the revised project description and the resultant net environmental effect of ceasing landfilling operations early and not achieving site consistency with the surrounding street grade level. Key issues for this project were hydrology and drainage, geology and soils, water quality, and air quality.



Mining Impact and Reclamation Study
Impact Analysis, Environmental Planning and Policy Development. Project Manager for comprehensive analyses of mining activities within jurisdiction of the City of Irwindale, including evaluation of environmental and economic conditions, and options for reclamation and long-term economic development. A comprehensive two-volume report was prepared including analysis of existing mining operations for compliance with the state Surface Mining and Reclamation Act (SMARA), physical and environmental effects of mining within the City, and development of reclamation policies to guide long-term land use planning and economic development. The study covered 14 open-pit mines ranging from 80 to 500 acres in surface area, and minimum 100-feet to more than 200-feet deep. Of the 14 total sites, seven are active mines, four are implementing landfill reclamation, and three are inactive mines. Follow-up tasks have involved support in proceedings with the State Mining and Geology Board, assistance in development and promotion of legislative proposals to amend SMARA, technical review of reclamation plans and related environmental documents, and development of a revised financial assurances program for the City.

Mining Assessment for the City of Azusa
Senior Project Manager for a project involving an assessment of the existing Vulcan Materials mining operations to assist the City of Azusa in determining the nature and extent of existing minerals resource extraction entitlements under CEQA and SMARA and to identify required additional entitlements necessary to allow for an expansion of operations to include an 80-acre parcel contiguous to the existing 270-acre mine. Analyses included a market assessment of existing materials mined by Vulcan, a geologic assessment to determine future resource extraction value potential for the proposed new 80-acre mine and future reclamation options and an analysis of current measurement and reporting methodologies. Developed an implementation strategy to improve reclamation planning and identify opportunities and actions for ensuring Vulcan complies with all applicable City plans, policies and ordinances, SMARA and CEQA requirements.

Yuba County, Hallwood Aggregate Mine
Project Manager for preparation of a *Surface Mining Reclamation Plan* for an aggregate mine operating in former gold mine dredger tailings within the Yuba River corridor in Yuba County. Analyses also included impact assessment of the current aggregate mining and processing operations, hot plant and off-site transportation. The reclamation included multiple phases in sequence with planned mine expansion activities designed to be implemented concurrent with ongoing mining.



RCH GROUP
planning & environmental consulting

Paul Miller

Managing Principal, Environmental Services

Paul is an environmental professional with more than 35 years of experience in providing services and products to government agencies and private sector corporations. His technical areas of expertise include CEQA project management and technical analyses in the areas of air quality, greenhouse gas emissions, noise, integrated waste management, energy, and hazardous materials. With a broad range of environmental skills, he has applied his background since 1986 to CEQA and NEPA and has been integral in the preparation of over 500 CEQA/NEPA environmental documents, including project manager for more than 20 major EIRs. He has been the project manager or a key team leader for five state agencies (California Public Utilities Commission (CPUC), California Energy Commission (CEC), CalRecycle, the former California Integrated Waste Management Board, and the State Water Resources Board, Central Valley Region) on projects of statewide importance. He was the senior air quality and noise reviewer for CEQA documents at ESA for almost 20 years. Since the 1989 Paul has been involved in dozens of projects that that analyze the high-volume trucking of materials to or from industrial sites (landfills, composting facilities, and mines).

CEQA/NEPA Project Experience:

- **Quarrying/Mining CEQA/NEPA documents:** Idaho-Maryland Mine EIR 2007-2008 (City of Grass Valley), Olive Pit Mine EIR and Kincaid Pit IS/MND (City of Irwindale), Permanente Quarry Reclamation Plan Amendment EIR (Santa Clara County), R&J Aggregate Mine EIR and La Vista Quarry (Alameda County), Roblar Road Quarry EIR and Canyon Rock Quarry Expansion EIR (Sonoma County), San Rafael Rock Quarry EIR and San Rafael Rock Quarry Extension Application Supplemental EIR (Marin County), Vernalis Quarry EIR (San Joaquin County).
- **Project Manager and Senior Air Quality Reviewer of Energy Projects for California Public Utilities Commission (CPUC) CEQA documents:** Pacific Gas and Electric Co. (PG&E) Divestiture EIR for Hydroelectric System Divestiture EIR; PG&E Divestiture EIRs to sell Morrow Bay, Moss Landing, Oakland, Potrero, Pittsburg, and Contra Costa Power Plants; San Diego Gas and Electric Company's (SDG&E's) Power Plant Divestiture Mitigated Negative Declaration; Mitigated Negative Dec (MND) to divest Southern California Edison Company's power plants.
- **Landfill CEQA documents:** Yolo County Central Landfill Permit Revisions EIRs (2007 and 2021) , Forward Landfill Expansion EIR, Austin Road Landfill Expansion EIR; Altamont Landfill and Resource Recovery Facility Expansion EIR; Time Extension of Importation of Contra Costa County Waste to the Altamont Landfill EIR; Altamont Landfill Reclassification (Class II) EIR; West Contra Costa Landfill Closure CEQA Technical Assistance; Ostrom Road Landfill Permit Modifications (Class II) EIR; Eureka County Nevada Solid Waste Management NEPA EAs; Bakersfield City Sanitary Landfill; Closure/Post-Closure Maintenance Plans EIR; San Leandro Landfill Gas Collection and Flaring System Mitigated Negative Declaration; New Jamestown Landfill EIR; Sutter County Ash Disposal Site EIR; Ukiah Landfill Permit Revision Supplemental EIR; Ukiah Landfill Closure EIR (2020), Marsh Canyon Landfill EIR.
- **Senior Air Quality and Greenhouse Gas Reviewer:** Honda Port of Entry EIR (Port of Richmond), Union Pacific Railroad Modernization EIR (Lathrop, CA), Eagle Mountain Pumped Storage Hydroelectric EIR and EIS (Mohave Desert), Oasis Shopping Center Master EIR (Redding, CA), San

Rafael Rock Quarry EIRs, La Vista Quarry EIR (Alameda County), Novato Sanitary District Master Plan EIR, SAFCA Mayhew Levee Replacement Project Peer Review.

- **Senior Noise Analyst and Reviewer**: Mr. Miller has been collecting high-quality noise measurements since 1988. He specializes in collecting baseline environmental noise data and analyzing the potential noise impacts of proposed projects in CEQA and NEPA documents. RCH uses a noise data collection and processing system that he has been continually modifying and enhancing the processes for data accuracy and cost efficiency. The combined hardware/software system uses higher-capacity batteries, portable computers to download data, and customized software to automatically plot daily noise data showing relevant standards and noise monitoring locations.
- **Anaerobic Digestion CEQA documents:** CalRecycle (formerly the California Integrated Waste Management Board), Statewide Program EIR for Anaerobic Digestion Facilities; Central Valley Regional Water Quality Control Board (Central Valley Water Board) - Dairy Manure Digester and Manure Co-digester Program EIR; Blue Line Materials Recovery Facility (MRF), Transfer Station Anaerobic Digester with Compressed Natural Gas (CNG) Production MND, and Hitachi Zosen Inova Anaerobic Digester (San Luis Obispo County, public meeting EIR air quality presentations).
- **Material Recovery Facility CEQA documents:** Irwindale Material Recovery Facility EIR, South San Francisco Scavenger Company Materials Recovery Facility EIR; West Contra Costa County Integrated Resource Recovery Facility EIR; Sanitary Fill Solid Waste Transfer Station and Household Hazardous Waste Facility EIR; Yuba-Sutter Disposal Inc. Transfer Station and Compost MND; Stockton Scavenger Transfer Station Focused EIR; City of Fremont Transfer Station/MRF/Composting Facility EIR.

Education
1977 Master of Science (Zoology and Entomology)
Colorado State University – Fort Collins, Colorado
1974 BA Zoology, Miami University – Oxford, Ohio

Professional Certifications and Affiliations
- California Air Resources Board -Accredited GHG Verifier of Emissions Data Reports for Mandatory Reporting
- Member, Association of Environmental Professionals (AEP)
- Board Member since 2010, Air and Waste Management Association, Mother Lode Chapter of Golden West Section

25+ Years Consulting Experience
- Environmental Science Associates (ESA)
- North State Resources
- Aspen Environmental Group
- EarthMetrics, Inc.
- Environmental Measurements, Inc.
- Ecology Consultants, Inc.
- Miller Environmental Consultants

RCH GROUP
planning & environmental consulting

Dan Jones

Senior Associate /Air Quality & Noise Analyst

Dan Jones is an environmental professional with over eight years of experience in providing environmental services and products to government agencies and private sector corporations. Dan's technical areas of expertise include CEQA project management and document preparation and technical analyses in the areas of air quality, greenhouse gases/climate change, energy, and noise. Dan has been integral in the preparation of over 300 CEQA documents and technical studies supporting such documents. Dan's technical noise experience includes short-term and long-term noise monitoring and noise modeling with the Federal Highway Administration's Roadway Construction Noise Model and Highway Traffic Noise Prediction Model. Dan is proficient in a variety of air emissions models including California Air Pollution Control Officers Association's CalEEMod, California Air Resource Board's EMFAC and OFFROAD, and Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model.

CEQA/NEPA Project Experience:

- **Mining Projects:** Olive Pit Mine and Reclamation Project EIR, R&J Aggregate Mines EIR, Olive Pit Mine and Reclamation Project EIR Addendum, and Irwindale Kincaid Pit Remediation and Reclamation Project, San Rafael Rock Quarry Extension Application Supplemental EIR, and Salton Sea Lithium Project EIR.

- **Water Conveyance/Infrastructure Projects:** East Bay Municipal Utility District (EBMUD) Sobrante Water Treatment Plant EIR, Buena Outfall Force Main Phase III IS/MND, Oasis Irrigation System Expansion Project EIR, Carmel River Floodplain Restoration and Environmental Enhancement (CRFREE) Mitigation Pipeline Underground Project IS/MND, The People's Moss Landing Water Desalination Project EIR, Central Amador Water Project Pioneer Water Rehabilitation Project IS/MND, Cuesta Heights Water Storage and Distribution Improvements Project IS/MND, Alameda Creek Levee Improvement IS/MND, Christian Valley Park Community Service District Water Storage Tank Project IS/MND, Modesto RD 2091 Levee Air Quality Analysis, Santa Venetia Timber Reinforced Berm Improvement Project, and San Joaquin Mormon Slough Levee Air Quality Analysis.

- **Waste Management Projects:** Glenn County Solid Waste Conversion Facility EIR, Blue Line Biogenic CNG Facility CEQA Addendum, Recology Vallejo Permit Revisions IS/MND, Valley Springs Recycling Center IS/MND, Irwindale Materials Recovery Facility/Transfer Station EIR, Sierra Waste Transfer Station Permitting, Forward Landfill SEIR, North Richmond Chip & Grind GHG Analysis, San Luis Obispo Anaerobic Digester IS/MND, Fair Deal Recycling Facility IS/MND & Transfer Processing Report, Ukiah Landfill Closure EIR, San Luis Obispo Anaerobic Digester Odor Impact Minimization Plan, Irwindale Materials Recovery Facility/Transfer Station EIR Addendum, San Luis Obispo Anaerobic Digester Authority to Construct Permit, Stage Gulch Organics Compost Facility EIR, and Yolo County Central Landfill (YCCL) Permit Revisions EIR.

- **Energy Projects:** Castor Solar Noise Study, California Public Utilities Commission Fulton-Fitch Mountain Reconductoring Project, California Public Utilities Commission Central Valley Power Connect 230 kV Project, California Public Utilities Commission Riverside Transmission Reliability Project, San Diego Gas & Electric TL 695, TL 6971 Reconductoring Project and Santa Paula Battery Energy Storage System IS/MND, PG&E Wheeler Ridge Junction Project, Gemini Solar EIS, Burney Bioenergy Facility Air Quality Analysis, and Salton Sea Geothermal Project.

- **Restoration/Recreational Projects:** Rockville Trails IS/MND, High Plains Shooting Sports Center Noise Analysis, Putah Creek Restoration Projects Program EIR, Lower Putah Creek Restoration Project IS/MND, Lake Chabot Campus Modernization IS/MND, Phillips 66 Company Line 200 Release Remediation Project IS/MND, Bay Point Restoration and Public Access IS/MND, University of California Santa Barbara Sea Wall IS/MND, Black Diamond Mines Preserve EIR, North Bay Wetland Mitigation Bank Air Quality and GHG analysis.

- **Residential/Commercial/Industrial Development Projects:** Alameda County Monte Vista Memorial Gardens EIR, Marin County Alta Way IS/MND, San Marin High School Turf Field Categorical Exemption, San Marin High School Expansion IS/MND, Novato High School Expansion IS/MND, Colfax Maidu Village Commercial Center IS/MND, City of Sacramento Fruitridge Shopping Center Redevelopment IS/MND, City of Sacramento River Oaks (The Cove) EIR Addendum, Colfax Corporation Yard and RV/Boat Storage IS/MND, Colfax Auburn Street Hotel IS/MND, Colfax Sierra Oaks Estates Residential Development IS/MND, Shasta 10 Noise/AQ/CAP Consistency Analysis, Morgan Knolls Subdivision IS/MND, Rocklin Meadows Subdivision AQ/GHG Analysis, Wildcat Subdivision AQ/GHG Analysis, Winding Creek Subdivision Noise Analysis, Rancho Vista Subdivision AQ Analysis, Riolo Vineyards Specific Plan IS/MND, Nevin Avenue Apartments IS/MND, Calistoga Subdivision Noise/AQ/CAP Consistency Analysis, Residences at Railway AQ/GHG Analysis, Centennial Towers North Tower AQ/GHG/HRA Analysis, 488 Linden Avenue AQ/HRA Analysis, 255 Cypress Avenue AQ/HRA Analysis, Centennial Towers R&D Project AQ/GHG/HRA Analysis, Whitehawk I & Whitehawk II AQ/GHG Analysis, Viri Estates Skilled Nursing Facility IS/MND, Alviso Village AQ/GHG/HRA Analysis, Lakeside Fire Protection District IS/MND, Green Island Road Wine Warehouse AQ/GHG/HRA Analysis, Pruneyard Shopping Center AQ/GHG/HRA Analysis, Richmond Terminal 3 Timber Export Facility IS/MND, 901 Larch Avenue IS/MND, 52 Franklin Avenue IS/MND, UCSF Research Building and Parking Garage Expansion EIR, 150 Airport Blvd IS/MND, Oak Knoll Mixed Use Community Plan EIR, Lincoln Northeast Quad Specific Plan HRA, Oakland T12 Office Tower, Sonora Food Service Building IS/MND, Osgood Heights IS/MND, 550 Gateway Blvd Hotel IS/MND, Justin Vineyards & Winery Permit Application, Sunnyvale Atria on El Camino Real AQ/GHG/HRA Analysis, Quarry Place Mixed Use Development AQ/GHG/Noise Analysis, First and Campbell AQ Analysis, Roseville Junction Crossing Noise Analysis, William Jenkins Health Center Noise Analysis, John Henry High School AQ/Noise Peer Review, Sierra Oaks Estates and Village Oaks IS/MND, The Parkway Apartments IS/MND, Cal Expo Rock & Brews CEQA Categorical Exemption, Solana Beach Skyline Elementary School Reconstruction Peer Review, Folsom Bidwell Pointe CEQA Infill Exemption, Granite Bay Joe Rodgers Subdivision AQ/GHG/Noise Analysis, Monarch Vista Apartments IS/MND, Double S Ranch Subdivision AQ/GHG Analysis, Vista Self Storage IS/ND, Novato High School Turf Field Categorical Exemption, Colfax Sierra Oaks Estates and Village Oaks CEQA Addendum, Bayview Health Risk Assessment, The Oaks Assisted Living CEQA Addendum, Dutton Meadows CEQA Addendum, Rocklin Tractor Supply Company AQ/GHG Analysis, Yolo County Haykingdom Expansion IS/MND, and Yolo County Cold Storage IS/MND.

Education
BS, Environmental Policy Analysis and Planning, University of California, Davis, CA

Professional Affiliations
Member, Association of Environmental Professionals

JOHN KAIN, AICP
PRINCIPAL, URBAN CROSSROADS, INC.
jkain@urbanxroads.com

BACKGROUND

Founding partner John Kain is a transportation planner who is particularly skilled at the integration of traffic projections with meaningful designs that improve elements of the built environment and expand our mobility choices. Mr. Kain's 40 years of professional experience stretches through the spectrum of transportation domains. These include plans for new communities, City General Plan mobility/circulation elements, traffic impact analyses, regional and local funding programs, transit station area designs, accommodations for pedestrians and bicyclists, shared parking studies, roundabout scaled concept plans, and implementation of "complete streets" strategies. Mr. Kain is a Fellow in the Institute of Transportation Engineers.

EDUCATION

M.S. – Administration
(Transportation Systems Management)
University of California, Irvine • 1977

B.A. - Social Ecology
University of California, Irvine • 1975

PROFESSIONAL CERTIFICATIONS

AICP (American Institute of Certified Planners)
American Planning Association • 1983

Instructor Credential - Public Services & Administration
Cal. Comm. Colleges • 1981

Management of Transportation Programs
University of California, Irvine • 1981

AFFILIATIONS

ITE	Institute of Trans. Engineers
ULI	Urban Land Institute
LAI	Lambda Alpha International

SELECTED AWARDS

AEP Environmental Analysis Merit Award • 2018
(CV Link Multi-Modal Transportation Project)

PCBC Best On The Boards Site Plan • 2017
(Liberty Project, West Sacramento)

ULI Best of the Best - Vision Award • 2011
(WRCOG, 4-City NEV Plan)

APA Comprehensive Planning Award • 1999
(ETRPA, El Toro Base Reuse Plan)

SELECTED PROJECT EXPERIENCE

Great Park Neighborhoods / Heritage Fields
City of Irvine • Ongoing
Nakase Nursery – Mobility Study/Area Plan Network
City of Lake Forest • On-going
Pomona Gold Line Station Parking and Access
City of Pomona • On-going
2700 North Main Mixed Use – Traffic Impact Analysis
City of Santa Ana • 2017
Mission Gateway Plaza & Villas – Traffic Impact Analysis
City of Jurupa Valley • 2017
FivePoint Amphitheatre – Event Parking and Access
City of Irvine • 2017
CV Link Transportation Analysis
Coachella Valley • 2017
Life Time Fitness – Traffic and Parking Assessments
City of San Clemente • 2017
Liberty Project - Sustainable Mobility Plans
City of West Sacramento • 2016
Canyon Springs Healthcare Campus & Senior Living
City of Riverside • 2015
Arantine Hills – Impact Analysis/Roundabout Designs
City of Corona • 2015
Mesa Verde Estates – Circulation Phasing
City of Calimesa • 2015
Newport Beach General Plan Update Traffic Projections
City of Newport Beach • 2014
The Preserve at San Juan
Orange County • 2014
Athens Materials Recovery Facility & Transfer Station
City of Irwindale • 2014

URBAN CROSSROADS

MARLIE WHITEMAN, P.E.

SENIOR ASSOCIATE, URBAN CROSSROADS, INC.
mwhiteman@urbanxroads.com



BACKGROUND

Senior Associate Marlie Whiteman, P.E., is a transportation engineer with over 20 years of full time consulting experience in travel demand forecasting, traffic impact analysis, and mobility assessments. She is a recognized transportation modeling expert, with strengths in model data development, consistency, validation, preparation of future forecasts, post-processing, as well as circulation planning, parking evaluations and access studies. Ms. Whiteman's hands-on capabilities include the use of various modeling software packages, such as TransCAD, Cube, and Tranplan. She earned a Bachelor of Science degree in Civil Engineering from the University of California, Irvine.

EDUCATION

B.S. – Civil Engineering
University of California, Irvine • 1996

REGISTRATIONS

PE Registered Professional Traffic Engineer – TR 2186 • 2003

AFFILIATIONS

OCTEC Orange County Traffic Engineering Council

APA American Planning Association

ITE Institute of Transportation Engineers

SELECTED ACCOMPLISHMENTS

AEP Environmental Analysis Merit Award • 2018
(CV Link Multi-Modal Transportation Project)

APA National Planning Achievement Award and Orange County Award of Merit • 2008
(Newport Beach General Plan)

Student chapter treasurer, vice president, & president, in succession • 1992-1996
(American Society of Civil Engineers at UCI)

SELECTED PROJECT EXPERIENCE

Pomona Gold Line Station Parking and Access
City of Pomona • Ongoing
Great Park Neighborhoods Transportation Analyses
City of Irvine • On-going
CV Link Transportation Analysis
Coachella Valley • 2017
FivePoint Amphitheatre – Traffic/Parking Management
City of Irvine • 2017
Ocean Breeze Senior Community - Parking and Access
City of Huntington Beach • 2017
Travertine La Quinta Transportation Analysis
City of La Quinta • 2017
Jeronimo Road Office and Warehouse Sites
City of Irvine • 2016
Pepper Avenue Specific Plan TIA
City of Fontana • 2015
Athens-Irwindale MRF and Transfer Station TIA
City of Irwindale • 2015
Newport Beach Traffic Modeling Support
City of Newport Beach • On-going
Lake Elsinore General Plan Traffic Modeling
City of Lake Elsinore • On-going
Moreno Valley General Plan Traffic Modeling
City of Moreno Valley • 2014
Rancho Santa Margarita General Plan Traffic Modeling
City of Rancho Santa Margarita • 2014

URBAN CROSSROADS

AGENCY LETTER 8: THOMAS LAST, GRASS VALLEY COMMUNITY DEVELOPMETN DEPARTMENT

Response to Comment Agcy 8-1

This comment is introductory in nature and provides general concerns regarding the project and its associated EIR. The commenter's specific assertions are addressed in the responses below.

Response to Comment Agcy 8-2

Nevada County General Plan Policy 17.7 states:

> *Use permit time limits for each project shall be established on a case-by-case basis. Time limits shall be based on the reasonably expected life of the mining operation and potential conflicts with future neighboring land uses. Each project shall have a periodic review for compliance with the use permit by the Planning Agency. In no case shall such review time period exceed five years. Said review shall be funded by the applicant.*

In this case, the applicant's requested 80-year permit timeframe is based on the historic production and potential for extension of the underground mineral resources to depth and the high level of capital investment needed to make the mine operational.

Response to Comment Agcy 8-3

The commenter proposes a reduced scale version of the project, whereby the 1,000 tons per day goal is reduced to a cap of 500 tons per day or less and no nighttime hauling. It is unclear what the commenter considers as nighttime activities. For clarification, the DEIR notes that trucking of engineered fill to the Centennial Industrial Site and local construction markets via SR 49 is scheduled at 16 hours per day from 6AM to 10PM (e.g., DEIR Table 3-7 and page 6-14). With an average of 50 trucks per day this is approximately 3 trucks per hour, and with a maximum of 100 trucks per day, this is approximately 6 trucks per hour.

The commenter's recommendation for a reduced project was evaluated as an alternative in Chapter of the DEIR - Alternative 4, Reduced Throughput. Alternative 4 was found to meet most of the project's objectives but would not meet Objectives 1 and 7 due to the difficultly in financing a project of this scale with lower throughput and the reduced number of employees. Further, this alternative would not reduce any of the project's significant impacts below the threshold of significance, with the possible exception of some intersection traffic impacts.

Response to Comment Agcy 8-4

The hours of operations for various activities are shown in Table 3-7 of the DEIR. Offsite hauling of engineered fill (which would include transport and dumping of the load) would take place from 6:00 AM to 10:00 PM 7 days a week. Placement, grading, and compaction of engineered fill would take place from 7:00 AM-3:30 PM Monday-Friday. The offsite hauling activity does not include spreading and compacting; thus, no construction activity would take place prior to 7:00 AM.

Truck traffic on a public road is not a construction activity, so the use of trucks on the roadways prior to 7:00 AM does not violate the City or County noise ordinances. Moreover, neither the Centennial nor Brunswick site are within a 500-foot radius of a residential zone in the City of Grass Valley and therefore City of Grass Valley Ordinance 8.28.100 has no relevance to the project. Impacts from noise from use of trucks and dumping on the Centennial site during the proposed hours has been analyzed in Chapter 4.10 of the DEIR.

Response to Comment Agcy 8-5

The commenter states that the County may also consider splitting the Centennial Site operations off as a separate project and conducting independent environmental review and permitting. Comment noted.

Response to Comment Agcy 8-6

A Notice of Applicability (NOA) for the water discharge is required by Mitigation Measure 4.8-1(a). As stated in the mitigation measure the owner shall be required to submit quarterly monitoring reports to the Central Valley Regional Water Quality Control Board (CVRWQCB).

General Order R-5-2016-0076 has been replaced with General Order R-5-2022-006 and the relevant sections of Chapter 4.8, Hydrology and Water Quality of the DEIR have been revised for clarification purposes as shown in Response to Comment Agcy 5-11. Upon receipt of the complete Notice of Intent (NOI), if the discharge is deemed eligible for coverage under the General Order, the CVRWQB will issue a Notice of Applicability (NOA). The NOA will specify monitoring and reporting program requirements. All NPDES permits are required to specify requirements for recording and reporting monitoring results. General monitoring provisions of the General Order require that samples taken for the purpose of monitoring be representative of the monitored activity. The monitoring and reporting schedule will be based on the requirements of General Order R-5-2022-006, under the jurisdiction of the CVRWQB. If the CVRWQB believes that more frequent sampling or reporting is required, those requirements will be included in the NOA.

There are currently two other permitted discharges downstream of the project under the same General Order. The Empire Mine State Park discharges to South Fork Wolf Creek and is required to sample for Iron, Manganese, and Arsenic a minimum of once per month. The North Star Water Treatment Facility is required to sample for Iron and Manganese a minimum of once per month and Arsenic a minimum of once per quarter.

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01/r5-2016-0076_noas/r5-2016-0076-005_amend.pdf

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01/r5-2016-0076_noas/r5-2016-0076-001_noa.pdf

Response to Comment Agcy 8-7

Underground vehicles will be electric powered only, as stated on page 4.3-50 of the DEIR. The inadvertent reference to “diesel” has been removed from page 3-19 of the DEIR, as follows:

> Mine development in nonmineralized “barren” rock (i.e., non-gold bearing) is expected to result in the production of approximately 500 tons per day (182,500 tons per year) of barren rock. The barren rock would be transported from the tunnel face to the mine shaft (using electric ~~or diesel-~~powered load/haul/dump vehicles, rail cars, and/or conveyors) to underground rock bins located adjacent to the shaft. The rock would then be loaded into the shaft skips, hoisted to the surface, and dropped into one of the compartments of the concrete silo located on the surface. The barren rock will then be transported by trucks on the surface for use as engineered fill.

The above minor change is for clarification purposes and does not affect the adequacy of the analysis contained in the DEIR, nor alter any conclusions.

Response to Comment Agcy 8-8

As described in Section 3.0 of the DEIR, after full placement of fill at the Centennial and Brunswick Industrial sites to the pad design elevations, hauling of engineered fill (barren rock and sand

tailings) would shift entirely to be utilized in local and regional construction markets. Please also see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets.

Response to Comment Agcy 8-9

As stated, page 3-40 of the DEIR, back-up power generation would have a capacity to provide approximately 6 MW on a continuous basis and the net load for the operation is approximately 6MW. Therefore, the backup generators have the capacity to power the entire operation if utility power is interrupted. Engineering details, including electrical designs and alarms, would be provided in the submittal of Improvement Plans to Nevada County which require approval before commencement of construction.

Response to Comment Agcy 8-10

The word "stored" is not used on page 3-26 of the DEIR. Engineered Fill would be placed on approximately 31 acres of the Brunswick Industrial site as described in Chapter 4.7 of the DEIR, within the limits of area and height as shown in Figures 3-7 and 3-8 of the DEIR. These limits define the maximum volume of engineered fill that can be placed on the Brunswick site. Please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets regarding demand for barren rock or sand tailings. Note that no stockpiles of engineered fill would be kept on the Brunswick site, as all material to be sold in local and regional construction aggregate markets would be kept either underground, or in surface bins at the Brunswick shaft and the storage bay in the process plant.

Response to Comment Agcy 8-11

Insurance coverage and applicable limits are not environmental impacts that require analysis under CEQA. Explosives transporters would be required to comply with all applicable laws regarding transport of explosives including any statutory or regulatory insurance policy requirements.

Response to Comment Agcy 8-12

Prior to commencement of initial mine dewatering, the Project Applicant will connect 30 properties in the East Bennett area to the NID potable water system as required in Mitigation Measure 4.8-2(c) of the DEIR.

Response to Comment Agcy 8-13

The mine rescue team will be comprised of on-site employees of the project.

Response to Comment Agcy 8-14

This comment does not relate to an environmental impact nor a deficiency with the DEIR. Comment noted.

Response to Comment Agcy 8-15

The commenter suggest that the various permits shown under the authority of the State Water Resources Control Board Division of Water Rights should be shown as being under the jurisdiction of the Regional Water Quality Control Board (RWQCB). Table 3-11 of the DEIR is hereby revised to show that the specific permits are under the authority of the RWQCB. Comment noted.

State Water Resources Control Board ~~Division of Water Rights~~	401 (Water Quality) Certification (Clean Water Act, 33 USC 1251: if the project requires Army Corps of Engineers 404 permit)	Discharge into "water of the United States" including wetlands

	General Industrial Activity Stormwater Permit. Notice of Intent (40 CFR Part 122)	Stormwater discharges associated with industrial activity, unless covered by individual NPDES Permit
	Spill Prevention Control and Countermeasures Plan (Health and Safety Code 25270 et seq.; 40 CFR Part 122)	Underground storage of petroleum of 42,000+ gallons. Above ground storage with 10,000+ gallons; or any spill affecting surface waters, single tank of 600 gallons, or 1,320 total

The above minor change is for clarification purposes and does not affect the adequacy of the analysis contained in the DEIR, nor alter any conclusions.

Response to Comment Agcy 8-16

The commenter requests that the DEIR include maps showing the maximally exposed sensitive receptor related to the health risk assessment. Please see Dudek Memorandum HRA Isopleths – Exhibit D, included in the Final EIR as Appendix K.

Response to Comment Agcy 8-17

The project design incorporates the extensive use of electric machinery and vehicles and therefore decreases the reliance on fossil fuels to the extent possible. All underground mining and surface processing would be powered by electricity provided by the local utility PG&E. Mitigation Measure 4-3-1(b) requires that where access to alternative-fueled equipment is available, portable diesel engines will be prohibited. As discussed in Section 4.3-4 of the DEIR, the use of fossil fuels has been minimized and use of grid-supplied electricity provides an opportunity for the use of renewably-generated electricity to power project operations. Thus, use of electrically-powered equipment would reduce the project's dependence on fossil-fuel energy supplies and would not be considered an inefficient source of energy demand. The quantity of fuel used, including gasoline and diesel, for operations was considered to generate the emission estimates provided in Appendix E.1 using the emission factors and vehicle assumptions provided in that report. Additionally, a memorandum from Dudek, explaining the expected volumes of gasoline and diesel to be used by the project has been attached to the Final EIR as Appendix M. As further detailed in revisions to the discussion for Impact 4.3-4, the volume of gas, diesel and other energy used by the project is not considered wasteful, inefficient or unnecessary.

4.3-4 Result in the inefficient or wasteful use of energy. Based on the analysis below, the impact is *less than significant*.

Implementation of the proposed project would result in the consumption of energy resources during construction, operation, and reclamation activities. The principal forms of energy consumed would be electricity, gasoline, and diesel. The foregoing forms of energy would be consumed by off-road equipment, facilities, stationary generators, and on-road vehicles. Off-road equipment (such as graders, excavators, cranes, et.) and stationary generators would generally be powered by diesel; however, some equipment, such as boring machines, air compressors, locomotives, pumps, and ventilation equipment would be electrically powered. On-road vehicles would demand either diesel or gasoline, with lighter duty vehicles often requiring gasoline while haul trucks and heavier duty vehicles typically require diesel fuel.

In addition to reducing air quality and GHG emissions, APM-AQ-1, Exhaust Emission Controls, would serve to avoid inefficient energy consumption in several ways. First, APM-AQ-1 commits the Project Applicant to using Tier 4 Final equipment throughout project construction, operation, and reclamation. The commitment to the use of Tier 4 engines is further required by Mitigation Measure 4.3-1(b) of this EIR. As a result of the improvements integrated into Tier 4 Final engines (relative to lower tier engines), Tier 4 Final compliant engines are generally the most fuel-efficient models currently available. Consequently, by using Tier 4 compliant engines throughout the construction, operation, and reclamation processes, fuel use by off-road equipment would be minimized, and the off-road equipment used in project implementation would not be inefficient.

As a further means of increasing the efficiency of fuel use associated with project implementation, APM-AQ-1 includes measures to minimize vehicle idling where practical. In general, reducing idling reduces the amount of run-time for engines, which decreases the amount of fuel consumed. Reducing idling time would, therefore, avoid inefficient energy consumption related to off-road vehicle use. Similarly, maintaining equipment in accordance with manufacturer's specifications, as required by APM-AQ-1, ensures that equipment continues to operate efficiently.

Projected fuel use during construction is approximately 161,700 gallons of diesel and 21,488 gallons of gasoline. Projected petroleum use during operation of the project averages to 222,375 gallons per year (165,182 gal/year (diesel) + 57,192 gal/year (gasoline)) over the estimated 11-year period during which engineered fill would be transported by truck to the Centennial and Brunswick Industrial Sites. For the remainder of the life of the project, during which engineered fill is transported longer distances to market, projected annual petroleum use is 403,208 gallons (357,742 gal/year (diesel) + 45,468 gal/year (gasoline)).

In addition to the energy efficiency requirements focused on reducing fuel consumption discussed above, construction and operations would also require operation of electrically powered equipment. Total energy demand during construction is estimated at 16,513 megawatt-hours. Total annual energy demand (PG&E supplied) for the operational lifetime of the project is estimated at 49,613 megawatt-hours. Use of grid-supplied electricity provides an opportunity for the use of renewably generated electricity to power project operations. Unlike fossil-fueled equipment, electric equipment may receive electrical power from sources such as solar, hydro-electric, wind, or biomass, which are sustainable and renewable. The electricity provider for the project area, PG&E, currently utilizes a variety of renewable energy sources to provide electricity to the grid. Thus, use of electrically powered equipment would reduce the project's dependence on fossil-fuel energy supplies and would not be considered an inefficient source of energy demand. Although electricity demand for the project would primarily be met through grid-supplied electricity, in certain instances, such as during power outages or emergency electrical shut-offs, the use of emergency generators would be necessary to provide continued electrical power. Despite the emergency generators being diesel fueled, both of the generators used during project construction and all four of the generators used during project operations, if needed, would be Tier 4 Final engines. As discussed above, Tier 4 Final engines are the most efficient engines currently available, which would ensure that the consumption of fuel by the generators would be minimized to the extent feasible. Moreover, the generators would be used to provide continued operations to critical mining

infrastructure such as pumps, locomotives, and ventilation systems, which are critical to the safety of miners and efficient operation of the mine. Thus, the use of electrically powered equipment would not result in the inefficient or wasteful consumption of energy.

All stages of project implementation would require on-road vehicle use. Light- and heavy-duty vehicles would be used by employees commuting to and from the project sites, as well as for the movement of goods, products, and equipment to and from the project sites. On-road vehicles currently use a variety of fuels including gasoline, diesel, and electricity. California has implemented strict regulations related to fuel efficiency standards for all types of vehicles, and to encourage the proliferation of electrically powered vehicles. Project-related vehicles, including those operated and owned by the Project Applicant, would be required to meet all existing and future state standards, which would ensure that all vehicles operated as part of the project are fuel- and energy-efficient. Finally, by using project-generated fill at the Centennial and Brunswick sites, the project would provide a local source of fill materials to both sites, which would minimize the length of travel for fill material. Providing local sources of fill materials reduces the energy required to transport material, and provides an energy-efficient supply of construction materials.

Based on the above, APM-AQ-1 and Mitigation Measure 4.3-1(b) would ensure that only high-efficiency off-road equipment is used during project construction, operation, and reclamation. Electrically powered equipment used on-site would primarily be served by grid-supplied electricity, which would originate from an increasingly renewably sourced mix of energy, and, if emergency power is required, the emergency generators would be Tier 4 Final compliant engines. On-road vehicles are required to meet stringent state and federal requirements related to fuel efficiency. All project vehicles would be required to comply with the existing requirements, which would ensure that on-road vehicles would be operated in an energy efficient manner. Accordingly, the proposed project would not result in an inefficient, wasteful, and unnecessary consumption of energy, and the impact would be ***less than significant***.

Mitigation Measure(s)
None required.

The above revisions to the DEIR provide quantitative estimates of project energy and fuel demand during construction and operations. This information amplifies the current impact discussion of the DEIR, which clearly demonstrates that the project's use of electricity and petroleum would not be wasteful or inefficient due to incorporation of energy- and fuel-efficient technology, including but not limited to, Tier 4 Final Engines in off-road equipment during construction, operation, and reclamation processes. Also, in an effort to reduce fuel consumption, the applicant has committed that all underground equipment will be powered by electricity. The project's annual operational use of electricity in megawatt-hours is only approximately 7% of the amount of electricity used in Nevada County in 2020 (see page 4.3-18 of the DEIR for the Nevada County electricity estimate).

Response to Comment Agcy 8-18

As stated on page 4.3-89 of the DEIR, The Energy Action Plan (EAP) is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(D); therefore, no CEQA document can tier from the County EAP. Nevertheless, the compliance of the project with EAP strategies has been analyzed and found to

be consistent with the EAP. Please see Master Response 25 - Nevada County Energy Action Plan.

Response to Comment Agcy 8-19

The commenter asserts that the discussion in Section 4.3-9 of the DEIR refers only to the project's impacts and does not clearly discuss the cumulative impacts of the project combined with other projects. However, Section 4.3-9 includes the following discussion of cumulative development energy use "Increased efficiency will be ensured in the future as cumulative development occurs due to compliance with the State's robust energy efficiency requirements. For example, the 2019 CBSC has begun phasing in Zero Net Energy requirements by requiring residential projects to meet 100% of their electricity needs through rooftop solar. Cumulative residential development would include rooftop solar to meet 100% of each project's electricity demand. In addition, pursuant to 2019 CBSC, new non-residential buildings associated with cumulative development are also required to be solar ready." (DEIR, p. 4.3-102.) As such, the DEIR's analysis already analyzes the project's cumulative energy use impacts as combined with other cumulative projects. Comment noted.

Response to Comment Agcy 8-20

Please see Master Response 19 – NSAQMD Criteria Pollution Thresholds during Operations.

Response to Comment Agcy 8-21

The commenter has not identified a new significant impact that was not addressed in the DEIR; therefore, recirculation is not required. Please also see Response to Comment 8-45 regarding criteria for recirculation.

Response to Comment Agcy 8-22

The commenter requests that the County submit the project's Final Drainage Report to the City of Grass Valley City Engineer for review and comment. The City of Grass Valley has no direct jurisdiction over the Final Drainage Report. Nonetheless, this comment will be provided to the County's decision makers for their consideration.

Response to Comment Agcy 8-23

The commenter asserts that the DEIR fails to adequately analyze the fact that the project sites are within the City's sphere of influence and does not analyze specific general plan policies associated with the City. However, the commenter does not identify any specific land use conflicts or impacts, and rather, generally asserts that more analysis is required. Pursuant to General Plan Policy 1.8.4, for all discretionary projects within a City's Sphere of Influence, the County shall first request that the City / Town determine whether or not it desires to annex the project. As required, the City of Grass held a Development Review Committee (DRC) Meeting on September 8, 2020 and determined that the City did not wish to pursue annexation of the project at that time. Furthermore, the City also provided comments to the County from the DRC meeting, which were reviewed as part of the development of the DEIR.

As stated on page 4.9-3 of the DEIR, "While the majority of the Sites are located in the City's sphere of influence and assigned General Plan land use designations by the City, the Sites are located within unincorporated Nevada County and are not proposed to be annexed to the City of Grass Valley." The County evaluated potential land use conflicts in Chapter 4.9 of the DEIR and concluded that potential land use conflicts were less than significant.



Response to Comment Agcy 8-24

The commenter asserts that mitigation measure 4.10-4 lacks timing and that the Ground Vibration Monitoring Program should be developed prior to operation of the mine. However, Mitigation Measure 4.10-4 is the Ground Vibration Monitoring Program, and is required to be implemented during any blasting on site. Data from the seismographs used during the Ground Vibration Monitoring Program will be used to develop an equation that can be used to modify blasting during subsequent mine operations to minimize impacts. No data can be collected by seismographs until blasting actually occurs at the project and the equation for site-specific ground vibration cannot be developed until measurements of vibrations from blasting are collected. Mitigation Measure 4.10-4 of the DEIR reflects the number and placement of seismographs recommended in the Blasting Report (Appendix M or the DEIR).

Mitigation Measure 4.10-4 is hereby revised as follows to clarify timing of installation and use of seismographs:

> 4.10-4 The Project Applicant shall conduct a project-specific Ground Vibration Monitoring Program, as set forth in this mitigation measure. As part of the Ground Vibration Monitoring Program, the mine shall employ between eight and ten seismographs, which shall be installed prior to any onsite blasting, and used during all blasting of levels above the 1,000-foot level. The seismographs shall be placed at the following locations:
>
> - *One at the Brunswick Shaft;*
> - *One at each of the four corners of the Mine Property;*
> - *One in the Whispering Pines Industrial Park;*
> - *Two at nearby residences; and*
> - *Two travelling seismographs which can change location depending on the weekly/monthly mining plan.*
>
> After the mine has stopped blasting at the proposed shaft and above the 1,000-foot level, only five seismographs would be required for the Ground Vibration Monitoring Program. One seismograph shall be located at the Brunswick Shaft and one in each of the four corners of the mine property. The five seismographs would collect relevant data throughout the entire operation to understand how the ground is transmitting vibration in these areas.
>
> Once mining operations commence, the Project Applicant shall hire a blast consultant to assist with the development of a 95 percent confidence level equation for the site-specific ground vibration. The blast consultant shall assess the data acquired by the seismographs using a linear regression and log-log confidence model to develop an equation that the mine can use to modify blasting, as needed, to ensure vibration levels remain below 0.4 in/s at sensitive receptors.
>
> Results of the Ground Vibration Monitoring Program and the equation for site-specific ground vibration shall be submitted to the Nevada County Planning Department, on a monthly basis, for review.

The above minor changes are for clarification purposes and do not affect the adequacy of the analysis contained in the DEIR, nor alter any conclusions.

Response to Comment Agcy 8-25

The commenter alleges that the hauling, dumping and compacting activities at the Centennial site will be beyond standard construction hours and will violate noise standards, creating significant noise impacts. However, the DEIR already acknowledges and analyzes the loading and dumping of trucks and spreading and compacting of material during the relevant hours, and concluded that noise impacts would be less than significant. As discussed in Response to Comment Agcy 8-4 above, and contrary to the commenter's assertion, hauling and dumping of loads will occur on the Centennial site between 6:00 AM and 10:00 PM, but no construction activities such as compaction or grading will occur prior to 7:00 AM. The EIR analyzed the noise during the proposed hours and locations of the various activities of the project including trucking, and did not identify any significant noise impacts. The project would comply with the applicable nighttime noise standards during the nighttime (6:00 AM – 7:00AM) hour of activity (See Chapter 4.10 of the DEIR).

Moreover, truck traffic on a public road is not a construction activity, so the movement of truck on the public streets is not a construction activity regulated by noise ordinances as construction noise. Neither the Centennial or Brunswick site is within a 500-foot radius of a residential zone in the City of Grass Valley, so the noise ordinance requirements cited by commenter are inapplicable. Impacts from noise of from trucks and dumping during the proposed hours has been analyzed in Chapter 4.10 of the DEIR.

Response to Comment Agcy 8-26

As stated on page 4.10-32 the noise increase from the placement and compaction of engineered fill at the Centennial site would be less than significant, based on application of relevant noise standards compared to expected project noise. The DEIR's characterization of the project noise at the Centennial site as "temporary" did not affect the impact analysis, so the commenter's dislike of that characterization is not relevant to the analysis. The commenter also alleges that construction noise will occur "when other construction activities are not allowed"; however, the placement and compaction of engineered fill is scheduled from 7:00AM to 3:30PM on Monday through Friday as stated in the project description and in Table 3-7 of the EIR. The only activities allowed prior to 7:00AM are hauling and dumping of engineered fill.

Response to Comment Agcy 8-27

In Table 4.10-6 of the DEIR the Baseline Ambient Conditions – Nighttime columns are mislabelled with Lmax shown in the first column and Leq in the second column. The label should be Leq in the first column and Lmax in the second columns (similar to the format of the rest of the table). The second column shows higher decibel values and is clearly representing Lmax. Table 4.10-6 is hereby corrected in the FEIR, on the following page, and this minor labelling error does not affect the analysis presented in the DEIR.

Response to Comment Agcy 8-28

The intersection of Idaho Maryland Road and Sutton Way currently is an all way stop and this is properly reflected in the Traffic Impact Analysis (TIA) in Appendix O of the DEIR and in Chapter 4.12 of the DEIR.

Response to Comment Agcy 8-29

The TIA and DEIR incorrectly used the Home-Based VTM per Worker, presented in Table A-3 of the SB743 Report as the threshold of significance for the project. The Total VMT per Service Population presented in Table A-4 should have been used as the threshold of significance in accordance with the Nevada County TIAG. The use of Total VMT per Service Population for Unincorporated Western Nevada County of 18.1 is the most conservative approach and the threshold of significance is 14.3% below the subarea mean with a value of 15.5 VMT per Service

Population. Sections 4.12.2 and 4.12.4 of the DEIR have been updated to reflect these changes in the FEIR, as follows.

Page 4.12-17 of the DEIR is hereby revised as follows:

> **Existing Vehicle Miles Traveled**
> VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. The available measures of VMT for Nevada County include the following:
>
> - Total VMT – the sum of VMT for all vehicle trips and trip purposes.

Table 4.10-1
Baseline Ambient Conditions and Adjusted Nevada County Noise Standards by Receptor

	Baseline Ambient Conditions[1]						Applicable Standards After Adjustment					
	Daytime[3]		Evening[3]		Nighttime[3]		Daytime		Evening		Nighttime	
Receptor[2]	L_{eq}	L_{max}	L_{eq}	L_{max}	~~L_{max}~~L_{eq}	~~L_{eq}~~L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
1	58	76	51	68	50	66	63	81	56	73	55	71
2	63	81	56	73	55	71	68	86	61	78	60	76
3	61	82	53	71	51	69	66	87	58	76	56	74
4	55	72	53	65	56	70	60	75	58	70	61	75
5	49	66	47	59	50	64	54	71	50	64	55	69
6	50	67	48	60	51	65	55	72	50	65	56	70
7	49	66	47	59	50	64	54	71	50	64	55	69
8	54	72	49	69	45	65	55	75	50	74	45	70
9	48	66	43	63	39	59	53	71	48	65	44	60
10	47	66	43	64	37	58	52	71	48	65	42	60
11	47	67	43	65	37	59	52	72	48	70	42	60
12	49	69	45	67	39	62	54	74	50	72	44	67
13	51	70	48	69	41	64	55	75	50	74	45	69
14	50	72	48	72	42	64	55	75	50	77	45	69
15	51	73	49	72	43	65	55	75	50	77	45	70
16	48	71	46	71	40	62	53	75	50	76	45	67
17	56	73	54	66	57	71	61	75	59	71	62	76
18	52	69	50	62	53	67	55	74	50	65	58	72
19	54	69	51	68	46	65	55	74	56	73	51	70
20	57	72	55	72	50	68	62	75	60	77	55	73
21	55	70	53	70	48	66	60	75	58	75	53	71
22	56	71	53	70	48	67	61	75	58	75	53	72
23	58	73	56	73	51	69	63	75	61	78	56	74
24	60	75	58	75	53	71	65	80	63	80	58	76
25	60	75	57	74	52	71	65	75	62	79	57	76
26	51	64	49	63	44	56	55	69	50	65	45	60
27	51	64	49	63	44	56	55	69	50	65	45	60
28	51	64	49	63	44	56	55	69	50	65	45	60
29	51	64	49	63	44	56	55	69	50	65	45	60

Table 4.10-1
Baseline Ambient Conditions and Adjusted Nevada County Noise Standards by Receptor

	Baseline Ambient Conditions[1]						Applicable Standards After Adjustment					
	Daytime[3]		Evening[3]		Nighttime[3]		Daytime		Evening		Nighttime	
Receptor[2]	L_{eq}	L_{max}	L_{eq}	L_{max}	$L_{~~max~~\underline{eq}}$	$L_{~~eq~~max}$	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
30	51	64	49	63	44	56	55	69	50	65	45	60

Notes:
1. Baseline ambient conditions at each representative receptor were established through extrapolating the Table 4.10-1 data closest to each receptor using a 4.5 dB per doubling of distance decay rate.
2. Receptor locations are indicated on Figure 4.10-2.
3. Daytime = 7:00 AM – 7:00 PM; Evening = 7:00 PM – 10:00 PM; Nighttime = 10:00 PM – 7:00 AM

Source: Bollard Acoustical Consultants, Inc. (2021).

- Residential VMT per capita – the sum of VMT for trips originating from home, divided by the number of residents.
- VMT per worker – the sum of VMT for trips from home to work, divided by the number of workers.

In July 2020, Fehr & Peers prepared Senate Bill 743, Vehicle Miles Traveled Implementation for the Nevada County Transportation Commission (NCTC). The NCTC in turn distributed the document to the various agencies within the County so each agency could develop their own significance threshold guidelines. Fehr & Peers recommends that VMT be expressed as a generation rate rather than a ratio. The County's recommended threshold of significance is on a per service population basis (Nevada County Traffic Impact Guidelines, June 2020). Because the proposed project is an industrial land use project, the calculated VMT per employee (worker) is also the VMT per service population~~County determined that the preferred significance threshold metric shall be VMT per worker (i.e., project employee)~~.

The subareas, based on similar travel characteristics and proximity, are recommended to be the following: the City of Grass Valley; the City of Nevada City; the Town of Truckee; Alta Sierra; Lake of the Pines; Lake Wildwood and Penn Valley; the remainder of western Nevada County; and the remainder of eastern Nevada County. Use of a subarea threshold acknowledges the differences in VMT generation in different parts of Nevada County.

Table 4.12-4 presents the results of the VMT measurement analysis that considers trips from outside the model as well as within the NCTC Travel Demand Model (TDM) ~~from several data sources including the NCTC Travel Demand Model (TDM), the California State Travel Demand Model, and MXD+, a trip generation tool developed by Fehr & Peers.~~ As noted in further detail in the Method of Analysis section below, the data in Table 4.12-4 was used to determine the significance threshold for the proposed project. Half of the project is located in the Grass Valley Subarea while half is located in unincorporated Western Nevada County~~The Grass Valley subarea was used as the basis due to the project's proximity to the City~~.

Table 4.12-4
~~Home-Based VMT per Worker~~Total VMT per Service Population

Location (SubArea)	NCTC TDM
Grass Valley	~~18.6~~28.0
Nevada City	~~26.6~~36.2
Truckee	N/A
Alta Sierra	~~27.8~~17.1
Lake Wildwood	~~34.3~~22.5
Penn Valley	~~18.6~~18.8
Lake of the Pines	~~25.0~~16.4
Unincorporated Western Nevada County	~~N/A~~18.1
Western Nevada County Total	22.2

Source: KDAnderson & Associates, Inc., 2021.

In addition, page 4.12-28, Section 4.12.4, Impacts and Mitigation Measures, is hereby revised as follows:

Vehicle Miles Traveled Standard of Significance
For the proposed project, a VMT impact may be considered less than significant if:

- The project's total weekday VMT per service population is equal to or less than 14.3 percent below the subarea mean under baseline conditions, or the project reduces the total VMT per service population for the subarea; and
- The project is consistent with the General Plan and the Nevada County Regional Transportation Plan.

As stated above, because the proposed project is an industrial land use project, the ~~County determined that the preferred significance threshold metric shall be~~ VMT per worker (i.e., project employee) is also the VMT per Service Population. The data in Table 4.12-4 was used to determine the significance threshold for the proposed project. Half of the project is located in the Grass Valley Subarea while half is located in unincorporated Western Nevada County. The subarea mean VMT per service population rates are 28.0 for Grass Valley and 18.1 for unincorporated Western Nevada County. The most conservative approach is to use the unincorporated Western Nevada County~~Grass Valley~~ subarea ~~was used as the basis due to the project's proximity to the City~~. Therefore, the proposed project would be considered to result in a significant impact related to VMT if the project would result in a VMT per worker ratio that is less than 14.3 percent below the subarea mean for the ~~Grass Valley~~unincorporated Western Nevada County subarea of 18.~~6~~1.

In addition, Impact 4.12-5, related to VMT, is hereby revised as follows:

4.12-5 Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Based on the analysis below, the impact is *less than significant*.

Because the proposed project is an industrial land use project, the ~~County determined that the preferred significance threshold metric shall be~~ VMT per worker (i.e., project employee) is the VMT per service population. The ~~Grass Valley~~unincorporated Western Nevada County subarea was used as the basis ~~due to the project's proximity to the City~~as a conservative approach. As shown in Table 4.12-4, the ~~Grass Valley~~unincorporated Western Nevada County subarea has an associated ~~home-based~~ VMT per ~~worker~~ service population of 18.~~6~~1. As shown in Table 4.12-16~~ on a per worker basis~~, the proposed project is modeled to generate a daily rate per service population (employee) of ~~13.9~~14.4 VMT (~~under 2035 Plus Project Conditions~~in the 2020 base year), which is more than 14.3 percent below the ~~Grass Valley~~unincorporated area metric of 18.~~6~~1 VMT per worker. Therefore, the proposed project would result in a reduced VMT per service population for the applicable subarea.

Table 4.12-16
Rise Grass Valley Project Generated VMT Summary

Metric	~~2035 Future Year~~2020 Base Year
~~Total Daily Project VMT~~	~~1,538~~
~~Maximum Employees on Site (including Centennial employees)~~	~~111~~
Daily VMT per ~~Employee~~ Service Population	~~13.9~~14.4
Source: ~~Fehr & Peers~~KD Anderson, 2020~~2~~.	

In addition, because the proposed project is anticipated to employ approximately 312 direct employees during full operations, pursuant to Section L-II 4.1.9 of the Nevada County LUDC, the Project Applicant would be required to submit a detailed analysis of transportation alternatives, documenting feasible measures for reducing auto dependence.

Although the overall project site is not currently served by transit and the Nevada County Transit Services Division does not have plans to bring service to the project area, the nearest bus route to either the Brunswick Industrial Site or Centennial Industrial Site is Route #3, which operates between the Tinloy Street/Bank Street Transit Center and the Nevada County Airport and passes directly by the Centennial Industrial Site. The proposed project would incorporate an area for bicycle racks at the Brunswick Industrial Site, which would provide a minimum of 11 racks (44 bicycle spaces). Pursuant to Nevada County LUDC, additional potential transportation reduction alternatives for the proposed project were identified in the Traffic Impact Analysis prepared for the proposed project, based on the Transportation Demand Management strategies included in the Vehicle Miles Traveled Implementation report prepared by Fehr & Peers for the NCTC, and include the following:

- **Commute Trip Reduction, #3.4.11, TRT-11: Provide Employer-Sponsored Vanpool/Shuttle:** This strategy would make a company sponsored vanpool/shuttle available to allow employees to commute in a single vehicle. Because employees of the proposed project are likely to be coming from throughout the area, the use of specific locations for pick up, such as existing Park-and-Ride lots in the County, would facilitate the reduction of commute vehicles.

  The proposed project could also institute a shuttle service between the project site(s) and the Tinloy Street/Bank Street Transit Center to provide a convenient location for employees to transfer from public transit or to be dropped off. A shuttle could operate several times each day, during the 7:00 AM and 7:00 PM shift changes and at the end of the administrative workday, after 3:30 PM.
- **Commute Trip Reduction, #3.4.3, TRT-3: Provide Ride-Sharing Programs:** This strategy involves the employer providing ride-share coordination and parking facilities to provide information for employees to ride share to and from work. This strategy is intended to match employees by location resulting in a reduction of commute vehicles. Rideshare activities would provide incentives for employees commuting to and from the site. Ridesharing could be coordinated between employees along a similar route from their residence to the work site. The use of existing Park-and-Ride lots may provide a location for employees to meet and commute together, reducing the number of vehicles in the roadway network. Three Caltrans Park-and-Ride locations exist in Nevada County, two in Penn Valley and one in Grass Valley; all are located along SR 20. A Park-and-Ride location also exists in Auburn for employees commuting along SR 49 from Placer County. Incentives may include the use of high-occupancy vehicle (HOV) lanes, less maintenance on a single vehicle due to reduced use, and cost sharing between employees/employer.

  Given that the proposed project would result in a VMT per ~~worker~~ service population ratio that is greater than 14.3 percent below the subarea mean for the ~~Grass Valley~~unincorporated Western Nevada County subarea of 18.~~6~~1, impacts associated with a conflict or being inconsistent with CEQA Guidelines section 15064.3, subdivision (b), would be ***less than significant***.

  Mitigation Measure(s)
  None required.

The above-noted errors, which are hereby corrected, did not affect the DEIR's conclusion related to the project's VMT impact, which remains less than significant, as stated in the DEIR. Further details are provided in Response to Comments Agcy 8-38 below.

Response to Comment Agcy 8-30

The commenter asserts that passenger-car-equivalent (PCE) factors were not used in the traffic analysis to account for the different traffic impact caused by larger trucks; however, the traffic model software used by the traffic consultant account for PCE in the software, and the use of PCE factors are not necessary. As stated on page 25 of the TIA, Synchro and Synco/Simtraffic were utilized for the analysis depending on the intersection characteristics. These programs account for "PCE" to compute levels of service and queues based on the input truck percentages. An explanation has been added to the revised TIA. The Synchro files were updated to reflect the correct truck traffic percentages along the study roadways. All LOS and queuing results and accompanying tables in the TIA were updated to reflect the updated truck percentages. Please see Appendix N to this Final EIR for the updated TIA. No new impacts or mitigations were identified.

Response to Comment Agcy 8-31

As demonstrated in Response to Comment Agcy 8-30, the commenter has not identified a new significant impact or significant impact that is substantially more severe than disclosed the DEIR; therefore, recirculation is not required. Please also see Response to Comment 8-45 regarding criteria for recirculation.

Response to Comment Agcy 8-32

Existing and approved projects identified are listed on page 4.12-35 and continues on page 4.12-48 of the DEIR (after a number of figures), and includes the Loma Rica Ranch and Dorsey Marketplace projects. These projects were included and taken into consideration in the TIA and DEIR.

Response to Comment Agcy 8-33

As discussed on page 4.12-48 of the DEIR, the analysis of the long range 2035 cumulative condition is intended to consider the impact of the proposed project within the context of the Nevada County region buildout projected to occur by 2035. Year 2035 traffic forecasts were based on the most recent NCTC regional travel demand model and includes those projects identified in the EPAP scenario and other reasonably foreseeable cumulative growth.

A connecting road between Idaho-Maryland Road and E. Bennett Road does not currently exist. A road connection between Centennial Drive and E. Bennett St. (WU11) is included in the Nevada County Regional Transportation Plan (NCRTP) as an unconstrained (unfunded) project with no estimated construction date. Without the realization of additional revenues or funding by a future development it cannot be reasonably expected to be constructed prior to the year 2035, and is therefore not within the timeframe analyzed for project-related traffic impacts (See pages 78 and 83 of the NCRTP).

Response to Comment Agcy 8-34

Table 11 of the TIA provides the projected truck traffic for the site. A Passenger Car Equivalence (PCE) is not necessary to illustrate the truck volumes**.** As stated on page 25 of the TIA, Synchro and Synco/Simtraffic were utilized for the analysis depending on the intersection characteristics. These programs account for "PCE" to compute levels of service and queues based on the input truck percentages.

Response to Comment Agcy 8-35

The Synchro files were updated to reflect truck traffic percentages along the study roadways. Synchro and Simtraffic account for "PCE" to compute levels of service and queues based on the input truck percentages. The TIA report and its appendices have been revised to reflect this correction; please see Appendix N to this Final EIR.

Response to Comment Agcy 8-36

All LOS results and accompanying tables in the TIA were updated to reflect the updated truck percentages (Please see Appendix N to this Final EIR). In addition, Tables 4.12-2, 4.12-10, 4.12-11, 4.12-18, and 4.12-19 are hereby revised and provided in strike-through and underline format at the end of this letter. Trucks are fully represented as Synchro and Simtraffic account compute levels of service based on the input truck percentages. No new impacts or mitigations were identified.

Response to Comment Agcy 8-37

All queuing results and accompanying tables in the TIA were updated to reflect the updated truck percentages (Please see Appendix N to this Final EIR). In addition, Tables 4.12-14, 4.12-15, 4.12-22, and 4.12-23 are hereby revised and provided in strike-through and underline format at the end of this letter. Trucks are fully represented as Synchro and Simtraffic account compute queues based on the input truck percentages. No new impacts or mitigations were identified.

Response to Comment Agcy 8-38

Please see Response to Comment 8-29. Sections 4.12.2 and 4.12.4 of the DEIR have been updated to use the interpolated 2020 base year conditions in accordance with Section 7 of Nevada County Traffic Impact Analysis Guidelines (June 2020) (TIAG), which results in a project VMT per service population of 14.4.

Service Population is defined in the Nevada County TIAG (page 3) as the total number of residents, employees, and students. The project does not have residents or students and therefore the VMT per Employee is the VMT per Service Population for the project.

Section 7.0 of the Nevada County TIAG states that a project's VMT impact may be considered less than significant if the project total weekday VMT per service population is equal to or less than 14.3% below the subarea mean under baseline conditions.

The Nevada County Transportation Commission Senate Bill 743 Final Vehicle Miles Traveled Implementation report (SB743 Report) dated July 6th 2020 was used as the basis for the adoption of the Nevada County TIAG. Section 4.1 of this report states: *"Recommendation: Use total weekday VMT per service population (residents plus employees and students) as the measure of VMT."* And *"VMT per service population is how much VMT is generated by the residents, employee, and students of the project."*

The use of home-based VMT per resident and home-based work VTM per employee is discussed in Section 4.1 but only for screening purposes stating: Variation among model travel analysis zones (TAZs) in the mix of residential and work-related land uses may create anomalous patterns when screening using total VMT per service population, so, for screening purposes, two other measures may be useful.

The DEIR incorrectly used the Home-Based VTM per Worker, presented in Table A-3 of the SB743 Report as the threshold of significance for the project. The Total VMT per Service Population presented in Table A-4 should have been used as the threshold of significance in accordance with the Nevada County TIAG. The northern portion of the Brunswick site is partially in the Grass Valley sub-area and the southern portion is in the Unincorporated Western Nevada County subarea. The use of Total VMT per Service Population for Unincorporated Western Nevada County of 18.1 is the most conservative approach and the threshold of significance is 14.3% below the subarea mean with a value of 15.5 VMT per Service Population. Sections 4.12.2 and 4.12.4 of the DEIR have been updated to reflect these changes, as shown in Response to Comment Agcy 8-29. The above-noted errors, which are corrected in this Final EIR, did not affect the DEIR's conclusion related to the project's VMT impact, which remains less than significant, as stated in the DEIR.

Response to Comment Agcy 8-39

Figure 4.12-1 of the DEIR has been updated (see following page), along with Figures 3, 6A and 6B of the TIA (see Appendix N of this Final EIR) to reflect the roundabout at Main Street/Idaho Maryland Road and the southbound off-ramp at Brunswick Road has been added. No changes to the analysis or conclusions of the DEIR result from these minor corrections.

Response to Comment Agcy 8-40

Figures 4.12-2 through 4.12-4 and Figures 4.12-7 through 4.12-24 of the DEIR are derived from the TIA. The intersections are generally orientated with north towards the top of the page as indicated by the north arrow in each figure. Figure 4.12-1, as shown on the following page, provides an overview map showing the numbered intersections which assists to determine the orientation of the intersection figures. The street names in each intersection figure are not intended to assist with orientation.

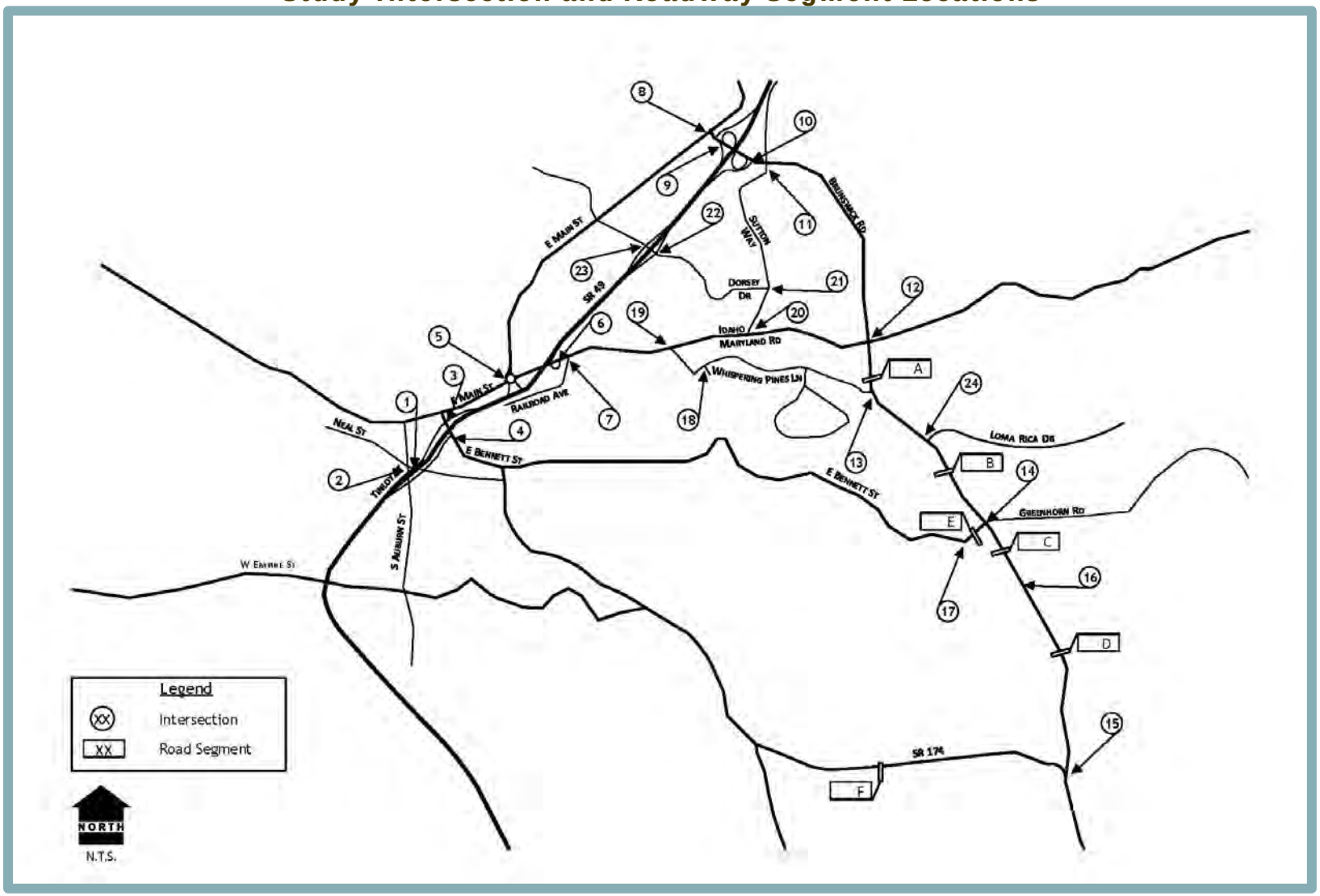
Response to Comment Agcy 8-41

The historic mining operation averaged approximately 1,000 tons per day of production in the years before the forced closure in 1942. The historic operation constructed a new headframe in 1942 with the intention of increasing mining depth to 5000 ft and doubling production to 2,000 tons per day. Therefore, a level of production of 1,000 tons per day is not speculatively large.

The number of years is not relevant in the analysis of Alternative 4. There is a finite amount of economic gold mineralization at the project, the extent of which is not known at this time and will likely not be known until it is depleted. If this given mass of material is mined at ½ of the rate it will take twice as long to complete mining.

The commenter proposes an alternative where the throughput is cut to 500 tons per day and the life of the mine remain the same length of time. Therefore, total mining would be 50% of the material mined in the base case. This alternative has already been examined in the DEIR (Alternative #4) and would not reduce any significant impact to less than significant. The significant and unavoidable aesthetics, construction noise, and traffic intersection impacts would remain significant and unavoidable. This alternative may be inconsistent with several policies of the General Plan (reduced employment, taxes, etc.) as explained on page 6-36 of the DEIR.

Figure 4.12-1
Study Intersection and Roadway Segment Locations



Source: KDAnderson & Associates, Inc., 20221.

Response to Comment Agcy 8-42

The commenter asserts that the proposed 80-year permit term is extreme and unprecedented in California. However, this is assertion incorrect. Permit terms of 100 years are routinely approved for large mining operations around California. As an example, Madera County approved a 100-year permit for the Vulcan Austin Quarry, which is a surface-mining operation that produces construction aggregate. Long permit terms are commonly requested for large mining operations because they are capital intensive, and it is not economically feasible to invest tens or even hundreds of millions of dollars on a project, when the number of years in which to obtain return on that investment are limited to only a few decades. The commenter presumes that a 500-tons per day throughput combined with a 30-year permit term is sufficient; but provides no evidence that this drastic change in the economics of the project would be feasible financially. Notably, the County already analyzed the 500-tons per day throughput alternative as Alternative 4 in the DEIR. The commenter also does not explain how the shorter permit term would reduce any significant impacts of the project. A shorter permit term would not avoid any of the significant impacts of the project, but would have less economic benefits to the County and would also potentially fail to meet one or more project objectives.

Response to Comment Agcy 8-43

The construction of a commercially viable, financeable, major underground gold mine operation that will produce 1,000 tons per day of gold mineralization and providing of jobs are project objectives. The complete elimination of the engineered fill placement on both Centennial and the Brunswick sites is not provided as an alternative. Such an alternative would not provide sufficient certainty for the financing of the construction of a major underground gold mine as it does not allow for a minimum amount of guaranteed storage space required to pay back the initial capital to construct the mine. The trucking of all materials off-site would also increase the project emissions due to the longer hauling distance versus the placement of fill on the Brunswick and Centennial sites.

Response to Comment Agcy 8-44

The DEIR has determined that the project will have a significant and unavoidable impact to aesthetics. Page 6-3 of the DEIR refers to the less-than-significant impact that would occur related to substantial adverse effects on scenic vistas.

Response to Comment Agcy 8-45

Please see Responses to Comments Agcy 8-2 through Agcy 8-44. The commenter has not identified a new significant impact that was not addressed in the DEIR or any other deficiency requiring recirculation; therefore, recirculation is not required. Section 1.4 of the Introduction chapter of this Final EIR includes a detailed discussion of the criteria for recirculation set forth in CEQA Guidelines Section 15088.5, demonstrating that recirculation is not required. The majority of that discussion is repeated here for convenience.

Pursuant to CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to

implement. Pursuant to 15088.5(a), "Significant new information" requiring recirculation include, for example, a disclosure showing that:

> (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
> (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
> (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
> (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

The following discussion will evaluate the four above criteria and demonstrate that the changes to the DEIR text presented in Chapter 3 of this Final EIR do not require recirculation of the DEIR.

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

Pursuant to CEQA Guidelines Section 15088.5(b), recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. Chapter 3, Revisions to the Draft EIR Text, of this Final EIR includes several minor changes to the DEIR text as a result of public comment that serve the purpose of clarifying or amplifying the discussion in the EIR without identifying new significant impacts. The majority of modifications consist of small, targeted revisions, consisting of minor additions or deletions. A few modifications involve larger additions of text, but the relevant criterion is not the extent of the modification, but rather whether the added text identifies a new significant impact, which is not the case. See Section 1.4 of the Introduction Chapter of this Final EIR for further discussion.

As shown above, in response to public comment, it was determined that the truck traffic percentages along study roadways needed to be updated in the transportation analysis. These corrections were made to the transportation analysis, an updated version of which is included as Appendix N to this Final EIR; and Chapter 4.12, Transportation, of the DEIR has been revised accordingly in this Final EIR. For example, Tables 4.12-2, 4.12-10, 4.12-11, 4.12-18, and 4.12-19 of the DEIR, reporting study intersection levels of service (LOS), and Tables 4.12-14, 4.12-15, 4.12-22, and 4.12-23 reporting study intersection queues, were updated in strike-through and underline format. However, as demonstrated in this Final EIR, in no case do the revisions trigger a new significant impact at study intersections, when comparing the updated values to the thresholds of significance used in the DEIR. Thus, these corrections do not warrant recirculation of the EIR.

As also shown above, the DEIR incorrectly used the Home-Based VTM per Worker, presented in Table A-3 of the SB743 Report,[4] as the threshold of significance for the project. The Total VMT per Service Population presented in Table A-4 should have been used as the threshold of significance in accordance with the Nevada County Traffic Impact Analysis Guidelines (June

[4] The *Nevada County Transportation Commission Senate Bill 743 Final Vehicle Miles Traveled Implementation Report* (SB743 Report), 2020.

2020). The northern portion of the Brunswick Site is partially in the Grass Valley sub-area and the southern portion is in the Unincorporated Western Nevada County subarea. The use of Total VMT per Service Population for Unincorporated Western Nevada County of 18.1 is the most conservative approach and the threshold of significance is 14.3% below the subarea mean with a value of 15.5 VMT per Service Population. As shown in updated Table 4.12-16, the proposed project is modeled to generate a daily rate per service population (employee) of 14.4 VMT, which is more than 14.3 percent below the unincorporated area metric of 18.1 VMT per worker (i.e., 15.5). Sections 4.12.2 and 4.12.4 of the DEIR have been updated to reflect these changes, as shown in Response to Comment Agcy 8-29. The above-noted errors, which are corrected in this Final EIR, did not affect the DEIR's conclusion related to the project's VMT impact, which remains less than significant, as stated in the DEIR.

As discussed above, the remaining revisions to the DEIR, as presented in Chapter 3 of this Final EIR, are small, targeted revisions that serve to clarify or amplify the existing adequate DEIR. Many of these minor modifications pertain to mitigation language – see criterion #3 below. Please also refer to Chapter 3 for a review of those changes.

In summary, recirculation of the EIR is not required pursuant to criterion 1 of 15088.5.

2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

This criterion pertains to whether the Final EIR provides significant new information showing that a substantial increase in the severity of an environmental impact already identified in the DEIR would occur unless mitigation measures are adopted that reduce the impact to a level of insignificance. Nothing in the responses to comments, nor in the changes to the DEIR text shown in Chapter 3 of this Final EIR, results in a substantial increase in the severity of a significant environmental impact identified in the DEIR. Recirculation of the EIR is not required under this criterion.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

As shown in Chapter 3 of this Final EIR, as a result of public comment, several minor modifications are made to mitigation measures included in the DEIR. Under *Laurel Heights Improvement Ass'n v Regents of Univ. of Cal.* (1993) 6 C4th 1112 (*Laurel Heights II*) and 15088.5(a)(3), when information added to the Final EIR consists of a suggested new project alternative or mitigation measure, recirculation is only required if the new alternative or mitigation measure meets all of the following criteria:[5]

- It is feasible;
- It is considerably different from the alternatives or mitigation measures already evaluated in the Draft EIR;

[5] Stephen L. Kostka and Michael H. Zischke. *Practice Under the California Environmental Quality Act, Second Edition, March 2022 Update, Volume 2*. March 2022, pg. 16-21.

- It would clearly lessen the project's significant environmental impacts; and
- It is not adopted.

Recirculation is only required if *each* of the above tests is met.

In all cases where this Final EIR makes modifications to mitigation measures included in the DEIR, the updated mitigation measures are feasible and the applicant has agreed to implement the updated mitigation measures. No new mitigation measures are identified in this Final EIR, only revised mitigation measures that are not considerably different from the mitigation measure language already included in the DEIR. Thus, this criterion is not triggered by the minor modifications to mitigation measures and recirculation of the EIR is not required.

With respect to the portion of the comment pertaining to alternatives, several commenters suggested one or more additional alternatives for the County to consider. As discussed in this Final EIR, Section 6 of the DEIR considered project alternatives. As summarized in DEIR section 6.2, and provided in CEQA Guidelines section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis since they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the public and decisionmakers. This Final EIR demonstrates how the alternatives proposed by the commenters are either not considerably different from others previously analyzed in that they are not anticipated to eliminate any of the significant impacts of the project, and/or they are not feasible. Thus, this criterion is not triggered and recirculation of the EIR is not required.

4. <u>The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.</u>

According to Kostka and Zischke, this test for recirculation is based on the type of wholesale omission of information found in *Mountain Lion Coalition v. Fish & Game Comm'n*, in which the Draft EIR omitted any analysis of cumulative impacts, and a detailed analysis was first provided in the final EIR.[6] The record clearly demonstrates that no such wholesale omissions have occurred with the Idaho-Maryland Mine DEIR.

<u>Conclusion</u>

The above discussion (see also Section 1.4 of the Introduction Chapter) demonstrates that none of the 15088.5 criteria for recirculation are met.

[6] Stephen L. Kostka and Michael H. Zischke, *Practice Under the California Environmental Quality Act,* pg. 16-22.

Table 4.12-1
Project Traffic Hours Intersection LOS – Existing Conditions

Location - Jurisdiction	Control	6:30 – 7:30 AM		3:30 – 4:30 PM		6:30 – 7:30 PM		Meets Traffic Signal Warrant?
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Neal St/Tinloy St ‡	Signal	A	4.8	A	8.3	A	6.6	N/A
2. S. Auburn St/Tinloy St ‡	Signal	A	6.1	A	8.7	A	7.0	N/A
3. E. Bennett Rd/Tinloy St/SR 49 WB Off-Ramp ‡	SB/WB Stop	A	3.9	A	6.1	A	4.1	Yes*
4. E. Bennett Rd/Hansen Way/SR 49 EB On-Ramp ‡	AWS	A	9.2	B	14.8	B	10.1	No
5. Main St/Idaho Maryland Rd/SR 49 WB Ramps ‡	Roundabout	A	4.5	A	6.6	A	4.3	N/A
6. Idaho Maryland Rd/SR 49 EB Ramps ‡	AWS	B	~~13.5~~14.4	C	~~18.2~~19.3	A	~~9.5~~9.8	No
7. Idaho Maryland Rd/Railroad Ave ‡	AWS	B	~~10.7~~11.3	C	~~15.9~~17.1	A	~~8.5~~8.8	No
8. Main St/Brunswick Rd/W. Olympia Dr ‡	Signal	A	5.8	B	~~13.3~~14.2	A	~~8.7~~9.1	N/A
9. Brunswick Rd/SR 49 WB Off-Ramp/Maltman Dr ‡	Signal	B	~~16.6~~15.8	B	~~19.8~~20.2	B	~~16.7~~15.8	N/A
10. Brunswick Rd/SR 49 EB Ramps ‡	Signal	A	~~8.6~~8.7	B	~~13.2~~13.3	A	~~9.2~~8.8	N/A
11. Brunswick Rd/Sutton Way ‡	Signal	A	~~4.8~~4.7	C	~~21.3~~21.2	A	~~9.1~~9.2	N/A
12. Brunswick Rd/Idaho Maryland Rd ‡								
NB Left	EB/WB Stop	A	~~8.0~~8.1	A	9.0	A	8.0	Yes*
SB Left		A	7.8	A	8.8	A	7.8	
EB		B	~~10.3~~10.5	B	~~13.7~~13.9	B	10.6	
WB		C	~~17.1~~17.3	**F**	**70.7**	B	14.6	
13. Brunswick Rd/Whispering Pines Ln ‡								
NB Left	EB Stop	A	8.4	A	9.1	A	8.3	Yes*
EB		B	10.8	B	14.1	B	10.6	
14. Brunswick Rd/E. Bennett Rd/Greenhorn Rd †	AWS	B	10.6	C	17.4	B	10.5	Yes*
15. Brunswick Rd/SR 174 †								
SB	SB Stop	B	12.5	**E**	**35.1**	B	12.5	Yes*
EB Left		A	~~7.6~~7.7	A	7.8	A	7.4	
16. Brunswick Rd/Project Driveway †	EB Stop	Not Studied						
17. E. Bennett Rd/Millsite Rd †	NB Stop	Not Studied						

Table 4.12-1
Project Traffic Hours Intersection LOS – Existing Conditions

Location - Jurisdiction	Control	6:30 – 7:30 AM		3:30 – 4:30 PM		6:30 – 7:30 PM		Meets Traffic Signal Warrant?
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
18. Whispering Pines Ln/Centennial Site Driveway ‡	NB Stop	Not Studied						
19. Idaho Maryland Rd/Centennial Dr ‡ NB WB Left	NB Stop	B A	~~11.3~~10.8 ~~8.2~~8.1	**F** A	**59.1** 8.3	B A	10.1 7.6	No
20. Idaho Maryland Rd /Sutton Way ‡	AWS	A	~~8.1~~8.0	B	~~12.4~~12.5	A	8.0	No
21. Sutton Way/Dorsey Dr ‡	AWS	A	8.0	B	11.8	A	8.2	No
22. Dorsey Dr/SR 49 EB Ramps ‡	Signal	A	7.9	B	13.6	A	7.8	N/A
23. Dorsey Dr/SR 49 WB Ramps ‡	Signal	A	3.7	A	9.1	A	5.3	N/A
24. Brunswick Road/Loma Rica Dr †	Signal	B	~~11.8~~12.0	B	~~13.9~~14.3	A	~~8.0~~8.1	N/A

Notes:
- AWS = all way stop
- † = Nevada County jurisdiction
- ‡ = Grass Valley jurisdiction
- **Bold** indicates intersection operates below the applicable threshold of significance
- * = meets warrant in 3:30 PM hour

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-2
Project Traffic Hours Intersection LOS – EPAP Plus Project Conditions (Scenario #1)

Location – Jurisdiction	Control	6:30 – 7:30 AM				3:30 – 4:30 PM				6:30 – 7:30 PM				Meets Traffic Signal Warrant?
		EPAP		EPAP Plus Project		EPAP		EPAP Plus Project		EPAP		EPAP Plus Project		
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Neal St/Tinloy St ‡	Signal	A	4.8	A	5.1	A	8.4	A	8.2	A	7.0	A	7.1	N/A
2. S. Auburn St/Tinloy St ‡	Signal	A	6.3	A	6.1	A	8.7	A	8.7	A	6.9	A	7.0	N/A
3. E. Bennett Rd/Tinloy St/SR 49 WB Off-Ramp ‡	SB/WB Stop	A	3.8	A	3.8	A	6.4	A	6.3	A	4.2	A	4.0	Yes*
4. E. Bennett Rd/Hansen Way/SR 49 EB On-Ramp ‡	AWS	A	9.3	A	9.3	B	15.2	B	15.2	B	10.2	B	10.2	No
5. Main St/Idaho Maryland Rd/SR 49 WB Ramps ‡	Roundabout	A	4.7	A	4.8	A	6.8	A	7.0	A	4.4	A	4.6	N/A
6. Idaho Maryland Rd/SR 49 EB Ramps ‡	AWS	~~B~~C	~~14.9~~15.9	C	~~17.2~~18.9	C	~~22.6~~24.4	~~C~~D	~~23.7~~25.7	~~A~~B	~~9.9~~10.2	B	~~10.3~~10.6	Yes*
7. Idaho Maryland Rd/Railroad Ave ‡	AWS	B	~~11.0~~11.4	B	~~11.5~~12.1	C	~~16.5~~17.8	C	~~17.0~~18.4	A	~~8.7~~9.1	A	~~8.9~~9.3	No
8. Main St/Brunswick Rd/W. Olympia Dr ‡	Signal	A	~~6.1~~5.7	A	5.9	B	~~13.7~~13.6	B	13.4	A	~~9.0~~9.1	A	9.0	N/A
9. Brunswick Rd/SR 49 WB Off-Ramp/Maltman Dr ‡	Signal	B	~~15.9~~16.5	B	~~16.8~~16.7	B	~~19.8~~19.5	~~B~~C	~~19.8~~20.5	B	~~16.5~~16.3	B	~~16.9~~17.0	N/A
10. Brunswick Rd/SR 49 EB Ramps ‡	Signal	A	~~9.1~~8.7	A	~~8.7~~8.5	B	~~13.5~~13.4	B	~~13.6~~13.8	A	9.0	A	~~8.9~~9.3	N/A
11. Brunswick Rd/Sutton Way ‡	Signal	A	5.2	A	~~5.2~~5.0	C	21.5	C	~~22.0~~21.8	A	~~9.5~~9.6	A	~~9.2~~9.4	N/A
12. Brunswick Rd/Idaho Maryland Rd ‡														
NB Left		A	~~8.0~~8.2	A	~~8.2~~8.4	A	~~9.0~~9.1	A	~~9.1~~9.2	A	8.0	A	8.2	
SB Left	EB/WB Stop	A	7.8	A	7.9	A	8.8	A	8.9	A	7.9	A	7.9	Yes*
EB		B	~~10.4~~10.6	B	~~11.3~~11.5	B	~~14.1~~14.2	B	~~14.1~~14.2	B	~~10.7~~10.8	B	~~11.2~~11.3	
WB		C	~~17.9~~18.1	D	~~25.4~~25.8	**F**	**83.7**	**F**	**~~98.2~~102.5**	C	15.3	C	18.3	
13. Brunswick Rd/Whispering Pines Ln ‡														
NB Left	EB Stop	A	8.4	A	8.8	A	9.1	A	9.1	A	8.3	A	8.5	Yes*
EB		B	10.9	B	11.4	B	14.5	B	14.8	B	10.6	B	11.1	
14. Brunswick Rd/E. Bennett Rd/Greenhorn Rd †	AWS	B	~~10.7~~11.0	B	~~12.7~~13.3	C	~~18.5~~19.6	C	~~20.7~~22.0	B	~~10.8~~11.0	B	~~12.4~~12.8	Yes*
15. Brunswick Rd/SR 174 †														
SB	SB Stop	B	12.5	B	~~13.0~~13.1	**E**	**36.3**	**E**	**38.1**	B	12.6	B	13.0	Yes*
EB Left		A	~~7.6~~7.7	A	7.7	A	7.8	A	7.8	A	7.4	A	7.4	
16. Brunswick Rd/Project Driveway †														
NB Left	EB Stop	Not Studied		A	7.8	Not Studied		A	8.4	Not Studied		A	8.2	No
EB				B	11.5			B	12.5			B	11.7	
17. E. Bennett Rd/Millsite Rd †														
NB	NB Stop	Not Studied		A	8.5	Not Studied		A	8.7	Not Studied		A	8.6	No
18. Whispering Pines Ln/Centennial Industrial Site Driveway ‡														
NB	NB Stop	Not Studied		A	9.6	Not Studied		A	9.0	Not Studied		A	8.7	No
WB Left				A	7.8			A	7.5			A	7.4	
19. Idaho Maryland Rd/Centennial Dr ‡														
NB	NB Stop	B	11.3	B	12.2	**F**	**~~99.8~~100.9**	**F**	**112.3**	B	10.2	B	10.8	Yes*
WB Left		A	8.2	A	8.4	A	8.5	A	8.5	A	7.6	A	7.7	
20. Idaho Maryland Rd /Sutton Way ‡	AWS	A	8.1	A	8.5	B	~~13.9~~14.0	B	14.3	A	8.1	A	8.5	No
21. Sutton Way/Dorsey Dr ‡	AWS	A	8.1	A	8.2	C	15.6	C	15.7	A	9.2	A	9.3	No
22. Dorsey Dr/SR 49 EB Ramps ‡	Signal	A	9.3	A	9.3	B	13.7	B	14.0	A	8.2	A	8.3	N/A
23. Dorsey Dr/SR 49 WB Ramps ‡	Signal	A	6.2	A	6.2	B	14.9	B	15.9	A	7.4	A	7.4	N/A
24. Brunswick Rd/Loma Rica Dr †	Signal	B	~~11.8~~12.0	B	~~11.5~~11.7	B	~~14.2~~14.6	B	~~14.7~~15.2	A	~~8.3~~8.4	A	~~8.5~~8.6	N/A

- AWS = all way stop
- † = Nevada County jurisdiction
- ‡ = Grass Valley jurisdiction
- **Bold** indicates intersection operates below the applicable threshold of significance
- * = meets warrant in 3:30 PM hour

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-3
Project Traffic Hours Intersection LOS – EPAP Plus Project Conditions (Scenario #2)

Location - Jurisdiction	Control	6:30 – 7:30 AM				3:30 – 4:30 PM				6:30 – 7:30 PM				Meets Traffic Signal Warrant?
		EPAP		EPAP Plus Project		EPAP		EPAP Plus Project		EPAP		EPAP Plus Project		
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Neal St/Tinloy St ‡	Signal	A	4.8	A	5.0	A	8.4	A	8.6	A	7.0	A	6.8	N/A
2. S. Auburn St/Tinloy St ‡	Signal	A	6.3	A	6.2	A	8.7	A	8.6	A	6.9	A	7.0	N/A
3. E. Bennett Rd/Tinloy St/SR 49 WB Off-Ramp ‡	SB/WB Stop	A	3.8	A	3.8	A	6.4	A	6.4	A	4.2	A	4.1	Yes*
4. E. Bennett Rd/Hansen Way/SR 49 EB On-Ramp ‡	AWS	A	9.3	A	9.3	B	15.2	B	15.2	B	10.2	B	10.2	No
5. Main St/Idaho Maryland Rd/SR 49 WB Ramps ‡	Roundabout	A	4.7	A	4.8	A	6.8	A	7.0	A	4.4	A	4.6	N/A
6. Idaho Maryland Rd/SR 49 EB Ramps ‡	AWS	~~B~~C	~~14.9~~15.9	C	~~17.2~~18.9	C	~~22.6~~24.4	~~C~~D	~~23.7~~25.7	~~A~~B	~~9.9~~10.2	B	~~10.3~~10.6	Yes*
7. Idaho Maryland Rd/Railroad Ave ‡	AWS	B	~~11.0~~11.4	B	~~11.5~~12.1	C	~~16.5~~17.8	C	~~17.0~~18.4	A	~~8.7~~9.1	A	~~8.9~~9.3	No
8. Main St/Brunswick Rd/W. Olympia Dr ‡	Signal	A	~~6.1~~5.7	A	~~6.1~~6.0	B	~~13.7~~13.6	B	~~13.5~~14.3	A	~~9.0~~9.1	A	9.0	N/A
9. Brunswick Rd/SR 49 WB Off-Ramp/Maltman Dr ‡	Signal	B	~~15.9~~16.5	B	~~16.8~~16.4	B	~~19.8~~19.5	C	~~20.3~~20.2	B	~~16.5~~16.3	B	~~16.4~~17.1	N/A
10. Brunswick Rd/SR 49 EB Ramps ‡	Signal	A	~~9.1~~8.7	A	~~8.7~~8.8	B	~~13.5~~13.4	B	~~14.0~~14.3	A	9.0	A	~~8.8~~9.2	N/A
11. Brunswick Rd/Sutton Way ‡	Signal	A	5.2	A	~~5.3~~5.1	C	21.5	C	~~22.1~~22.5	A	~~9.5~~9.6	A	9.6	N/A
12. Brunswick Rd/Idaho Maryland Rd ‡														
NB Left		A	~~8.0~~8.2	A	~~8.2~~8.4	A	~~9.0~~9.1	A	9.2	A	8.0	A	8.2	
SB Left	EB/WB Stop	A	7.8	A	7.9	A	8.8	A	8.9	A	7.9	A	7.9	Yes*
EB		B	~~10.4~~10.6	B	~~11.5~~11.6	B	~~14.1~~14.2	B	~~14.3~~14.4	B	~~10.7~~10.8	B	~~11.3~~11.4	
WB		C	~~17.9~~18.1	D	~~26.7~~26.8	**F**	**83.7**	**F**	**107.3**	C	15.3	C	18.8	
13. Brunswick Rd/Whispering Pines Ln ‡														
NB Left	EB Stop	A	8.4	A	8.8	A	9.1	A	~~9.1~~9.2	A	8.3	A	8.5	Yes*
EB		B	10.9	B	11.5	B	14.5	~~B~~C	~~14.9~~15.0	B	10.6	B	11.2	
14. Brunswick Rd/E. Bennett Rd/Greenhorn Rd †	AWS	B	~~10.7~~11.0	B	~~12.7~~13.0	C	~~18.5~~19.6	C	~~20.7~~22.0	B	~~10.8~~11.0	B	~~12.4~~12.8	Yes*
15. Brunswick Rd/SR 174 †														
SB	SB Stop	B	12.5	B	13.0	**E**	**36.3**	**E**	**38.1**	B	12.6	B	13.0	Yes*
EB Left		A	~~7.6~~7.7	A	7.7	A	7.8	A	7.8	A	7.4	A	7.4	
16. Brunswick Rd/Project Driveway †														
NB Left	EB Stop	Not Studied		A	7.8	Not Studied		A	8.4	Not Studied		A	8.2	No
EB				B	11.5			B	12.5			B	11.7	
17. E. Bennett Rd/Millsite Rd †														
NB	NB Stop	Not Studied		A	8.5	Not Studied		A	8.7	Not Studied		A	8.6	No
18. Whispering Pines Ln/Centennial Industrial Site Driveway ‡	NB Stop	Not Studied		Not Applicable		Not Studied		Not Applicable		Not Studied		Not Applicable		
19. Idaho Maryland Rd/Centennial Dr ‡														
NB	NB Stop	B	11.3	B	12.2	**F**	**~~99.8~~100.9**	**F**	**112.3**	B	10.2	B	10.8	Yes*
WB Left		A	8.2	A	8.4	A	8.5	A	8.5	A	7.6	A	7.7	
20. Idaho Maryland Rd /Sutton Way ‡	AWS	A	~~8.1~~8.2	A	8.5	B	~~13.9~~14.0	B	14.3	A	8.1	A	8.5	No
21. Sutton Way/Dorsey Dr ‡	AWS	A	8.1	A	8.2	C	15.6	C	15.7	A	9.2	A	9.3	No
22. Dorsey Dr/SR 49 EB Ramps ‡	Signal	A	9.3	A	9.0	B	13.7	B	13.7	A	8.2	A	8.4	N/A
23. Dorsey Dr/SR 49 WB Ramps ‡	Signal	A	6.2	A	6.1	B	14.9	B	15.6	A	7.4	A	7.3	N/A
24. Brunswick Rd/Loma Rica Dr †	Signal	B	~~11.8~~12.0	B	~~11.5~~11.7	B	~~14.2~~14.6	B	~~14.7~~15.2	A	~~8.3~~8.4	A	~~8.5~~8.6	N/A

Notes:
- AWS = all way stop
- † = Nevada County jurisdiction
- ‡ = Grass Valley jurisdiction
- **Bold** indicates intersection operates below the applicable threshold of significance
- * = meets warrant in 3:30 PM hour

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-4
EPAP Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
1. Neal St / Tinloy St							
EB	70	67	69	105	103	99	99
WB	150	86	86	139	126	95	92
2. S. Auburn St / Tinloy St							
NB through	80	78	73	115	117	78	73
NB through-left	80	55	53	76	78	53	52
SB	75	78	76	109	109	101	101
WB	95	84	85	99	99	79	75
3. E. Bennett Rd / Tinloy St – SR 49 WB Off-Ramp							
NB left turn	60	27	28	41	42	31	28
NB through	150	46	45	54	56	47	47
4. E. Bennett Rd / Hansen Way – SR 49 EB On-Ramp							
SB left turn	60	<25	<25	38	38	<25	<25
SB through	150	<25	<25	95	95	35	35
5. E. Main St / Idaho Maryland Rd - SR 49 WB Ramps							
NB	---	<25	<25	26	26	<25	<25
SB	---	<25	<25	49	51	<25	<25
EB	---	30	32	63	60	28	29
WB	---	<25	<25	53	53	26	27
6. Idaho Maryland Rd / SR 49 EB Ramps							
NB right	---	~~120~~133	~~163~~183	~~55~~63	~~55~~63	<25	<25
NB left	355	33	~~38~~33	63	63	<25	<25
WB	90	~~30~~33	~~35~~40	~~203~~220	~~220~~240	~~33~~35	~~40~~43
7. Idaho Maryland Rd / Railroad Ave							
EB	90	~~75~~80	~~88~~95	~~80~~98	~~83~~100	<25	<25
8. E. Main St / Brunswick Rd – W. Olympia Dr							
NB left	110	<25	<25	<25	<25	<25	<25
NB right	125	~~43~~44	~~42~~46	~~119~~122	~~114~~116	~~60~~58	~~55~~60

Table 4.12-4
EPAP Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
SB left (2 lanes)	355	~~60~~65	~~66~~71	~~179~~175	~~173~~181	~~99~~105	~~100~~109
WB left (2 lanes)	150	~~45~~40	~~41~~44	~~9~~92	~~88~~87	~~61~~62	~~63~~64
WB right	150	~~54~~49	~~57~~50		~~148~~159	~~71~~77	~~72~~82
9. Brunswick Rd / SR 49 WB Off-Ramp – Maltman Dr							
NB left	100	<25	<25	~~75~~63	~~77~~78	~~57~~55	~~54~~51
NB right	100	~~32~~30	28	~~135~~123	~~131~~134	~~85~~76	82
SB left (2 lanes)	260	~~117~~126	~~125~~135	~~191~~197	~~197~~208	~~136~~138	~~135~~149
SB right	260	47	~~50~~48	~~86~~84	~~79~~84	~~52~~55	~~55~~58
EB	160	~~47~~59	63	~~210~~201	207	~~123~~133	~~135~~137
WB left	145	62	~~62~~64	~~107~~106	~~103~~104	~~89~~90	~~96~~94
10. Brunswick Rd / SR 49 EB Ramps							
NB left	200	~~165~~153	~~159~~152	~~225~~224	221	~~177~~182	~~177~~196
NB right	---	~~93~~113	~~98~~110	~~245~~243	~~250~~252	~~91~~85	~~96~~95
11. Brunswick Rd / Sutton Way							
NB left (2 lanes)	280	~~56~~53	~~53~~58	~~241~~253	~~247~~259	~~110~~119	~~112~~114
SB left	190	~~43~~42	~~41~~39	~~102~~104	110	~~55~~58	~~57~~56
SB right	180	---	---	---	<25	---	---
EB left (2 lanes)	185	~~59~~55	~~55~~58	~~124~~133	~~122~~124	~~67~~69	~~64~~66
EB right	250	~~45~~48	~~47~~50	~~150~~157	~~155~~159	~~87~~84	~~82~~89
WB left	125	44	~~44~~40	~~144~~142	~~137~~135	~~69~~72	~~64~~70
12. Brunswick Rd / Idaho Maryland Rd							
NB left	540	<25	<25	<25	<25	<25	<25
SB left	120	<25	<25	<25	<25	<25	<25
EB right	---	<25	25	40	40	<25	<25
WB left	60	25	40	68	73	<25	<25
13. Brunswick Rd / Whispering Pines Ln							
NB left	210	<25	<25	<25	<25	<25	<25
EB left	110	<25	<25	<25	<25	<25	<25

Table 4.12-4
EPAP Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
14. Brunswick Rd / E. Bennett Rd – Greenhorn Rd							
NB left	225	<25	<25	<25	<25	<25	<25
SB left	260	<25	<25	<25	<25	<25	<25
EB	---	<25	<25	<25	<25	<25	<25
WB	---	<25	<25	<25	<25	<25	<25
15. Brunswick Rd / SR 174							
SB left	90	25	30	205	215	43	48
EB left	130	<25	<25	<25	<25	<25	<25
16. Brunswick Rd / Project Driveway							
NB left	350	---	<25	---	<25	---	<25
EB	---	---	<25	---	<25	---	<25
17. E. Bennett Rd / Millsite Rd							
NB right	---	---	<25	---	<25	---	<25
18. Whispering Pines Ln / Project Driveway							
NB	---	--	<25	---	<25	---	<25
WB left	100	---	<25	---	<25	---	<25
19. Idaho Maryland Rd / Centennial Dr							
NB	---	<25	<25	315	335	<25	<25
WB left	130	<25	<25	<25	<25	<25	<25
20. Idaho Maryland Rd /Sutton Way							
SB right	90	<25	<25	45	45	<25	<25
SB left	---	<25	<25	<25	<25	<25	<25
ÈB	---	<25	25	98	100	<25	<25
WB	---	<25	<25	63	70	<25	<25
21. Sutton Way / Dorsey Dr							
SB right	120	<25	<25	38	38	<25	<25
SB thru	---	<25	<25	43	45	<25	<25
NB	---	<25	<25	98	98	<25	<25

Table 4.12-4
EPAP Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
EB	---	<25	<25	110	110	40	40
22. Dorsey Dr / SR 49 EB Ramps							
NB Left (2 lanes)	215	112	113	104	108	56	60
NB right	215	41	43	98	96	48	51
EB left	180	60	60	155	150	56	66
23. Dorsey Dr / SR 49 EB Ramps							
SB right	400	50	50	58	60	48	48
SB left-thru	400	53	52	154	165	67	68
EB right	155	36	40	199	205	41	44
WB left	180	81	81	184	183	84	82
24. Brunswick Rd / Loma Rica Dr							
NB right	410	~~31~~32	~~31~~30	26	26	<25	<25
SB left	400	~~133~~137	~~146~~150	135	135	~~64~~65	~~68~~69
WB left	100	~~32~~33	~~35~~36	~~160~~163	~~160~~163	~~35~~36	38

Notes:

- Highlighted values indicate queue length in excess of available storage.
- Queuing distances based on stochastic modeling.
- * indicates longest lane for multiple turn lane approaches.

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-5

EPAP Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
1. Neal St / Tinloy St							
EB	70	67	66	105	103	99	94
WB	150	86	87	139	138	95	89
2. S. Auburn St / Tinloy St							
NB through	80	78	71	115	109	78	76
NB through-left	80	55	52	76	67	53	52
SB	75	78	71	109	104	101	100
WB	95	84	82	99	103	79	75
3. E. Bennett Rd / Tinloy St – SR 49 WB Off-Ramp							
NB left turn	60	27	27	41	43	31	32
NB through	150	46	45	54	56	47	45
4. E. Bennett Rd / Hansen Way – SR 49 EB On-Ramp							
SB left turn	60	<25	<25	38	38	<25	<25
SB through	150	<25	<25	95	95	35	35
5. E. Main St / Idaho Maryland Rd - SR 49 WB Ramps							
NB	---	<25	<25	26	26	<25	<25
SB	---	<25	<25	49	51	<25	<25
EB	---	30	32	63	60	28	29
WB	---	<25	<25	53	53	26	27
6. Idaho Maryland Rd / SR 49 EB Ramps							
NB right	---	~~120~~133	~~163~~183	~~55~~63	~~55~~63	<25	<25
NB left	355	33	33	63	63	<25	<25
WB	90	~~30~~33	~~35~~40	~~203~~220	~~220~~240	~~33~~35	~~40~~43
7. Idaho Maryland Rd / Railroad Ave							
EB	90	~~75~~80	~~88~~95	~~80~~98	~~83~~100	<25	<25
8. E. Main St / Brunswick Rd – W. Olympia Dr							
NB left	110	<25	<25	<25	<25	<25	<25

Table 4.12-5

EPAP Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
NB right	125	~~43~~44	~~39~~43	~~119~~122	~~126~~132	~~60~~58	~~59~~63
SB left (2 lanes)	355	~~60~~65	~~64~~72	~~179~~175	~~177~~193	~~99~~105	~~99~~104
WB left (2 lanes)	150	~~45~~40	~~36~~46	~~90~~92	88	~~61~~62	~~60~~64
WB right	150	~~54~~49	~~56~~58	~~153~~155	~~149~~163	~~71~~77	~~74~~82
9. Brunswick Rd / SR 49 WB Off-Ramp – Maltman Dr							
NB left	100	<25	~~<25~~26	~~75~~63	~~75~~73	~~57~~55	52
NB right	100	~~32~~30	~~28~~30	~~135~~123	~~129~~131	~~85~~76	~~83~~81
SB left (2 lanes)	260	~~117~~126	~~127~~136	~~191~~197	~~199~~194	~~136~~138	~~143~~149
SB right	260	47	~~50~~53	~~86~~84	~~76~~97	~~52~~55	~~54~~52
EB	160	~~47~~59	~~56~~58	~~210~~201	~~204~~203	~~123~~133	~~128~~129
WB left	145	62	~~63~~57	~~107~~106	~~104~~108	~~89~~90	~~85~~90
10. Brunswick Rd / SR 49 EB Ramps							
NB left	200	~~165~~153	~~160~~165	~~225~~224	~~226~~231	~~177~~182	~~172~~182
NB right	---	~~93~~113	~~100~~113	~~245~~243	~~259~~257	~~91~~85	~~99~~97
11. Brunswick Rd / Sutton Way							
NB left (2 lanes)	280	~~56~~53	~~52~~57	~~241~~253	~~251~~268	~~110~~119	111
SB left	190	~~43~~42	~~41~~40	~~102~~104	~~105~~99	~~55~~58	~~56~~57
SB right	180	---	---	---	<25	---	---
EB left (2 lanes)	185	~~59~~55	~~60~~58	~~124~~133	~~128~~124	~~67~~69	~~63~~64
EB right	250	~~45~~48	46	~~150~~157	~~161~~154	~~87~~84	~~86~~80
WB left	125	44	~~45~~46	142	~~147~~152	~~69~~72	~~67~~70
12. Brunswick Rd / Idaho Maryland Rd							
NB left	540	<25	<25	<25	<25	<25	<25
SB left	120	<25	<25	<25	<25	<25	<25
EB right	---	<25	25	40	40	<25	<25
WB left	60	25	43	68	75	<25	<25
13. Brunswick Rd / Whispering Pines Ln							

Table 4.12-5

EPAP Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
NB left	210	<25	<25	<25	<25	<25	<25
EB left	110	<25	<25	<25	<25	<25	<25
14. Brunswick Rd / E. Bennett Rd – Greenhorn Rd							
NB left	225	<25	<25	<25	<25	<25	<25
SB left	260	<25	<25	<25	<25	<25	<25
EB	---	<25	<25	<25	<25	<25	<25
WB	---	<25	<25	<25	<25	<25	<25
15. Brunswick Rd / SR 174							
SB left	90	25	30	205	215	43	48
EB left	130	<25	<25	<25	<25	<25	<25
16. Brunswick Rd / Project Driveway							
NB left	350	---	<25	---	<25	---	<25
EB	---	---	<25	---	<25	---	<25
17. E. Bennett Rd / Millsite Rd							
NB right	---	---	<25	---	<25	---	<25
18. Whispering Pines Ln / Project Driveway **– Not Applicable**							
19. Idaho Maryland Rd / Centennial Dr							
NB	---	<25	<25	315	335	<25	<25
WB left	130	<25	<25	<25	<25	<25	<25
20. Idaho Maryland Rd /Sutton Way							
SB right	90	<25	<25	45	45	<25	<25
SB left	---	<25	<25	<25	<25	<25	<25
ÈB	---	<25	25	98	100	<25	<25
WB	---	<25	<25	63	70	<25	<25
21. Sutton Way / Dorsey Dr							
SB right	120	<25	<25	38	38	<25	<25

Table 4.12-5

EPAP Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
SB thru	---	<25	<25	43	45	<25	<25
NB	---	<25	<25	98	98	<25	<25
EB	---	<25	<25	110	110	40	40
22. Dorsey Dr / SR 49 EB Ramps							
NB Left (2 lanes)	215	112	107	104	113	56	59
NB right	215	41	41	98	99	48	54
EB left	180	60	62	155	157	56	65
23. Dorsey Dr / SR 49 EB Ramps							
SB right	400	50	50	58	57	48	49
SB left-thru	400	53	57	154	151	67	69
EB right	155	36	39	199	196	41	41
WB left	180	81	77	184	179	84	84
24. Brunswick Rd / Loma Rica Dr							
NB right	410	~~31~~32	~~31~~30	26	26	<25	<25
SB left	400	~~133~~137	~~146~~150	135	135	~~64~~65	69~~68~~
WB left	100	~~32~~33	~~35~~36	~~160~~163	~~160~~163	~~35~~36	38

Notes:

- Highlighted values indicate queue length in excess of available storage.
- Queuing distances based on stochastic modeling.
- * indicates longest lane for multiple turn lane approaches.

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-6
Project Traffic Hours Intersection LOS – Cumulative Plus Project Conditions (Scenario #1)

Location - Jurisdiction	Control	6:30 – 7:30 AM				3:30 – 4:30 PM				6:30 – 7:30 PM				Meets Traffic Signal Warrant?
		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Neal St/Tinloy St ‡	Signal	A	6.7	A	6.9	A	9.0	A	9.0	B	11.7	B	12.2	N/A
2. S. Auburn St/Tinloy St ‡	Signal	A	7.2	A	7.1	A	9.9	A	9.5	A	9.0	A	9.1	N/A
3. E. Bennett Rd/Tinloy St/SR 49 WB Off-Ramp ‡	SB/WB Stop	A	4.1	A	4.1	A	8.0	A	7.6	A	4.4	A	4.5	Yes*
4. E. Bennett Rd/Hansen Way/SR 49 EB On-Ramp ‡	AWS	A	9.6	A	9.6	C	18.3	C	18.3	B	10.7	B	10.8	Yes*
5. Main St/Idaho Maryland Rd/SR 49 WB Ramps ‡	Roundabout	A	5.1	A	5.3	A	8.3	A	8.4	A	4.9	A	5.1	N/A
6. Idaho Maryland Rd/SR 49 EB Ramps ‡	AWS	B	~~12.7~~13.5	B	13.3	~~B~~C	~~19.4~~22.7	B	19.6	B	~~11.9~~12.1	B	12.0	N/A
7. Idaho Maryland Rd/Railroad Ave ‡	AWS	B	~~11.5~~11.9	B	11.7	~~B~~C	~~19.3~~24.0	B	19.4	B	~~12.2~~12.8	B	12.4	N/A
8. Main St/Brunswick Rd/W. Olympia Dr ‡	Signal	A	~~6.1~~6.3	A	6.2	B	~~14.0~~14.6	B	14.2	A	~~9.8~~9.9	A	9.7	N/A
9. Brunswick Rd/SR 49 WB Off-Ramp/Maltman Dr ‡	Signal	B	~~17.1~~17.6	B	18.1	B	~~16.9~~17.2	B	17.2	B	~~16.1~~16.3	B	16.4	N/A
10. Brunswick Rd/SR 49 EB Ramps ‡	Signal	A	~~8.3~~8.2	A	8.4	B	14.9	B	14.8	A	~~8.9~~8.6	A	8.7	N/A
11. Brunswick Rd/Sutton Way ‡	Signal	A	~~5.3~~5.5	A	5.2	C	~~28.2~~28.9	C	30.2	B	~~10.7~~10.3	B	10.5	N/A
12. Brunswick Rd/Idaho Maryland Rd ‡ NB Left SB Left EB WB	EB/WB Stop	B	~~17.3~~17.8	B	18.5	C	~~31.6~~32.8	C	32.5	B	~~18.1~~18.2	B	18.7	N/A
13. Brunswick Rd/Whispering Pines Ln ‡ NB Left EB	EB Stop	A B	8.4 11.0	A B	8.7 11.4	A C	9.4 19.3	A C	9.4 19.9	A B	~~8.3~~8.4 11.0	A B	8.5 11.3	Yes*
14. Brunswick Rd/E. Bennett Rd/Greenhorn Rd †	AWS	B	~~11.0~~11.3	B	13.0	~~C~~D	~~23.7~~25.6	D	27.2	B	~~10.9~~11.2	B	12.6	Yes*
15. Brunswick Rd/SR 174 † SB EB Left	SB Stop	A B	~~7.7~~7.8 ~~12.8~~12.9	A B	7.8 13.4	A **E**	7.8 **46.2**	A **E**	7.8 **48.9**	A C	~~8.2~~7.4 ~~17.5~~12.7	A B	7.4 13.1	Yes*
16. Brunswick Rd/Project Driveway † NB Left EB	EB Stop	Not Studied		A B	7.8 11.4	Not Studied		A B	8.5 12.9	Not Studied		A B	8.1 12.2	Yes*
17. E. Bennett Rd/Millsite Rd † NB	NB Stop	Not Studied		A	8.6	Not Studied		A	8.7	Not Studied		A	8.6	No
18. Whispering Pines Ln/Centennial Industrial Site Driveway ‡ NB WB Left	NB Stop	Not Studied		A A	9.7 7.8	Not Studied		A A	9.1 7.5	Not Studied		A A	8.7 7.4	No
19. Idaho Maryland Rd/Centennial Dr ‡ NB WB Left	NB Stop	A	~~6.7~~6.8	A	6.6	B	11.5	B	11.5	A	7.5	A	7.4	N/A
20. Idaho Maryland Rd /Sutton Way ‡	AWS	A	~~8.0~~8.1	A	8.4	B	14.2	B	14.5	A	7.9	A	8.1	Yes*
21. Sutton Way/Dorsey Dr ‡	AWS	A	9.0	A	9.1	**F**	**213.1**	**F**	**214.3**	B	10.4	B	10.5	Yes*
22. Dorsey Dr/SR 49 EB Ramps ‡	Signal	A	8.9	A	8.6	B	14.8	B	15.0	A	8.7	A	8.9	N/A
23. Dorsey Dr/SR 49 WB Ramps ‡	Signal	A	5.6	A	5.5	B	17.6	B	16.9	A	8.2	A	8.4	N/A
24. Brunswick Rd/Loma Rica Dr †	Signal	B	~~11.9~~12.1	B	11.6	B	~~14.8~~15.3	B	15.5	A	~~8.1~~8.2	A	8.2	N/A

- AWS = all way stop
- † = Nevada County jurisdiction
- ‡ = Grass Valley jurisdiction
- **Bold** indicates intersection operates below the applicable threshold of significance
- * = meets warrant in 3:30 PM hour

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-7
Project Traffic Hours Intersection LOS – Cumulative Plus Project Conditions (Scenario #2)

Location - Jurisdiction	Control	6:30 – 7:30 AM				3:30 – 4:30 PM				6:30 – 7:30 PM				Meets Traffic Signal Warrant?
		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Neal St/Tinloy St ‡	Signal	A	6.7	A	7.2	A	9.0	A	9.7	B	11.7	B	12.4	N/A
2. S. Auburn St/Tinloy St ‡	Signal	A	7.2	A	7.2	A	9.9	B	10.0	A	9.0	A	9.0	N/A
3. E. Bennett Rd/Tinloy St/SR 49 WB Off-Ramp ‡	SB/WB Stop	A	4.1	A	4.0	A	8.0	A	7.6	A	4.4	A	4.5	Yes*
4. E. Bennett Rd/Hansen Way/SR 49 EB On-Ramp ‡	AWS	A	9.6	A	9.6	C	18.3	C	18.3	B	10.7	B	10.8	Yes*
5. Main St/Idaho Maryland Rd/SR 49 WB Ramps ‡	Roundabout	A	5.1	A	5.3	A	8.3	A	8.4	A	4.9	A	5.0	N/A
6. Idaho Maryland Rd/SR 49 EB Ramps ‡	AWS	B	~~12.7~~13.5	B	~~13.3~~14.3	~~B~~C	~~19.4~~22.7	~~B~~C	~~19.6~~23.1	B	~~11.9~~12.1	B	~~12.0~~12.3	N/A
7. Idaho Maryland Rd/Railroad Ave ‡	AWS	B	~~11.5~~11.9	B	~~11.7~~12.1	~~B~~C	~~19.3~~24.0	~~B~~C	~~19.4~~24.3	B	~~12.2~~12.8	B	~~12.4~~13.0	N/A
8. Main St/Brunswick Rd/W. Olympia Dr ‡	Signal	A	~~6.1~~6.3	A	~~6.5~~6.2	B	~~14.0~~14.6	B	~~14.3~~14.1	A	~~9.8~~9.9	B	~~10.2~~10.0	N/A
9. Brunswick Rd/SR 49 WB Off-Ramp/Maltman Dr ‡	Signal	B	~~17.1~~17.6	B	~~17.7~~17.9	B	~~16.9~~17.2	B	~~17.8~~17.1	B	~~16.1~~16.3	B	~~16.4~~16.0	N/A
10. Brunswick Rd/SR 49 EB Ramps ‡	Signal	A	~~8.3~~8.2	A	~~8.2~~7.8	B	14.9	B	~~14.9~~15.0	A	~~8.9~~8.6	A	~~8.7~~8.9	N/A
11. Brunswick Rd/Sutton Way ‡	Signal	A	~~5.3~~5.5	A	~~5.3~~5.1	C	~~28.2~~28.9	C	~~30.0~~29.9	B	~~10.7~~10.3	B	~~10.7~~10.6	N/A
12. Brunswick Rd/Idaho Maryland Rd ‡ NB Left SB Left EB WB	EB/WB Stop	B	~~17.3~~17.8	B	~~18.5~~19.2	C	~~31.6~~32.8	C	~~33.0~~34.3	B	~~18.1~~18.2	B	~~18.8~~19.0	N/A
13. Brunswick Rd/Whispering Pines Ln ‡ NB Left EB	EB Stop	A B	~~8.4~~8.5 11.0	A B	8.7 11.6	A C	9.4 19.3	A C	~~9.4~~9.5 20.0	A B	~~8.3~~8.4 11.0	A B	8.5 ~~11.3~~11.4	Yes*
14. Brunswick Rd/E. Bennett Rd/Greenhorn Rd †	AWS	B	~~11.0~~11.3	B	13.0	~~C~~D	~~23.7~~25.6	D	~~27.2~~29.4	B	~~10.9~~11.2	B	~~12.6~~13.0	Yes*
15. Brunswick Rd/SR 174 † SB EB Left	SB Stop	A B	~~7.7~~7.8 ~~12.8~~12.9	A B	7.8 ~~13.4~~13.0	A **E**	7.8 **46.2**	A **E**	7.8 **48.9**	A C	~~8.2~~7.4 ~~17.5~~12.7	A B	7.4 13.1	Yes*
16. Brunswick Rd/Project Driveway † NB Left EB	EB Stop	Not Studied		A B	7.8 11.4	Not Studied		A B	8.5 12.9	Not Studied		A B	8.1 12.2	Yes*
17. E. Bennett Rd/Millsite Rd † NB	NB Stop	Not Studied		A	8.6	Not Studied		A	8.7	Not Studied		A	8.6	No
18. Whispering Pines Ln/Centennial Industrial Site Driveway ‡	NB Stop	Not Studied		Not Applicable		Not Studied		Not Applicable		Not Studied		Not Applicable		
19. Idaho Maryland Rd/Centennial Dr ‡ NB WB Left	NB Stop	A	~~6.7~~6.8	A	~~6.6~~6.7	B	~~11.5~~11.8	B	~~11.5~~11.8	A	7.5	A	~~7.4~~7.5	N/A
20. Idaho Maryland Rd /Sutton Way ‡	AWS	A	~~8.0~~8.1	A	~~8.4~~8.5	B	14.2	B	14.5	A	7.9	A	8.1	Yes*
21. Sutton Way/Dorsey Dr ‡	AWS	A	9.0	A	9.1	**F**	**213.1**	**F**	**214.3**	B	10.4	B	10.5	Yes*
22. Dorsey Dr/SR 49 EB Ramps ‡	Signal	A	8.9	A	8.7	B	14.8	B	15.3	A	8.7	A	9.3	N/A
23. Dorsey Dr/SR 49 WB Ramps ‡	Signal	A	5.6	A	5.8	B	17.6	B	17.6	A	8.2	A	8.5	N/A
24. Brunswick Rd/Loma Rica Dr †	Signal	B	~~11.9~~12.1	B	~~11.6~~11.8	B	~~14.8~~15.3	B	~~15.5~~16.0	A	~~8.1~~8.2	A	~~8.2~~8.4	N/A

Notes:
- AWS = all way stop
- † = Nevada County jurisdiction
- ‡ = Grass Valley jurisdiction
- **Bold** indicates intersection operates below the applicable threshold of significance
- * = meets warrant in 3:30 PM hour

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-8

Cumulative Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
1. Neal St / Tinloy St							
EB	70	84	80	116	115	119	120
WB	150	115	103	106	109	131	140
2. S. Auburn St / Tinloy St							
NB through	80	73	75	137	136	98	102
NB through-left	80	44	45	63	66	44	44
SB	75	86	84	139	134	123	133
WB	95	68	70	113	113	103	101
3. E. Bennett Rd / Tinloy St – SR 49 WB Off-Ramp							
NB left turn	60	28	28	41	40	33	34
NB through	150	46	44	66	64	46	49
4. E. Bennett Rd / Hansen Way – SR 49 EB On-Ramp							
SB left turn	60	<25	<25	40	40	<25	<25
SB through	150	<25	<25	145	145	45	45
5. E. Main St / Idaho Maryland Rd - SR 49 WB Ramps							
NB	---	<25	<25	32	32	<25	<25
SB	---	<25	<25	70	72	25	25
EB	---	39	41	86	88	34	36
WB	---	<25	<25	66	68	32	33
6. Idaho Maryland Rd / SR 49 EB Ramps							
NB right	---	~~39~~40	~~51~~53	~~48~~50	~~48~~50	<25	<25
NB left	355	~~81~~86	~~87~~92	~~151~~152	~~151~~152	~~5~~520	~~52~~53
WB	90	~~61~~65	~~68~~74	~~260~~276	~~266~~300	74~~72~~	~~78~~81
7. Idaho Maryland Rd / Railroad Ave							
EB	90	~~123~~134	~~136~~150	~~166~~181	~~166~~181	51~~47~~	57~~53~~
8. E. Main St / Brunswick Rd – W. Olympia Dr							
NB left	110	<25	<25	<25	<25	<25	<25
NB right	125	~~42~~44	~~43~~46	~~130~~133	~~139~~135	~~59~~65	~~62~~61

Table 4.12-8

Cumulative Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
SB left (2 lanes)	355	~~68~~67	~~67~~65	~~175~~180	~~176~~175	~~106~~102	~~109~~106
WB left (2 lanes)	150	~~43~~44	44	~~97~~104	~~102~~98	67~~75~~	~~71~~69
WB right	150	~~47~~52	~~51~~56	149	~~159~~152	79~~69~~	~~74~~82
9. Brunswick Rd / SR 49 WB Off-Ramp – Maltman Dr							
NB left	100	<25	~~28~~29	~~68~~76	~~66~~71	53~~54~~	~~53~~52
NB right	100	~~30~~32	~~30~~29	~~131~~122	~~117~~118	91~~84~~	~~85~~76
SB left (2 lanes)	260	~~134~~144	~~142~~148	~~148~~150	~~151~~149	144~~140~~	~~133~~139
SB right	260	~~45~~49	~~46~~44	84	86	52~~54~~	~~56~~51
EB	160	~~61~~60	65	~~202~~199	~~203~~201	~~128~~133	~~141~~139
WB left	145	~~61~~66	~~61~~58	~~106~~108	~~106~~105	92~~90~~	~~93~~95
10. Brunswick Rd / SR 49 EB Ramps							
NB left	200	~~141~~147	~~152~~151	~~215~~223	~~218~~224	~~180~~173	~~177~~179
NB right	---	~~106~~115	~~102~~117	~~262~~261	~~258~~254	95~~110~~	~~97~~103
11. Brunswick Rd / Sutton Way							
NB left (2 lanes)	280	~~58~~60	~~55~~61	~~435~~467	~~545~~511	~~141~~146	~~136~~150
SB left	190	~~38~~37	37	~~115~~113	~~110~~101	51~~52~~	57
SB right	180	---	---	---	<25	---	---
EB left (2 lanes)	185	~~61~~57	~~53~~58	~~127~~147	~~138~~137	70~~66~~	~~63~~69
EB right	250	~~52~~53	~~50~~51	~~224~~215	~~220~~222	~~98~~104	~~96~~114
WB left	125	~~48~~49	~~49~~47	~~177~~170	~~179~~182	74~~84~~	~~79~~77
12. Brunswick Rd / Idaho Maryland Rd							
NB left	540	~~90~~92	~~108~~112	~~151~~152	~~166~~170	56	~~76~~77
SB left	120	<25	<25	188	188	~~103~~104	~~106~~108
EB left	150	34	25	74	74	39	~~39~~40
WB left	175	~~100~~104	~~99~~101	68	68	43	~~43~~44
13. Brunswick Rd / Whispering Pines Ln							
NB left	210	<25	<25	<25	<25	<25	<25
EB left	110	<25	<25	58	60	<25	<25

Table 4.12-8

Cumulative Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
14. Brunswick Rd / E. Bennett Rd – Greenhorn Rd							
NB left	225	<25	<25	<25	<25	<25	<25
SB left	260	<25	<25	<25	<25	<25	<25
EB	---	<25	<25	<25	<25	<25	<25
WB	---	<25	<25	<25	<25	<25	<25
15. Brunswick Rd / SR 174							
SB left	90	25	28	248	260	45	48
EB left	130	<25	<25	<25	<25	<25	<25
16. Brunswick Rd / Project Driveway							
NB left	350	---	<25	---	<25	---	<25
EB	---	---	<25	---	<25	---	<25
17. E. Bennett Rd / Millsite Rd							
NB right	---	---	<25	---	<25	---	<25
18. Whispering Pines Ln / Project Driveway							
NB	---	---	<25	---	<25	---	<25
WB left	100	---	<25	---	<25	---	<25
19. Idaho Maryland Rd / Centennial Dr							
NB	---	~~28~~29	29	~~285~~302	~~285~~302	29	30
WB left	130	<25	<25	<25	<25	<25	<25
20. Idaho Maryland Rd /Sutton Way							
SB right	90	<25	<25	48	48	<25	<25
SB left	---	<25	<25	35	35	<25	<25
ÈB	---	<25	<25	105	105	<25	<25
WB	---	<25	<25	55	60	<25	<25
21. Sutton Way / Dorsey Dr							
SB right	120	<25	<25	28	28	<25	<25
SB thru	---	<25	<25	190	190	<25	<25
NB	---	30	30	1333	1340	58	60

Table 4.12-8

Cumulative Plus Project Queues (Scenario #1)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
EB	---	25	25	188	188	<25	25
22. Dorsey Dr / SR 49 EB Ramps							
NB Left (2 lanes)	215	98	103	125	120	58	54
NB right	215	59	57	97	100	62	59
EB left	180	63	60	180	177	65	67
23. Dorsey Dr / SR 49 EB Ramps							
SB right	400	53	52	63	64	49	49
SB left-thru	400	43	42	165	162	64	67
EB right	155	41	44	218	217	40	42
WB left	180	73	74	253	250	108	111
24. Brunswick Rd / Loma Rica Dr							
NB right	410	32	~~32~~31	27	27	<25	<25
SB left	400	~~134~~137	~~146~~151	~~147~~148	~~147~~148	~~69~~70	~~74~~75
WB left	100	~~35~~36	38	178	178	~~3~~37	~~38~~39

Notes:

- Highlighted values indicate queue length in excess of available storage.
- Highlighted values indicate queue length in excess of available storage with more than 25-foot increase from No Project condition.
- Queuing distances based on stochastic modeling.
- * indicates longest lane for multiple turn lane approaches.

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Table 4.12-9

Cumulative Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
1. Neal St / Tinloy St							
EB	70	84	86	116	117	119	118
WB	150	115	116	106	110	131	144
2. S. Auburn St / Tinloy St							
NB through	80	73	76	137	144	98	97
NB through-left	80	44	46	63	69	44	45
SB	75	86	84	139	137	123	129
WB	95	68	69	113	117	103	93
3. E. Bennett Rd / Tinloy St – SR 49 WB Off-Ramp							
NB left turn	60	28	26	41	40	33	34
NB through	150	46	47	66	64	46	48
4. E. Bennett Rd / Hansen Way – SR 49 EB On-Ramp							
SB left turn	60	<25	<25	40	40	<25	<25
SB through	150	<25	<25	145	145	45	45
5. E. Main St / Idaho Maryland Rd - SR 49 WB Ramps							
NB	---	<25	<25	32	32	<25	<25
SB	---	<25	<25	70	71	25	25
EB	---	39	41	86	88	34	34
WB	---	<25	<25	66	67	32	32
6. Idaho Maryland Rd / SR 49 EB Ramps							
NB right	---	~~39~~40	~~51~~53	~~48~~50	~~48~~50	<25	<25
NB left	355	~~81~~86	~~87~~92	~~151~~152	~~151~~152	~~50~~52	~~52~~53
WB	90	~~61~~65	~~68~~74	~~260~~276	~~266~~300	~~72~~74	~~78~~81
7. Idaho Maryland Rd / Railroad Ave							
EB	90	~~123~~134	~~136~~150	~~166~~181	~~166~~181	~~47~~51	~~53~~57
8. E. Main St / Brunswick Rd – W. Olympia Dr							
NB left	110	<25	<25	<25	<25	<25	<25

Table 4.12-9

Cumulative Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
NB right	125	~~42~~44	~~43~~45	~~130~~133	~~134~~136	~~59~~65	~~70~~68
SB left (2 lanes)	355	~~68~~67	~~66~~73	~~175~~180	~~177~~173	~~106~~102	~~117~~116
WB left (2 lanes)	150	~~43~~44	~~47~~46	~~97~~104	~~106~~100	~~75~~67	~~73~~71
WB right	150	~~47~~52	~~55~~58	~~149~~149	~~155~~168	~~69~~79	~~73~~81
9. Brunswick Rd / SR 49 WB Off-Ramp – Maltman Dr							
NB left	100	<25	<25	~~68~~76	~~69~~70	~~54~~53	~~51~~52
NB right	100	~~30~~32	~~30~~28	~~131~~122	~~128~~121	~~84~~91	~~83~~78
SB left (2 lanes)	260	~~134~~144	~~144~~151	~~148~~150	~~149~~158	~~140~~144	~~140~~147
SB right	260	~~45~~49	~~50~~46	84	~~86~~82	~~54~~52	52
EB	160	~~61~~60	~~62~~68	~~202~~199	~~205~~204	~~128~~133	~~139~~147
WB left	145	~~61~~60	~~65~~60	~~106~~108	~~107~~108	~~90~~92	~~89~~94
10. Brunswick Rd / SR 49 EB Ramps							
NB left	200	~~141~~147	~~153~~137	~~215~~223	~~225~~230	~~180~~173	179
NB right	---	~~106~~115	~~94~~103	~~262~~261	~~259~~263	~~110~~95	~~96~~98
11. Brunswick Rd / Sutton Way							
NB left (2 lanes)	280	~~58~~60	~~56~~55	~~435~~467	~~490~~507	~~141~~146	~~139~~140
SB left	190	~~38~~37	39	~~115~~113	~~113~~116	~~52~~51	54
SB right	180	---	---	---	---	---	---
EB left (2 lanes)	185	~~61~~57	~~60~~57	~~127~~147	134	~~66~~70	62
EB right	250	~~52~~53	50	~~224~~215	~~208~~224	~~98~~104	95
WB left	125	~~48~~49	~~47~~50	~~177~~170	~~181~~180	~~84~~74	79
12. Brunswick Rd / Idaho Maryland Rd							
NB left	540	~~90~~92	~~108~~113	~~151~~152	~~166~~170	56	77
SB left	120	<25	<25	188	188	~~103~~104	~~107~~109
EB left	150	34	<25	74	74	39	~~39~~40
WB left	175	~~100~~104	~~99~~102	68	68	43	44

Table 4.12-9

Cumulative Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
13. Brunswick Rd / Whispering Pines Ln							
NB left	210	<25	<25	<25	<25	<25	<25
EB left	110	<25	<25	58	60	<25	<25
14. Brunswick Rd / E. Bennett Rd – Greenhorn Rd							
NB left	225	<25	<25	<25	<25	<25	<25
SB left	260	<25	<25	<25	<25	<25	<25
EB	---	<25	<25	<25	<25	<25	<25
WB	---	<25	<25	<25	<25	<25	<25
15. Brunswick Rd / SR 174							
SB left	90	25	28	248	260	45	48
EB left	130	<25	<25	<25	<25	<25	<25
16. Brunswick Rd / Project Driveway							
NB left	350	---	<25	---	<25	---	<25
EB	---	---	<25	---	<25	---	<25
17. E. Bennett Rd / Millsite Rd							
NB right	---	---	<25	---	<25	---	<25
18. Whispering Pines Ln / Project Driveway – Not Applicable							
19. Idaho Maryland Rd / Centennial Dr							
NB	---	~~28~~29	29	~~285~~302	~~285~~302	29	30
WB left	130	<25	<25	<25	<25	<25	<25
20. Idaho Maryland Rd /Sutton Way							
SB right	90	<25	<25	48	48	<25	<25
SB left	---	<25	<25	35	35	<25	<25
ÈB	---	<25	<25	105	105	<25	<25
WB	---	<25	<25	55	60	<25	<25
21. Sutton Way / Dorsey Dr							

Table 4.12-9

Cumulative Plus Project Queues (Scenario #2)

Location	Length*	No Project EPAP 6:30 – 7:30 AM Queue (feet)	Plus Project EPAP 6:30 – 7:30 AM Queue (feet)	No Project EPAP 3:30 – 4:30 PM Queue (feet)	Plus Project EPAP 3:30 – 4:30 PM Queue (feet)	No Project EPAP 6:30 – 7:30 PM Queue (feet)	Plus Project EPAP 6:30 – 7:30 PM Queue (feet)
SB right	120	<25	<25	28	28	<25	<25
SB thru	---	<25	<25	190	190	<25	<25
NB	---	30	30	1333	1340	58	60
EB	---	25	25	188	188	<25	25
22. Dorsey Dr / SR 49 EB Ramps							
NB Left (2 lanes)	215	98	101	125	128	58	52
NB right	215	59	60	97	101	62	63
EB left	180	63	63	180	174	65	75
23. Dorsey Dr / SR 49 EB Ramps							
SB right	400	53	52	63	59	49	49
SB left-thru	400	43	38	165	161	64	69
EB right	155	41	42	218	220	40	49
WB left	180	73	76	253	249	108	114
24. Brunswick Rd / Loma Rica Dr							
NB right	410	32	~~32~~31	27	27	<25	<25
SB left	400	~~134~~137	~~146~~151	~~147~~148	148~~1~~	~~69~~70	~~74~~75
WB left	100	~~35~~36	38	178	178	~~36~~37	~~38~~39

Notes:

- Highlighted values indicate queue length in excess of available storage.
- Highlighted values indicate queue length in excess of available storage with more than 25-foot increase from No Project condition.
- Queuing distances based on stochastic modeling.
- * indicates longest lane for multiple turn lane approaches.

Source: KDAnderson & Associates, Inc., 2022~~1~~.

Agency Letter 9

Nevada County Historical Landmarks Commission
P.0. Box 1014
Nevada City, California 95959
info@nevadacountylandmarks.com
530-274-7118

21 January 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, Cal., 95959

Via email: Idaho.MMEIR@co.nevada.ca.us

Dear Mr. Kelley,

At this morning's meeting, the Nevada County Historical Landmarks Commission approved these comments on the Draft Environmental Impact Report (Draft) for the Idaho-Maryland Mine Project.

Agcy 9-1

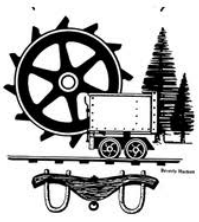
We express no views on the many environmental, health and safety issues presented by this ambitious project. With respect to the historical preservation issues, we note the following:

Agcy 9-2

1. Evaluation of the proposed project must start with the fact that in 1984, the Board of Supervisors declared the Idaho-Maryland Mine Site a Historical Landmark--NEV 33. This project should be evaluated in that context and not whether the Mine Site is on the national or state historical registers.

Agcy 9-3

2. The Draft assumes that the County's designation was limited to the area the Draft calls the Centennial Site, which is reportedly outside the project area, and concludes that therefore the Board's determination that it is a historical landmark "need not be addressed." That is at best incorrect; at worst disingenuous. The designation was for the entire Idaho-Maryland Mine, "one of the 'Big Three';" not merely the portion of the mine around the Centennial and Whispering Pine Roads, where its headquarters building is located. The Newsome drill, specifically mentioned in the designation, was extensively used outside the Centennial Site, The fact that the Mine Site is a historical landmark must be addressed.



Agcy 9-4 3. The Commission does not have engineering expertise to enable it to judge whether the work the developer is proposing will adversely impact the historical features of the Mine. We expect the County to do that.

Agcy 9-5 4. We had earlier noted a concern that the Round Hill shaft be preserved. It does not appear that that will happen.

Agcy 9-6 5. We remain of the view that sharing records will not mitigate any harm the project might cause.

Agcy 9-7 Finally, the Draft acknowledges the significant impact that Errol MacBoyle had on Nevada County. If this project is permitted to proceed, we suggest that the developer be required to erect a suitable monument commemorating Mr. MacBoyle. Currently, there is none such in the County.

Agcy 9-8 We look forward to reviewing a draft Environmental Impact Report which properly and adequately considers the historical features of the landmark that is the Idaho-Maryland Mine Site.

Yours truly,

Bernard Zimmerman

Bernard Zimmerman, Chair

cc. Landmarks Commissioners
Gage McKinney

AGENCY LETTER 9: BERNARD ZIMMERMAN, NEVADA COUNTY HISTORICAL LANDMARKS COMMISSION

Response to Comment Agcy 9-1

The commenter states that the Nevada County Historical Landmarks Commission (Commission) approved the following comments at its January 21, 2022 meeting and expresses no views on the environmental or health and safety impacts of the project. Comment noted. This is an introductory comment and does not provide a comment on any environmental issue associated with the project.

Response to Comment Agcy 9-2

The commenter states that "evaluation of the project must start with the fact that in 1984, the Board of Supervisors declared the Idaho-Maryland Mine [IMM] Site a Historical Landmark." The County's environmental review is required to comply with the requirements of the California Environmental Quality Act (CEQA). As it pertains to cultural resources, CEQA Appendix G outlines four criteria the environmental document should evaluate. Two of the four pertain to significant changes to a historical or archaeological resource as defined by Public Resources Code section 15064.5. DEIR Chapter 4.5 includes analysis of identified historic and archaeological resources consistent with CEQA Appendix G, which was supported by a site-specific cultural resources survey prepared by a qualified archeologist meeting the Secretary of the Interior's Professional Qualification Standards. (DEIR, Appx. G.) The DEIR found that any substantial adverse changes to historical or archaeological resources would be less than significant after mitigation. (DEIR, pp. 4.5-22, 30.)

Response to Comment Agcy 9-3

The commenter states that the DEIR inaccurately assumes County's designation of the IMM as a Nevada County Historical Landmark (NEV-33) falls outside the Area of Potential Effects. It is unclear what records the commenter is referencing to make an assertion that NEV-33 included the entire IMM. The Project Applicant's cultural resources expert and the County conducted coordination with Bernard Zimmerman, chair of the Nevada County Historical Landmarks Commission. As outlined in the DEIR, significant outreach and research was undertaken to assess the NEV-33 landmark. (DEIR, p. 4.5-19–21.) Based on this research, the County concluded NEV-33 is outside the project boundary. If, as asserted by the commenter, NEV-33 includes the entire IMM, then this feature was analyzed in the cultural resources technical study and DEIR. Impact 4.5-1 looked at the remaining aboveground and underground components of IMM and concluded the remaining above-ground facilities did not meet NRHP or CRHR criteria. The underground components of Idaho Maryland Mine, despite being inaccessible, could be a contributing element to the Idaho Maryland historic district and a potentially significant impact could occur. Mitigation Measure 4.5-1(a) was provided that reduces this impact to a less than significant level. (DEIR, p. 4.5-22.)

Response to Comment Agcy 9-4

The commenter states it does not have engineering expertise to determine whether the project will impact the historical features of the IMM. Comment noted. Please see Responses to Comments Agcy 9-2 and Agcy 9-3.

Response to Comment Agcy 9-5

The commenter states it is concerned that the Round Hill shaft will not be preserved. The Round Hill shaft will not be used as part of the project and is not within the limits of proposed surface disturbance.

Response to Comment Agcy 9-6

The commenter states that it believes sharing records will not mitigate any harm the project might cause. Comment noted. Please see Master Response 1.

Response to Comment Agcy 9-7

The commenter suggests that should the project be approved, the Project Applicant should be required to erect a monument in dedication of Errol McBoyle. Comment noted. Please see Master Response 1.

Response to Comment Agcy 9-8

The commenter states that it looks forward to reviewing a DEIR that adequately considers the historical features of the IMM. This is a conclusory comment and does not provide a comment on an environmental issue associated with the project. Please see the above responses.

Agency Letter 10

Nevada Irrigation District

Water for Life

VIA EMAIL: Idaho.MMEIR@co.nevada.ca.us

March 25, 2022

Mr. Matt Kelly, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902

Re: Nevada Irrigation District Comments for the Idaho Maryland Mine Project Draft Environmental Impact Report

Dear Mr. Kelly:

Nevada Irrigation District (NID) is in receipt of the Draft Environmental Impact Report (DEIR) for the Idaho Maryland Mine Project. This letter conveys recommendations and concerns regarding the project that are germane to NID's statutory responsibilities. The comments are categorized by type.

East Bennet Road Potable Waterline

Agcy 10-1

The DEIR proposes the installation of a NID potable water line along East Bennett Road to provide an alternate source of water should existing ground water wells be depleted from mine dewatering. The DEIR depicts the pipeline as being contained with the existing right-of-way along East Bennet Road; however, NID will require the pipeline to interconnect with NID's existing water distribution system in the Whispering Pines Lane area. The connection to existing NID infrastructure will necessitate the crossing of multiple parcels that do not contain an existing roadway/right-of- way. Additionally, connection to NID will occur near Clydesdale Court, which will require a short section of alignment within the right-of-way along Whispering Pines Lane. The Draft EIR does not contemplate this cross-country extension nor the short run up Whispering Pines Lane. NID expects the complete alignment of the East Bennett potable water line including the interconnection

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on Whispering Pines Lane be included in the final EIR and be identified in the conditions of approval for the project. In addition, all easements necessary for construction and ongoing maintenance of the new pipeline shall be acquired by the Applicant and conveyed to NID prior to acceptance of the new potable line. All costs for the above must be borne by the Applicant.

Agcy 10-2

The DEIR makes multiple references to the construction of the East Bennet potable water line being constructed to County guidelines. However, NID is the responsible agency for potable water infrastructure; therefore, all construction involving, or connecting to NID infrastructure must be constructed to NID standards. This correction as it relates to potable water infrastructure is necessary throughout the document.

East Bennet Road NID Potable Water Connection Mitigations

Agcy 10-3

The DEIR requires connection of 30 properties along East Bennett Road (4.8-29(c)) that are currently supplied water via wells. Properties that connect to NID's potable water line and keep their existing wells will require a Double Check Valve (DCV) to prevent any potential backflow into NID's system. DCV installation will increase initial installation costs and require a monthly fee on the consumptive water bill. NID considers the additional installation and ongoing DCV costs as a necessary part of mitigation and should be paid for by the Applicant for the duration of dewatering and mine operations.

Agcy 10-4

The Applicant proposed to cover the connection and consumptive costs of NID potable water usage for parcels along East Bennet Road. The mitigation includes paying for all connection costs as well as covering the consumptive rate for up to 400 gallons per day. 400 GPD does not match the amount of water proposed within the Final Idaho Maryland Mine Water Supply Assessment provided to NID. The Water Supply Assessment estimates the average consumption of the 31 parcels to be .4 gallons per minute per dwelling. This equates to a total daily usage of 576 gallons per day and should be the amount of consumptive use the Applicant will pay as a mitigation for any connection along the East Bennett corridor. During the WSA hearing, NID's Board of Directors expressed serious concerns that the number of impacted wells could far exceed the 30 estimated by the DEIR. NID proposes the Applicant conduct a more extensive and robust well and ground water monitoring effort prior to and during any dewatering.

Agcy 10-5

Should the number of private wells impacted exceed the 30 that the Applicant estimates, NID believes the Applicant should guarantee and include in its proposed mitigation potable water for each well that is impacted.

Agcy 10-6

The DEIR includes a mitigation measure to pay for consumptive water use for parcels along East Bennet Road that connect to NID until the property is sold by the owner, or until the property is annexed into the City of Grass Valley. NID believes the Applicant

should cover cost of consumptive use for each impacted well in the volume stated above (regardless of ownership or annexation) for as long as the project is operating and for a period of 24 months after project is complete or abandoned. This includes initial mine dewatering as well as continued mine operations

Agcy 10-7 In order to establish a baseline of the number and quality of wells outside of the East Bennett area, NID suggests the Applicant undertake advance sampling of both water quality and production for the wells located in the Woodrose, Greenhorn and Beaver Lane areas.

Agcy 10-8 The estimates within the GHG emissions modeling (page 351) assumes 26 residences would be switched from well water to NID potable water. Other portions of the DEIR require connection of 30 parcels to NID's potable water system. This discrepancy should be corrected, and the total amount of water use should match the WSA document of .4 gallons per minute per dwelling unit.

Area of Ground Water Depletion

During the WSA hearing, NID's Board of Directors expressed serious concerns that the number of impacted wells could far exceed the 30 estimated by the DEIR. NID proposes the Applicant conduct a more extensive and robust well and ground water monitoring effort prior to, and during any dewatering. Should the number of private wells impacted exceed the 30 estimated by the Applicant, NID believes the Applicant should guarantee and include in its proposed mitigation potable water for each well that is impacted.

Agcy 10-9 The DEIR includes modeling analysis of anticipated effects to ground water levels after initial mine dewatering and long-term ground water levels related to general operations over the term of the project. The document specifies that the Applicant will implement a rigorous Ground Water Monitoring Plan (GWMP) to assess how the hydrogeologic system responds to mining. The GWMP is proposed to establish multiple monitoring wells to provide data analysis of groundwater throughout the project area. NID requests the monitoring wells be placed near locations with the greatest concentration of existing ground water wells, specifically the Greenhorn, Woodrose, and Beaver Lane areas. The strategic placement of monitoring wells will provide an early warning of any adverse effects of dewatering. The monitoring wells should mirror the average depth of the residential wells in the area and be in sufficient number and locations to provide for accurate data. Early awareness will allow the Applicant to halt dewatering and develop alternative water supply options for affected areas.

Agcy 10-10 One of the potential outcomes of dewatering the mine includes the negative effect to local ground water well production beyond the wells that have already been identified to be impacted in the DEIR. As referenced in the DEIR, the Applicant will be required, at their

cost, to provide an alternate water supply for any well impacted. However, there is no financing mechanism to ensure any additional wells that are impacted beyond the 30 wells identified are able to connect to potable water. NID, as the sole surface water provider in the area, is concerned that the level of infrastructure necessary to extend water to affected wells beyond Bennet Road area would come at a substantial cost. NID estimates extending infrastructure and connecting customers in the Greenhorn, Woodrose, and Beaver area is estimated to be $14 Million. These costs include both pipeline costs and connection fees. Additionally, construction of this magnitude will require a substantial amount of time to complete. NID requests that a mitigation measure and condition of approval require the Applicant to put forth bonds or other form of financial security to cover the costs of such infrastructure for a period of 5 years beyond the completion of initial dewatering of the mine. This will help ensure the communities surrounding mine operations will have some assurance of funding to complete an alternate water supply should it become necessary.

Wolf Creek Discharge

The DEIR proposes to dewater the underground workings of the Idaho Maryland Mine, via pumping, treatment, and discharge operations to the South Fork of Wolf Creek. NID is an authorized diverter of imported and natural flows in Wolf Creek. The location of NID's diversion will allow for the recapture of the treated ground water discharge from the Mine. To properly manage flows, promote water efficiency, and protect habitat in Wolf Creek, NID will need access to real-time discharge flows into Wolf Creek. NID recommends a publicly accessible web page that provides real time data along with flow trending over a one-week period. Additionally, any planned outage in the treatment process that would interrupt flows into Wolf Creek should be communicated to NID one week in advance. This information will allow NID to adjust imports into Wolf Creek to meet the needs of end users and maximize beneficial use.

Agcy 10-11

As stated above, NID diverts a mixture of natural and imported flows from Wolf Creek to provide irrigation water to 715 customers. While NID does not have jurisdiction over water quality flowing into Wolf Creek, NID, along with Nevada County Environmental Health, need to be notified in the event of a spill or other contaminating event. Early notification allows NID to respond in a manner that will allow isolation of flows to protect our customer base, many of which utilize this water in home for incidental uses.

Preservation of Historic Storm Water Flow Volume in Wolf Creek

Agcy 10-12

NID exercises the discharge of water from our canal systems during emergency, or storm related events. Many of these natural channels join or cross through the Brunswick site. The ability to continue utilizing these channels to spill water into Wolf Creek shall be preserved and maintained at the levels of historic use. NID has discharge records up to

11 CFS into the head waters of the South Fork of Wolf Creek on the Southeast end of the Brunswick Site. The second spill channel intersects the Brunswick property near Bennet Road on the Northwest edge of the Brunswick site. Flows into Wolf Creek at this location have been recorded up to 35 CFS. NID requests that a mitigation measure be included to ensure the volume of Mine discharge water to Wolf Creek will not limit storm flow capacity during storm events.

Potable Water Connection to Mine

Agcy 10-13

Lastly, NID's Rules and Regulations require a reduced pressure backflow prevention device on all commercial or industrial connections to our treated water systems. This will require a retrofit of any existing connections prior operations at both the Brunswick and or Centennial sites. Installation of backflow prevention devices will protect the community drinking water system from an over pressuring event within the mines water system. These devices, and the costs of installing them will need to be paid for by the Applicant.

Again, thank you for providing a copy of the Notice of Preparation for the Idaho Maryland Mine. The District looks forward to working collaboratively with the County and Rise Grass Valley. If you have any questions or would like additional information, please contact me at (530)-271-6882.

Respectfully Submitted,

Armon "Chip" Close
Water Operations Manager

cc: Chris Bierwagen, NID Board President, Division II
Karen Hull, NID Board Vice President, Division III
Ricki Heck, NID Director, Division I
Laura Peters, NID Director, Division IV
Rich Johansen, NID Director, Division V
Jennifer Hanson, NID General Manager
File

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AGENCY LETTER 10: ARMON CLOSE, NEVADA IRRIGATION DISTRICT

Response to Comment Agcy 10-1

The Nevada Irrigation District (NID) commented that the proposed potable water line would need to interconnect with the existing NID water line in the Whispering Pines Lane area, requiring additional rights-of-way and easements for installation of infrastructure on parcels where easements/rights-of-way do not presently exist. NID asserts that the DEIR did not contemplate the required interconnections or easements; however, the DEIR does contemplate the need for these interconnections and easements/rights-of-way as discussed below.

The proposed water pipeline design interconnects with NID's existing water distribution system on Whispering Pines Road, as shown in Figures 3-2, 3-9, and 3-15 of the DEIR and described on page 3-36 of the DEIR.

Further, the applicant has submitted an easement agreement with the Use Permit application to allow the construction of the pipeline from E. Bennett Road to the Centennial site and grant easements to NID pursuant to NID standards.

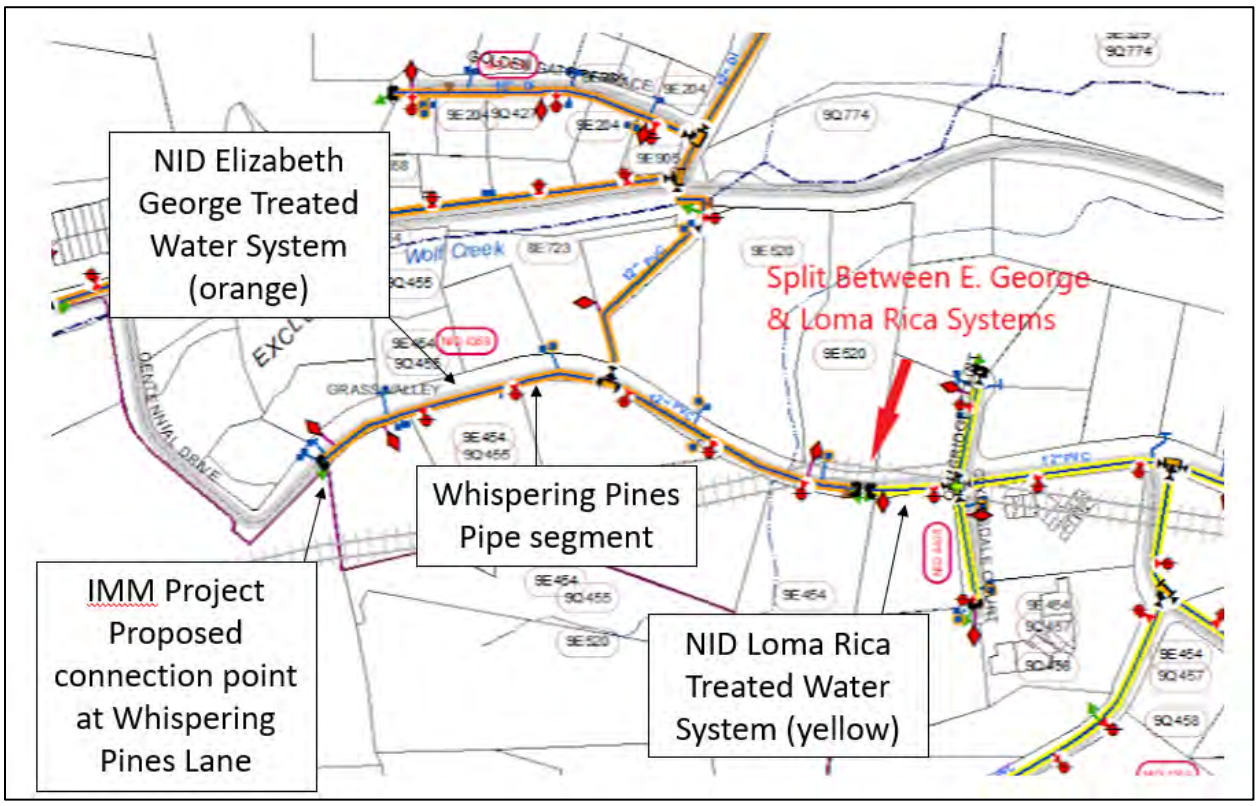
https://www.nevadacountyca.gov/DocumentCenter/View/33587/Rise-Willman-NID-Easement-Agreement---ADDED-392020

The applicant has submitted detailed drawings with the Use Permit application showing the pipeline route and property boundaries.

https://www.nevadacountyca.gov/DocumentCenter/View/33572/Pipeline-Easements-1---ADDED-392020

Additionally, the commenter specifically states that the DEIR does not contemplate the interconnection with NID system on Whispering Pines Lane near Clydesdale Court, which will require a short section of alignment within the right-of-way along Whispering Pines Lane. The commenter suggests that the connection will require the crossing of multiple parcels that do not contain an existing roadway/right-of-way; however, this is not correct. As shown in the figure below (based on map of NID pipeline system provided to applicant by NID) the Elizabeth George Treated Water System and Loma Rica Treated Water Systems have pipelines that are directly adjacent within the roadway and could be connected without obtaining any new right-of-way or easements and without new significant disturbance. This more feasible connection method would transfer customers on Whispering Pines Lane from the Elizabeth George system to the Loma Rica system in order to complete a closed circuit with the proposed water line extension for the project along E. Bennett Road.

Given that there are options to provide the connection discussed by NID without crossing the parcels as suggested, it would be speculative to assume crossing of other parcels is required. Further, while there are multiple technical methods that could be used to connect the water systems such as pressure balancing systems, the specific details regarding interconnection and balancing of pressures and allocation of water from different NID water treatment plant circuits is an engineering level detail and engineering level detail is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.)



Mitigation Measure 4.8-2(c) of the DEIR is hereby revised to clarify these necessary interconnections and that all easements necessary for construction and ongoing maintenance of the new pipeline shall be acquired by the applicant and conveyed to NID prior to acceptance of the new potable line, and the applicant will bear the associated costs.

4.8-2(c) *Prior to commencement of initial mine dewatering, the Project Applicant shall implement the Well Mitigation Plan (February 2, 2021, Rise Grass Valley, Inc.) by connecting 30 properties in the East Bennett area to the NID potable water system (see Figure 1 and Table 1 of the Well Mitigation Plan for specific property locations). The Project Applicant shall be responsible for fully funding the following for each property connection:*

1) *Engineering and Permitting <u>to NID and County standards</u>.*
2) *Construction of main water piping, <u>interconnecting the existing NID pipelines at E. Bennet Road and Whispering Pines Lane in accordance with NID standards and NID approved engineering design.</u>*
3) *Construction of service lateral piping <u>in accordance with NID standards and NID approved engineering design.</u>*
4) *Installation of water meters at property line <u>in accordance with NID standards and NID approved engineering design.</u>*
5) *Connection of water meters to house (If requested and authorized by property owner)*

6) *Closure of domestic water wells (If requested and authorized by property owner)*

7) *NID installation and capacity charges for a 5/8-inch meter connection.*

8) *Reimbursement for water charges, for monthly fixed service charges and use of up to 400 gallons per day, will continue until the sooner of the following occurs: 1) The property is sold by the owner after the NID connection is accomplished and paid for by Rise. 2) The property is annexed into the City of Grass Valley.*

9) *Of the 30 properties, it is anticipated that only APN 009-600-012 is not eligible for water cost reimbursement as it is currently vacant. Existing NID customers will not be eligible for reimbursement of NID water charges and will be confirmed through consultation with NID during the design process.*

10) *All easements necessary for construction and ongoing maintenance of the new pipeline shall be acquired by the applicant and conveyed to NID prior to acceptance of the new potable line.*

Proof of satisfaction of this measure shall be provided to Nevada County Environmental Health Department for each property identified in the Well Mitigation Plan.

The above changes to Mitigation Measure 4.8-2(c) of the DEIR are for clarification purposes, in response to NID's comments, and do not alter the analysis, nor the conclusions of the DEIR.

Response to Comment Agcy 10-2

The commenter states that the DEIR incorrectly requires the potable water pipeline to be constructed to County standards although NID has jurisdiction over the construction standards for the pipeline. However, page 3-36 of the DEIR discusses compliance with County guidelines for the purpose of standards applicable to disposing of asphalt and road paving, not the pipeline itself. Mitigation Measure 4.8-2(c) requires the connection to the NID potable water system, which would require engineering approval from NID and construction to the appropriate NID standards. As shown on the above response, the FEIR includes language clarifying that the potable water pipeline will be constructed to NID standards.

Response to Comment Agcy 10-3

The Well Mitigation Plan has been revised to include the installation of Double Check Valves. Please see Appendix D to this Final EIR for a revised Well Mitigation Plan. As described in the Well Mitigation Plan (Appendix K.9 of the DEIR), the applicant will close property owners' wells, using certified well drillers operating under Nevada County regulations, if well closure is requested by the landowner at the time of NID connection and service to their properties. If a property owner decides to retain and continue using their water well, the cost of the well's operation, including Double Check Valve monthly fees, would be the owner's responsible and not the applicant.

Response to Comment Agcy 10-4

The single-family home unit demand factor of 0.36 acre-feet per year per connection is used by NID for projecting demands. (Page 18 of the NID 2020 Urban Water Management Plan). This is equivalent to 321 gallons per day. The well mitigation plan proposes compensation of up to 400 gallons per day or approximately 25% more than NID's estimate of demand for a single-family

home. The water supply assessment uses a higher water consumption figure as a conservative measure to ensure adequate water supply; but this is not the appropriate figure to use for the Well Mitigation Plan.

Response to Comment Agcy 10-5

The commenter states that the applicant should be required to conduct an extensive and robust well and groundwater monitoring effort prior to and during dewatering and should guarantee potable water for any well impacted beyond the 30 wells that are proposed to be connected to NID water supply. A rigorous Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(b) requires that if, based on the GMP, it is determined that mining operations are resulting in a significant impact to any wells (including wells beyond the 30 wells included in the expected impact area), the Project Applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted.

Please also see Master Response 15 – Adequacy of Groundwater Monitoring Wells, for an updated description of the proposed monitoring approach, which now also includes a proposal by the applicant to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Agcy 10-6

The commenter states that the applicant should pay for water for any parcel connected to NID water supply for the life of the mine, even after the parcel is sold or annexed into the City of Grass Valley. The Well Mitigation Plan (Appendix K.9 of the DEIR) takes a conservative approach and presumes that an owner who decides to connect to the NID system has been impacted by and at the fault of the mining operation, even if no impact to groundwater well supply has occurred. As such, the Well Mitigation Plan was designed to be even more conservative than Nevada County General Plan Policy 17.12, which requires an impact as a prerequisite to the obligation to pay for water, which policy states “If it is determined that the operator is at fault, impacted owners shall be compensated by the operator.” A new homeowner would not be impacted because the impact would have previously occurred, and the cost of purchasing water from NID for that new homeowner would be the same as buying any other home connected to NID’s water supply. The provision of free water as a selling feature to a new buyer is not contemplated by the policy. If a property was annexed into the City of Grass Valley, it would be subject to the ordinances of the City which allows water wells to be used for irrigation purposes only (Grass Valley General Ordinance Section 13.16.020) and would therefore require a property owner to connect to the potable water supply and pay for their water use. As annexation of a home into the City would already require connection to NID water supply and purchase of NID water, continuation of payment for water by the applicant after annexation would be a windfall to the property owner rather than mitigation of an impact, and is not required by CEQA or County policy.

Response to Comment Agcy 10-7

The commenter states that the applicant should conduct advance sampling of water quality and production for the wells located in the Woodrose, Greenhorn and Beaver Lane areas to establish a baseline. A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As discussed on page 4.8-66 of the DEIR, the GMP will select locations of the

monitoring wells in order to provide spatial coverage throughout the project and adjacent areas and include collection of water quality data. As discussed on pages 2-3 of the GMP (Appendix K.8 of the EIR), assessment of impacts of water-level changes in domestic wells is difficult to perform when examining each domestic well on an individual basis because of operational and depth considerations for each well. As noted in Master Response 15, the applicant has also provided a Domestic Well Monitoring Plan to monitor domestic water wells, including water level and quality, within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Agcy 10-8

The commenter notes that the greenhouse gas emissions modelling for the project assumed that only 26 residences would be switched to NID water, while the Well Mitigation Plan requires up to 30 residences be connected to NID water. This discrepancy is due to the fact that four of the 30 properties along E. Bennett Road within the potential well impact area are already serviced by NID, as shown in Table 1 of the Well Mitigation Plan (Appendix K.9 of the DEIR). As four of the 30 parcels are already connected to NID water, no greenhouse gas emissions would be caused by the project for those four parcels. Indoor/outdoor water use for the homes along the potable water line and electricity intensity factors are based on California Emission Estimator Model (CalEEMod) defaults, as stated in the footnote on page 349 of Appendix E.1 of the EIR. An assumption of 26 dwellings for a total water demand of 2.76 million gallons (MG) of water per year results in average total water use of 291 gallons per day per dwelling. This is similar to the single-family home unit demand factor of 0.36 acre-feet per year (321 gallons per day) per connection used by NID for projecting demands. (Page 18 of the NID 2020 Urban Water Management Plan). The modelled GHG emissions for water supply to residences along E. Bennett Road are only 1.2 metric tons CO_2e per year. A change in assumptions as suggested by the commenter is not warranted because the four parcels are already connected to NID water supply, and further the change would result in only a trivial increase in GHG emissions not relevant to the impact analysis.

Response to Comment Agcy 10-9

The commenter states that the applicant should supply water to any wells that are impacted due to mine dewatering beyond the 30 parcels proposed for connection to NID water, and should also place monitoring wells near the Greenhorn, Woodrose and Beaver Lane areas. Further, the commenter requested that the monitoring well depth mirror the existing wells in the area. As discussed below, the applicant is required to replace water for any parcel that has significant impact to groundwater supply due to mine dewatering, and further, five monitoring well sites are planned in the vicinity of the Greenhorn, Woodrose, and Beaver Lane areas with shallow/deep well depths to capture water level fluctuations at all relevant depths.

A rigorous Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). The mitigation measure requires water-level monitoring data for a minimum of 12 months before commencement of dewatering of the mine. As described in Section 7.0 of the GMP (Appendix K.8 of the EIR), data loggers would collect water-level information once every 1 to 4 hours throughout the life of the project. As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(b) requires that if, based on the GMP, it is determined that mining operations are resulting in a significant impact to groundwater wells, the Project Applicant shall

be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted.

As described on page 4.8-66 of the DEIR the GMP will select locations of the monitoring wells in order to provide spatial coverage throughout the project and adjacent areas. As shown in Figure 1 of the GMP, five monitoring well sites are planned in the vicinity of the Greenhorn, Woodrose, and Beaver Lane areas. Section 4.0 of the GMP describes that each monitoring well location will consist of a shallow and a deep well installation. This "shallow/deep" pairing method is designed to assess changes in vertical water levels and gradients that may occur as the result of mining activities. Shallow monitoring wells will be installed to depths of approximately 100 ft, and deep monitoring wells will be installed to depths of approximately 300 ft. The exact installation depths will vary between each well pair and will be determined based on observed groundwater conditions during the field installation activities.

As noted in Master Response 15, the applicant has also provided a Domestic Well Monitoring Plan to monitor domestic water wells, including water level and quality, within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Agcy 10-10

The commenter asserts that the applicant should be required to provide financial assurance of 14 million dollars to cover the cost of mitigating dewatering impacts in the Greenhorn, Woodrose and Beaver Lane areas. As discussed below, a bond for construction of water supply infrastructure in this area is not necessary because no significant impacts to domestic water wells are predicted in the Greenhorn, Woodrose, and Beaver areas. Moreover, the well monitoring program, required as mitigation for the project would provide early warning of any potential dewatering impacts to the Greenhorn, Woodrose and Beaver Lane areas, allowing the mine operator to provide replacement water prior to impacts, or to slow or halt dewatering to prevent any impact prior to water supply being connected.

The analysis provided in Section 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. Pursuant to Nevada County General Plan Policy 17.12, the project would address this by installing a potable water supply line in East Bennett Road and providing individual well owners with a connection to the potable water line. No significant impacts to domestic water wells are predicted in the Greenhorn, Woodrose, and Beaver areas, as drawdown in these areas is not expected to result in a 10% or greater reduction in groundwater well column levels (See Sections 4.2.2.1, 4.2.2.2, and 4.2.2.3 of Appendix K.2 of the DEIR). The predictions include the use of a 100% safety factor, multiple sensitivity scenarios, and have been peer reviewed by the County's independent expert consultant. However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). Please refer to Chapter 4 of this Final EIR, Mitigation Monitoring and Reporting Program, which includes a table containing all of the mitigation measures required in the DEIR. As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented.



As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining, is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess how drawdowns in the water-bearing zones. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented.

Mitigation Measure 4.8-2(a) requires that a projected water-level impact assessment for individual domestic wells shall be performed once dewatering of the underground mine workings commences, based on responses of the measured groundwater levels of the project monitoring wells. The projected groundwater drawdown shall be estimated for each domestic well in the project area. This impact assessment shall be performed by tabulating the variation of the measured water levels from the project monitoring wells over the monitoring period and during the dewatering of the underground mine workings and mining operations. For each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings. To provide property owners additional assurance regarding impacts of mine dewatering, a condition of approval will be imposed on the project requiring that monitoring of domestic water wells will be conducted upon request by property owners within or nearby the predicted 1-ft drawdown isopleth of the project (See Master Response 15 - Adequacy of Groundwater Monitoring & Mitigation).

If the water level impact assessment showed a potential impact to wells outside of the East Bennett area, assuming the 100% safety factor, the applicant would be required to mitigate this impact before it occurs in accordance with Mitigation Measure 4.8-2(b). The mitigation would be for properties which may be potentially impacted as determined in the projected water-level impact assessment. As discussed in the Well Mitigation Plan, if a dewatering impact to an area outside of the E. Bennett area were projected during operations, pre-emptive action would be taken as necessary to ensure immediate water supply and compensation. The 10% drawdown threshold of significance is extremely conservative and, in most cases, would not lower the water level below the casing of the domestic well. Therefore, well mitigation may not be required after inspection. If reduction of the water column was great enough to reduce the well's yield, a simple adjustment to the pumping system may only be required. For example, by pumping at a lessor rate over a longer duration and if necessary, installing or increasing the size of a pressure or holding tank. In the unlikely case where these measures were not sufficient, appropriate mitigation could be the deepening of a single well, drilling of a new well, or the provision of potable water service to a group of wells. Slowing or halting of mine dewatering could be done as necessary to allow enough time to complete mitigations. In the case of deepening a well this may be several weeks and would require a simple well construction permit from the Nevada County Environmental Health Department and the mobilization of a licensed contractor. Several months may be required in the case of connecting a group of wells to the NID system. NID recently completed the Loma Rica District Waterline Extension project in approximately 3 months, which involved the installation of 3,000 feet of 8-inch diameter treated waterline to 20 parcels. A notice of exemption from CEQA was filed on July 21, 2021. Construction commenced in early October 2021 and was completed and operations on December 10th, 2021. https://www.nidwater.com/loma-rica-district-financed-waterline-extension-project

The Well Mitigation Plan (Appendix D to this Final EIR) has been modified to clarify the actions that would be taken as described above.

In addition, as noted in Master Response 15, the applicant has also provided a Domestic Well Monitoring Plan to monitor domestic water wells, including water level and quality, within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Agcy 10-11

The commenter requests real-time flow data for the discharge of water into South Fork Wolf Creek, via a publicly accessible webpage that shows one week of flow history. Additionally, NID requests one week of notice whenever a planned outage in treatment or other interruption to discharge flow is expected.

Pursuant to the commenter's request, the applicant will be required to provide one-week notice of any expected flow interruptions when feasible, and notice of any spill or contaminating event via a condition of approval. Additionally, the applicant will be required to provide NID access to real-time flow data of South Fork Wolf Creek directly downstream from the project's discharge, with 15-minute interval data, with a trend history of at least one week, per a condition of approval. The County will not require the flow data to be publicly available, but the data may be made publicly available at the applicant's or NID's discretion.

Response to Comment Agcy 10-12

The commenter requests that a mitigation measure be added to ensure the volume of mine discharge water to South Fork Wolf Creek will not limit storm flow capacity during storm events. and notes that historic flows through the Property have been up to 35 CFS. As discussed in Section 4.8-3 of the DEIR, the detention basin for the Brunswick Industrial Site is sized to detain storm flows to compensate for the quantity of treated mine water discharged to South Fork Wolf Creek, in addition to compensating for increased runoff from potential future industrial development of the site.

Mitigation Measure 4.8-3 requires the applicant to submit a Final Drainage Report to the Nevada County Planning Department for review and approval. The Final Drainage Report shall demonstrate that the on-site storm drain systems are sized such that site runoff (in addition to treated mine discharge for the Brunswick Industrial Site) under the post-development condition will not exceed pre-development levels in the downstream channel(s) during the design storm events. As such, the DEIR already includes mitigation that ensures NID's ability to discharge water through the Property during storm events will not be limited; thus, no additional mitigation is required.

Response to Comment Agcy 10-13

Backflow prevention devices will be installed pursuant to NID rules (See Section 9 of Nevada Irrigation Water Service Regulations[7]) at the Brunswick and Centennial sites. Engineering details would be provided in the submittal of Improvement Plans to Nevada County, which require County review to ensure compliance with NID rules and County approval before commencement of construction.

[7]https://www.nidwater.com/files/53708aff0/2021+WATER+SERVICE+RULES+%26+REGS%2C+FULL+Document.pdf

Agency Letter 11

Northern Sierra Air Quality Management District

Gretchen Bennitt, Executive Director

District Headquarters
200 Litton Drive, Suite 320
Grass Valley, CA 95945
(530) 274-9360
FAX: (530) 274-7546
office@myairdistrict.com
www.myairdistrict.com

Northern Field Office
257 E. Sierra, Unit E
Mailing Address: P.O. Box 2227
Portola, CA 96122
(530) 832-0102
FAX: (530) 832-0101

April 29, 2022

Re: Revised Comments on Draft EIR for Idaho-Maryland Mine, Nevada County, CA

Introduction

Agcy 11-1 The Northern Sierra Air Quality Management District (NSAQMD) has been involved at various stages with the development of the environmental documentation for this proposed project. As a responsible agency under the California Environmental Quality Act, the NSAQMD neither supports nor opposes this project, and is submitting these comments in the interest of ensuring the adequacy of the DEIR. The NSAQMD recognizes that the commitment to use electric underground mobile equipment instead of diesel-powered equipment is a significant mitigation.

Asbestos Emissions

The Air Quality sections of the DEIR include a newly introduced concept of converting asbestos measurements to PCM (phase contrast microscopy) units.

Agcy 11-2 During the DEIR comment period the NSAQMD contacted OEHHA with questions about the asbestos PCM conversion process. OEHHA staff referred the NSAQMD to the California Air Resources Board's (CARB) Risk Analysis Section, which worked with CARB's Monitoring and Laboratory Division in providing an assessment of the underlying science. CARB staff concluded that "it is not appropriate to determine risk from rock samples" (personal communication with CARB staff, 3/28/22) and noted that the PCM conversion factor was developed for air monitoring samples, not rocks. For reference, the origin of the PCM conversion factor is EPA's Airborne Asbestos Health Assessment Update (EPA/600/8-84/003F, 1986). Since there is no approved method for calculating risk from rock samples, comparison with the NSAQMD's AB2588 toxics significance threshold based on rock composition carries some uncertainty.

Agcy 11-3 The DEIR is correct in observing that the Asbestos Airborne Toxic Control Measures (ATCMs) at CCR Title 17, Section 93105 and 93106 apply to the project. Underground mining is not covered in the ATCMs, but will be subject to permit conditions prescribed by the NSAQMD via the required Authority to Construct/Permit to Operate.

Agcy 11-4 Note that the footnote on page 55 reads, "Samples containing naturally-occurring asbestos were from underground rock only..." whereas November 2021 TEM sampling did discover asbestos in one of the two surface samples (#Y962843) from the 55-acre Centennial site.

1

Also, there appears to be at least one mistake in the TEM lab reports. The sheet for sample #Y962990 lists a "Calculated Asbestos Concentration (Weight %)" for chrysotile asbestos as .075%; there is an apparent laboratory error in reporting the total as <0.001 %.

Criteria Pollutant Emissions

Agcy 11-5 On page 304 of Appendix E.1, there are multiple tables that require explanation. The rationale for using a silt content of 1.6% for the crushed rock and a moisture content of 15% for the sand tailings should be discussed. The normal ranges noted in AP-42 section 13.2.4 are a silt content of 0.44% to 19% and a moisture content of 0.25% to 4.8%.

Agcy 11-6 Additional assumptions on document page 304 require explanation, including a wind erosion area of 0.72 acres, 0.34 acres of access road and 1.00 acre either seeded or with covering underway. Elsewhere in the DEIR, it appears that more surface is to be disturbed than the area indicated in these assumptions. Likewise, the assumptions for bulldozing and compaction (2.43 hrs/day and 1.02 hrs/day respectively) appear less than indicated elsewhere in the DEIR.

Agcy 11-7 The Logging and Chipping (described on page 4.3-56) is assumed to be for 24 total acres (Centennial and Brunswick sites combined). We see no mention of emissions associated with ongoing vegetation management.

Agcy 11-8 The beginning of the Earthwork and Material Handling section (App. E-1, p. 24) reads, "The barren rock will be transported from the concrete silo using a series of chutes and conveyors to a fully enclosed truck loading building." Each transfer point along the "series of chutes and conveyors" is an emission point which is not accounted for in the DEIR.

Agcy 11-9 Table 2 of the Health Risk Assessment lists the Base Elevation for the generators and diesel storage tanks in meters (placing them above 9,000'), whereas it should be feet. The calculations require verification to ensure that the modeling inputs are in the correct units.

Agcy 11-10 The footnote for table 8 on page 28 of E.1 says, "Concentrate truck trip distance of 145 miles is based on the distance between the project sites and the Port of Oakland." An explanation of why the ore concentrate is going to the Port of Oakland is necessary. If it is being transported to a refinery elsewhere, the associated emissions should be included in the GHG analysis since GHG emissions are a global concern.

Agcy 11-11 Unnumbered document page 184 of E.1 (for paved road fugitive emissions from vehicles) shows a table that has fractions of vehicles making fractions of trips, and then rounds the resulting VMT numbers before performing the final calculations. For instance, Freight Trucks have an average of 0.43 daily trips going 0.52 miles and lists their VMT as 0. The 0 miles travelled is then multiplied by the weight of the trucks, which yields 0 pounds. It also shows 1 concentrate truck trip per day, whereas in some places there are 10 concentrate trips/day and there are 5 concentrate truck trips listed on page 186 and 187. This is an example of how not only concentrate trucks but also other vehicles display different mileage, different trip numbers, etc. throughout the emissions calculations. These require standardization and accurate data conclusions.

Agcy 11-12	The emissions estimates assume that all on-site roads will be paved. This requires inclusion as a condition or mitigation measure.
Agcy 11-13	The spreading of 1,000 tons per day of engineered fill with a dozer require inclusion in the off-road equipment emissions (dozers are considered to be off-road equipment) data.
Agcy 11-14	App. E-1, document page 380/1938 lists 3 diesel generators that are proposed to operate 8 hours per day, 7 days per week in perpetuity (operational). The emissions from these generators require inclusion in the various emission quantification tables. Similarly, Table 4 (off-road construction emissions) of App. E.1, p. 21 includes 9 portable diesel generators operating 6 hours/day, 6 days/week that require inclusion in the emissions estimate data columns.
Agcy 11-15	Emissions from construction of the septic leach field and sewage line running up hill to the septic system require inclusion in the emissions analysis. Emissions from any backup diesel generator(s) required to pump sewage up the hill require inclusion in the emissions data.
Agcy 11-16	The OFFROAD model does not include fugitive emissions. It only includes engine emissions. The Operational Off-road Equipment list (App. E-1, document page 380/1938) lists off-road equipment at the Brunswick site. PM emissions from those require addition to the TAC calculations, which specify zero emissions from off-road equipment.
Agcy 11-17	The "Earthwork and Material Handling Fugitive Dust" section starting on page 300 includes limited construction activities that are anticipated (SF Creek Culvert Replacement, Pond Berm Repair, Service Shaft Collar and Building Pad). It assumes a serpentinite content in fill of 14.3%, with an asbestos content of 0.20%. A figure of 0.03% (which requires explanation) is derived from these numbers. There is a calculation of wind erosion that assumes a disturbed area of 4 acres. The resultant calculated fugitive dust emissions from wind erosion during construction is 0.41 tpy of PM10 and 0.02 tpy of PM2.5. The following unnumbered page (doc page 301) has an unlabeled table which indicates that only 40,150 tons of fill would be placed per year (versus the proposed 365,000 tpy). The content of the pages after that require clarification. For example, there is a sub-table called "Compaction" as part of the Fill Placement calculation series that notes a piece of equipment ("Cat563") that works for 0.06 hours (216 seconds) per day. On that same page is a bulldozer that moves 411.1 tons per hour and works 0.27 hours (16 minutes and 12 seconds) per day.
Agcy 11-18	The reason for selecting 25 meters as the plume height and width for all of the line volume sources in Table 2 starting on page 8 of Appendix B of Appendix E.1 require explanation.
Agcy 11-19	The DEIR cites AP-42, Ch. 13.3 as a source for blasting emissions information. ANFO is listed in that source as emitting 17 lbs./ton of NOx. At 0.93 tpd of ANFO, that calculates to 2.89 tons per year of NOx emissions from ANFO detonation. Nitrogen oxides are principally NO2, which is recognized as a non-carcinogenic TAC. These TAC emissions are excluded from the DEIR. The "Underground Blasting and Crushing" section (p. 4.3-56) assumes no TAC emissions from blasting.

Agcy 11-20

ASUR Plan

The NSAQMD will take the ASUR Plan into consideration while developing an Authority to Construct/Permit to Operate.

Sincerely,

Gretchen Bennitt

Gretchen Bennitt, APCO
Northern Sierra Air Quality Management District

AGENCY LETTER 11: GRETCHEN BENNITT, NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT

Response to Comment Agcy 11-1

The County acknowledges the comment as an introduction to comments that follow. This comment is included in the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. No further response is required or necessary.

Response to Comment Agcy 11-2

The Northern Sierra Air Quality Management District (NSAQMD) has indicated that there is no approved method, and thus some uncertainty, regarding the estimation of asbestos risk based on rock samples. Based on this lack of methodology and associated uncertainty, compliance with the California Air Resources Board (CARB) Air Toxics Control Measures (ATCMs) for naturally occurring asbestos, including development of an Asbestos Dust Mitigation Plan (ADMP), is the standard approach within CEQA documents to address health concerns associated with exposure to asbestos from unpaved surfaces, construction and grading operations and quarries where asbestos is found or likely to be found in order to ensure potential health risk impacts to the public would be minimized to a less than significant impact. Multiple other projects in the NSAQMD jurisdiction, as well as throughout the state, have relied upon compliance with these naturally occurring asbestos ATCMs in order to control any potential asbestos emissions to the extent possible. As described in Mitigation Measure 4.3-2 of the DEIR, the proposed project shall also comply with all applicable criteria in the CARB ATCMs for naturally occurring asbestos, which would result in a less than significant impact. However, based on public concern regarding asbestos exposure, and to provide the most information possible regarding potential health risk, the DEIR included quantitative analysis of asbestos risk based on a very conservative methodology (as described below and in Master Response 22 – Conservatism of Asbestos Assumptions).

The Health Risk Assessment for the project uses modeled air concentrations to estimate health risks from asbestos emissions based on the Office of Environmental Health Hazards Assessment's (OEHHA) *Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (2015) (OEHHA Guidelines). The modeling of asbestos air emissions from operations (such as blasting, rock handling, and grading) is done in the same manner as other toxic air contaminants (TAC) contained in rock (such as metals or silica) but uses the appropriate base units of TAC content required for asbestos (TEM asbestos structures). The modeling performed for the Health Risk Assessment was generally completed as follows:

1. Dust emission rates (PM_{10}) from various project activities were estimated
2. Dust concentrations were modeled at locations surrounding the project using air dispersion modelling
3. The asbestos content of dust was estimated using the most conservative approach, using the maximum content of asbestos structures in rock and sand tailings and assuming all asbestos structures are liberated from dust particles. This is a very conservative assumption. Please see also Master Response 22 – Conservatism of Asbestos Assumptions
4. The health risk at receptor locations was estimated based on the modeled concentration of airborne asbestos fibers in accordance with the OEHHA Guidelines.

The base unit for asbestos content in rock is TEM structures per unit mass. The model accounts for the liberation of the asbestos TEM structures into the air though dust creation and dispersion. The TEM structures then must be converted to equivalent PCM fibers in order to calculate the health risk at a receptor location. The OEHHA Guidelines provide a conversion factor to convert PCM fibers to mass (0.003 µg = 100 asbestos fibers PCM). The use of PCM equivalent weight percent is for convenience in modeling because all other TACs are modeled in weight percent and asbestos is reported in units of pounds per year under the Air Toxics Hot Spots Program (OEHHA 2015 Appendix C). PCM equivalent weight percent of rock are interchangeable with TEM structures per unit mass and have no effect on the modeled health risk for asbestos.

As stated on page 4.3-42 of the EIR, the NSAQMD's cancer and noncancer thresholds to assess health risk significance for CEQA are consistent with what are used for the AB 2588 risk assessment procedures. The threshold of significance for health risk is an increased cancer risk of >10 cases per million persons. The Health Risk Assessment prepared for the project concluded that the health risk to the most sensitive receptor will be below this threshold.

Nevertheless, the DEIR concluded that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and required mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an ADMP to the NSAQMD for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring to ensure that project asbestos emissions meet all applicable standards.

Response to Comment Agcy 11-3

The NSAQMD confirmed that the DEIR was correct that the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations and ATCM for Surfacing will apply to the project. Comment noted. Notably, the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations defines a Quarry as a facility or operation that obtains stone from the earth by means of cutting, digging, excavating, or blasting. Underground mining would be captured under this broad definition.

Response to Comment Agcy 11-4

The NSAQMD noted that the footnote on page 55 had an error in it. Therefore, footnote 41 has been deleted and the body text on page 4.3-80 of the EIR has been revised as follows (additions in underline, deletions in ~~strike-out~~):

> Because asbestos was found to be present in some of the ~~underground mining~~ material samples that Rise Grass Valley Inc. sent for laboratory analysis,~~[41]~~ an ADMP is required to be implemented to reduce potential asbestos exposure and protect public health.
>
> ~~41. Samples containing naturally-occurring asbestos were from underground rock only; naturally-occurring asbestosis not known to outcrop at the surface of the Brunswick Indutrial Site or Centennial Industrial Site.~~

The error in the TEM lab report is also noted. This error does not affect the analysis of asbestos emissions from the project, as the correct value was used in the analysis.

Response to Comment Agcy 11-5

The silt content for crushed barren rock was assumed at 1.6% based on EPA AP-42 Table 13.2.4-1 mean value for crushed limestone for the stone quarrying and processing industry. Other values presented in this table are from iron and steel production, taconite mining, and coal mining. The

stone quarrying industry is most similar to the proposed project's production of barren rock and therefore the selection of this silt content is appropriate.

A moisture content of 15% was assumed for sand tailings based on the estimated moisture content of sand tailings after dewatering by filter press. Typical moisture in filter cake for mineral tailings for pressure filters would range from 15% to 20% (Please see Table 6.43 of Metso Mineral Processing Handbook Edition 12)[8]. Therefore, the use of 15% is the most conservative assumption for estimating fugitive dust emissions, as a higher moisture content assumption would reduce the fugitive dust generation.

Response to Comment Agcy 11-6

The commenter questions the disturbance area assumptions used in the air quality model. The area worked was determined from an assumed compacted lift thickness and fill density provided by NV5 in the geotechnical reports for the project. The resulting tonnage of a single 0.5-foot (6 inch) lift is calculated at 1,388 tons per acre. At the daily tonnage of 1,000 tons per day this would equal an area worked of 0.72 acres per day. For conservatism, it was assumed that only a single lift would be placed in a day and the entire area exposed to wind erosion. In reality, multiple lifts might be placed during a day with a smaller overall exposed surface area. The 0.34-acre area of the access road is assumed from a road length of 1,000 feet and a road width of 15 feet, which is a conservative assumption of road length based on the expected project site configuration.

Bulldozing and compaction productivity were estimated from the Caterpillar Performance Handbook.[9] The compacted thickness of lift and number of compaction passes are provided by NV5 in the geotechnical reports for the project. The hours of bulldozing and compaction were more refined in the fugitive dust analysis in order to accurately estimate the fugitive dust generated from placement and compaction or engineered fill, but do not underestimate the likely work hours for these activities. Of note, the air quality analysis assumes a greater amount of operating hours per day for the calculation of exhaust criteria air pollutants and diesel particulate matter, and therefore exhaust emissions from bulldozers and compactors are overstated in the DEIR. This conservatism in exhaust emissions does not affect the analysis or conclusion of the DEIR.

Response to Comment Agcy 11-7

The logging and chipping would remove existing forest vegetation where engineered fill is proposed to be placed. The emissions from the logging and chipping activities were included in the air quality emissions analysis. The slopes of the fill pile will be seeded with grass and this grass would be cut periodically (to 4-inch height as stated on page 4.13-20 of the DEIR). However, any emissions from grass mowing would be negligible and would not change the results of the analysis.

Response to Comment Agcy 11-8

The emissions associated with the transfer points along the series of chutes and conveyors are presented in the second to last row of the table "Underground Mining – Stationary" on page 294 of Appendix E.1 labelled "Transfer to 500 ton barren rock silo" and the first two rows of the table "Ore Processing – Surface" on page 195 of Appendix E.1 labelled "Transfer to conveyor" and "Transfer to haul trucks".

[8] Metso:Outetec Basics in Mineral Processing, Edition 12, available at: https://www.mogroup.com/insights/e-books/basics-in-minerals-processing-handbook/
[9] Caterpillar Performance Handbook 48, available at: https://wheelercat.com/wp-content/uploads/2018/07/SEBD0351_ED48.pdf

Response to Comment Agcy 11-9

The base elevation for the generators (STCK8) and diesel storage tanks (STCK9 and STCK10) in Table 2 of the Health Risk Assessment are shown in feet, but the unit notation is in meters. This notation is a typographical error in the table. The correct elevation for these sources was used in the model as confirmed on page 395 of Appendix E.1, with the elevation of these sources noted at 837.71 meters, 838.73 meters, and 759.39 meters.

Response to Comment Agcy 11-10

The Port of Oakland is the principal ocean gateway for international containerized cargo shipments in Northern California. The Union Pacific and BNSF railroad facilities are located adjacent to the marine terminal area. Gold concentrate would be purchased by third parties and loaded into containers for shipment overseas or by rail to destinations in North America. Alternatively, the material could be trucked to Nevada State where processing facilities owned by third parties exist. However, the distance to the Nevada State border from the project site of approximately 90 miles is less than the distance to the Port of Oakland of 145 miles, so the Port was selected to provide a more conservative estimate of emissions.

The commentator suggests that GHG emissions associated with the international or interstate shipment of concentrates should have been included in the DEIR. This transport would be considered part of a lifecycle analysis. The California Natural Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions, found that lifecycle analysis was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). The gold concentrates produced by the project would be purchased by a third party and refined at a location that is not known and not in the control of the project. Calculation of GHG emissions from third party transport of gold concentrate would be speculative and therefore not required under CEQA. Please see also Master Response 26 – Lifecycle GHG Emissions.

Response to Comment Agcy 11-11

The purpose of the table on page 184 of Appendix E.1 is to calculate the weighted average vehicle weights of equipment and trucks along on-site paved roads only. Thus, the VMT values in question only pertain to on-site travel and do not factor into the off-site assumptions, which seems to be the distinction that the commenter was unclear about. A different calculation was used for off-site vehicle travel, which resulted in the difference in assumptions identified by the commenter. This on-site only estimate was used to determine the pounds per VMT for fugitive dust entrainment along paved roads based on the project-specific vehicle mix, which resulted in a more conservative value for particulate emission factors (since the majority of vehicles on-site are heavy trucks and equipment) than for off-site roadways, which have passenger vehicles as the primary proportion in the vehicle mix.

In addition, the table in question depicts only whole numbers for the “Total Vehicle Miles Traveled”, so values less than 1 are not shown. However, the equations do factor in the fractional “Total Miles Traveled” for the various trucks. For instance, although the table shows “0” total VMT for Freight Trucks, the equation of “Average Daily Trips” multiplied by “Total Distance (miles)” resulted in the following: 0.43 * 0.52 = 0.22 total VMT on-site, which was factored into the estimate of the weighted average on-site vehicle weights, and thus the pounds of particulate matter per VMT emission factor. The same table with the increased decimal places for “Total Vehicle Miles Traveled” is shown below for clarification:

Vehicle	Average Daily Trips	Total Distance (miles)	Total Vehicle Miles Traveled	Weight (tons)
Haul Trucks	50	0.59	29.50	20.8
Freight Trucks	0.43	0.52	0.22	27.5
Concentrate Trucks	1.0	0.52	0.52	27.5
Explosives Trucks	0.14	0.52	0.07	27.5
Fuel Trucks	0.15	0.52	0.08	27.5
Cement Trucks	1.28	0.52	0.66	27.5
Outside Services (light vehicles)	3.0	0.52	1.54	12.5
Light Trucks	80	0.52	41.21	3.45
Employee Vehicles	325	0.12	38.18	2.25
Forklifts			60.00	5
Wheel Loader	150	0.05	7.39	33
Weighted Average			**179.37**	**8.1**

Response to Comment Agcy 11-12

The paving of all on-site roads in included in the Project Description and therefore a condition of approval or mitigation measure is not required. Please see Figure 3.8 of the EIR. Nonetheless, the air quality analysis did conservatively include some dust emissions from unpaved access roads, even though the roads are proposed to be paved. Please see also page 303 of the Appendix E.1.

Response to Comment Agcy 11-13

The commenter states that a dozer is needed in the analysis to account for the spreading of engineered fill. Notably, a dozer is already included in the off-road equipment list and the associated emissions are included in the criteria air pollutant, TAC, and GHG inventories of the DEIR. Please see page 131 of Appendix E.1, which identifies a dozer for fill placement at the Centennial and Brunswick Sites.

Response to Comment Agcy 11-14

Portable generators/welders are included in the off-road equipment lists for construction and operations and the associated emissions are included in the criteria air pollutant, TAC, and GHG inventories of the DEIR. Please see pages 131 through 135 of Appendix E.1, which identifies the pieces of equipment assumed for the various phases of project construction and operations.

Response to Comment Agcy 11-15

Emissions from the construction of the septic leach field and sewage pipe is included in the grading and paving phase of the construction emissions in Appendix E.1 of the DEIR. The electricity demand for sewage treatment and pumping is included in the estimated electrical power consumption under the category “Water Treatment” on page 347 of Appendix E.1. As stated on page 4.3-104 of the DEIR, the use of backup generators during power outages is speculative and therefore the emissions for back-up power generators during outages are not included in the emissions estimates.

Response to Comment Agcy 11-16

The PM_{10} emissions from various off-road equipment in the OFFROAD model are used as a surrogate for diesel particulate matter (DPM) exhaust and are already incorporated into the Health Risk Assessment, as identified in Table 10 (“Off-Road Equipment” rows, “DPM” column) on page

386 of Appendix E.1. TACs in fugitive dust (PM_{10}) are not included in the OFFROAD model emission factors. TACs in fugitive dust (asbestos, silica, and metals) are included in the Health Risk Assessment and the assumptions discussed on 21-23 of the Health Risk Assessment.

Response to Comment Agcy 11-17

The pages that the commenter referred to are for the grading during construction of the project (Year 2021) and not for the operations. The 40,150 tons of fill being moved is the historic fill that is currently on the Brunswick site. This material would be excavated, moved, and compacted on the site in order to create the planned site grading.

Bulldozing and compaction productivity were estimated from the Caterpillar Performance Handbook. The compacted thickness of lift and number of compaction passes are provided by NV5 in the geotechnical reports for the project. As shown on page 301 of Appendix E.1, bulldozing and compaction are assumed to average 110 tons per day. Given the small daily production and high productivity, the average hours per day are 0.27 hours per day bulldozing and 0.06 hours per day compaction. The disturbed area of 4 acres is the assumption of the maximum area of the site that would be actively graded at one time. As grading of areas is completed, the concrete foundations of buildings and asphalt paving would be completed which limits the area of disturbance exposed to wind erosion.

A Phase I-II Environmental Site Assessment (ESA) was conducted at the Brunswick site (Appendix J of the DEIR). There is currently historic mine fill on the site, some of which will be moved during site construction. Eight of fourteen trenches in the mine waste noted some serpentinite in the geological logs. A conservative assumption was made that 25% of the material in the trenches is composed of serpentinite. Therefore, a serpentinite content of 14% was assumed (8 ÷ 14 x 25%). Five of the trenches were tested for asbestos in previous environmental studies as described in the ESA. Three samples were determined to have no asbestos and two samples were determined to have asbestos but below the detection limit of 1%. Therefore, an asbestos content of 0.2% was assumed for serpentinite (Average of 3 samples with no asbestos and 2 samples at half detection limit). No conversion to PCM equivalent was made for the assumed asbestos in construction grading for the Health Risk Assessment. These asbestos assumptions are conservative and likely overstate the health risk during construction grading. Even with this conservatism, the Health Risk Assessment prepared for the project concluded that the health risk to the most sensitive receptor will be below the applicable cancer and non-cancer risk thresholds. Nevertheless, the DEIR concluded that the project would result in a potentially significant impact with respect to exposing receptors to substantial concentrations of asbestos and required mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the EIR requires the submission of an ADMP to the NSAQMD for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring to ensure compliance with all applicable standards.

Response to Comment Agcy 11-18

This comment requests clarification on the source parameters in Table 2 of Appendix B of Appendix E.1. All references for the source parameters provided in Table 2 are shown in the footnote of that table as well as Section 7, References of the cited document. The NSAQMD does not have published guidance for air dispersion modeling. As such, nearby jurisdictions were evaluated for similar guidance to use for modeling. The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the closest air district to the NSAQMD with applicable dispersion modeling guidance. In Section 2.2 of the SMAQMD Dispersion Modeling of

Construction Generated PM_{10} Emissions document, emissions from exhaust should be modeled as volume sources with a release height of 5.0 meters and the lateral length in both directions being equal. The guidance also states that at least 50% of the project site area should be covered by the volume sources. The guidance omits any discussion on size of the lateral length of the volume sources. As such, Dudek consulted with various air districts throughout the State regarding the lateral dimension for volume sources. No published air district guidance in the State recommended a volume source lateral dimension. When discussing this issue with various air districts, the consensus was to have a volume source no greater than 25 meters in any direction when covering a site.

Response to Comment Agcy 11-19

The commenter asserts that blasting emissions, in particular nitrogen oxides, were not included in the DEIR's analysis; however, these emissions were included in the analysis of criteria air pollutants. NOx is a criteria air pollutant and has been analyzed as such. As discussed on page 4.3-41 of the EIR, the NSAQMD established thresholds of significance for CEQA purposes to achieve and maintain the National and California Ambient Air Quality Standards (AAQS). Because an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, a project that complies with the thresholds established by a local air district, such as the NSAQMD, would not result in adverse effects to human health related to criteria pollutant emissions. NO_2 only has an acute reference exposure level, so no cancer or chronic non-cancer health effects are associated with exposure. To account for NOx in the health risk estimates, the assessment was rerun to include NO_2 and the resultant acute non-cancer health impacts of the project increased from 0.004 to 0.1, which is far below the significance threshold of 1. Please see Dudek Health Risk Assessment Memorandum for the Idaho-Maryland Mine Project – Hexavalent Chromium and Nitrogen Dioxide attached to the Final EIR. Therefore, there would be no change to the less than significant impact conclusion from the DEIR with respect to health risk.

Response to Comment Agcy 11-20

The County acknowledges the comment and notes that it does not raise new or additional environmental issues concerning the adequacy of the DEIR. Comment noted.

Agency Letter 12

Northern Sierra Air Quality Management District

Gretchen Bennitt, Executive Director

District Headquarters
200 Litton Drive, Suite 320
Grass Valley, CA 95945
(530) 274-9360
FAX: (530) 274-7546
office@myairdistrict.com
www.myairdistrict.com

Northern Field Office
257 E. Sierra, Unit E
Mailing Address: P.O. Box 2227
Portola, CA 96122
(530) 832-0102
FAX: (530) 832-0101

April 4, 2022

Re: Comments on Draft EIR for Idaho-Maryland Mine, Nevada County, CA

Introduction

Agcy 12-1

The NSAQMD submitted comments and recommendations regarding the proposed project as part of the NOA/NOP, but these were omitted from the DEIR's NOP comment section.

The NSAQMD recommended that the applicant work with the Department of Toxic Substances Control, the US Geological Survey and/or the Office of Environmental Health Hazard Assessment to obtain concurrence that asbestos testing for the proposed mine is adequately addressed with regard to the number and locations of samples and applicable analytical techniques. It does not appear as if this was done.

The NSAQMD has also submitted additional comments and been involved in other ways with the environmental documentation process for the proposed project. Many of the NSAQMD's comments and observations have been addressed, but some important ones remain unaddressed. Notably, the DEIR includes a newly added, previously undiscussed method of converting asbestos in rocks to asbestos in air that is not backed by science.

Asbestos emissions are the primary concern of the Northern Sierra Air Quality Management District (NSAQMD). The DEIR's treatment of naturally occurring asbestos is scientifically unsound and therefore not adequate for CEQA purposes. Laboratory testing in November 2021 of seven dominant types of rock from the site discovered asbestos in every type, with an average of 594,625,000 asbestos fibers per gram. For perspective, a new penny weighs 2.5 grams. Based on the recent tests of 40 rock samples and 2 previous rock samples, in a penny's mass of average mine rock there are well over a billion asbestos fibers.

Asbestos and Public Health

Asbestos is a well-known carcinogenic toxic air contaminant. Effects of asbestos exposure are insidious, highly variable and may not show up for 10 to 40 years or more. The most infamous result of asbestos exposure is mesothelioma, a specific type of cancer. The Office of Environmental Health Hazard Assessment (OEHHA) approach to asbestos risk assessment under AB2588 (the Air Toxics Hot Spots Act) is currently based only on a person's risk of developing mesothelioma. It does not provide any assessment of risk of developing other types of asbestos-related diseases such as asbestosis (an inflammatory condition affecting the lungs that can cause shortness of breath, coughing, and permanent lung damage), pleural

plaques (changes in the membranes surrounding the lung), pleural thickening, benign pleural effusions (abnormal collections of fluid between the thin layers of tissue lining the lungs and the wall of the chest cavity) and assorted cancers of the lung, larynx, pharynx, stomach, colorectum and ovary.

For additional information on the effects of asbestos exposure, see the National Cancer Institute website (https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet). Following is a relevant excerpt from this website:

*There is some evidence that family members of workers heavily exposed to asbestos face an increased risk of developing mesothelioma (https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet#r12). This risk is thought to result from exposure to asbestos fibers brought into the home on the shoes, clothing, skin, and hair of workers. To decrease these exposures, Federal law regulates workplace practices to limit the possibility of asbestos being brought home in this way. Some employees may be required to shower and change their clothes before they leave work, store their street clothes in a separate area of the workplace, or wash their work clothes at home separately from other clothes (*https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet#r2*).*

Cases of mesothelioma have also been seen in individuals without occupational asbestos exposure who live close to asbestos mines ((https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/asbestos/asbestos-fact-sheet#r12)).

Asbestos PCM Conversion

The Air Quality sections of the DEIR include a newly introduced concept of converting asbestos measurements to PCM (phase contrast microscopy) units. There is no accepted method to convert between rock samples and air samples. The DEIR's approach of translating asbestos discovered in solid rock samples into PCM fiber concentrations in air is not possible. The PCM concept is from Appendix C: Asbestos Conversion Factors & Cancer Potency Factor, which is part of OEHHA's February 2015 Air Toxics Hot Spots Program Guidance Manual. OEHHA's conversion from fiber counts to mass as PCM fibers was developed exclusively for air samples. This is made clear in EPA's Airborne Asbestos Health Assessment Update document (USEPA, 1986. Airborne Asbestos Health Assessment Update. EPA/600/8-84/003F, Office of Health and Environmental Assessment, Washington, DC), which is referenced in OEHHA's Air Toxics Hot Spots Program Guidance Manual, Appendix C: Asbestos Conversion Factors & Cancer Potency Factor.

None of the DEIR's discussions regarding PCM conversions are valid. PCM cannot be used as a reporting metric, a compliance verification mechanism or a replacement for other methods of asbestos investigation. PCM asbestos conversion is not a concept that applies outside the world of asbestos air monitoring. During the DEIR comment period the NSAQMD contacted OEHHA with questions about the PCM conversion. OEHHA referred the NSAQMD to the California Air Resources Board (CARB) Risk Analysis Section, which worked with CARB's

Monitoring and Laboratory Division in providing an assessment of the underlying science. In short, CARB confirmed the non-validity of the applicant's PCM conversion approach. Following is an excerpt from a 3/28/22 email from CARB's Risk Analysis Section:

I … wanted to clarify our earlier statement from our previous email regarding the risk calculations based on the lab reports, we initially attempted to convert TEMs into concentration in the air per the OEHHA guidance and ran it through HARP, but after discussing the outcome with others internally, it really isn't an appropriate way to calculate the risk (this was confirmed below with our MLD staff as well). Rather, you would need an annual average concentration from either sampled or modeled air concentrations, so our initial analysis no longer applies.

Staff from our Monitoring and Laboratory Division observed the following:

1. Determination of Risk from Rock Samples. *I agree with you, it is not appropriate to determine risk from rock samples. The asbestos fibers considered in Appendix C of the Hot Spots Guidance came from airborne samples during occupational exposure studies. I checked the 1986 U.S. EPA reference….*

The PLM and TEM analyses in this DEIR were done on bulk samples (rocks), and the asbestos concentrations are reported in weight percent. It is not known how many asbestos fibers can be generated (and become airborne) from a given mass of asbestos-containing rock material. So there is no known conversion factor for the asbestos weight % (by TEM analysis of a rock sample) that can be used to estimate the number of PCM fibers/m^3 applicable for the Hot Spots risk assessment equation.

2. Calculation of asbestos weight % in TEM analysis report. *[This is in response to a separate question from the NSAQMD] The total asbestos weight % should be the sum of the chrysotile and amphibole asbestos weight percent. For sample **Y962990** (attached) it appears that there is an error in the report. Only 1 chrysotile fiber ≥5 µm is reported, and yet the weight % is 0.075. Comments describe actinolite fibers detected (an amphibole asbestos). Strange that a total weight % of <0.001 is reported.*

*For sample **Y962999** … I did not detect an anomaly in the TEM report. Chrysotile fibers can be much smaller and thinner than amphibole asbestos fibers. Many chrysotile fibers detected do not amount to much weight because they are so small or thin. CARB M435 PLM analysis of this sample is 2.5% asbestos by point-count. This is not unusual either. PLM analysis uses ~100,000 times more mass of sample than TEM analysis. It is best to start with PLM, and follow up with TEM for the PLM non-detects. TEM can miss out on finding the asbestos because the TEM sample mass is so low.*

3. DEIR asbestos calculations (Appendix C). *For Appendix C (attached) there were no equations given on how TEM structures per nanogram and PCM asbestos weight percent were calculated in the first table that groups asbestos test results by rock type. In the next table, on the second and third pages (pages 56 and 57), there is a missing column for TEM weight % from the analyses.*

4. Geological Units and Asbestos Testing (page 9). *The equations that [were] used for calculations of asbestos structures per nanogram and PCM asbestos by weight are not given. It is difficult to follow the discussion in this section because the lithology of the rock units is not described, and neither are the rock sample groupings clearly identified in Appendix C.*

NSAQMD recommends that the notion of PCM conversion should be thrown out because using OEHHA's air sampling PCM conversion formula for rock samples has the effect of making it look like there is less asbestos present than TEM laboratory work has demonstrated to be the case. Instead, the project's risk should be evaluated based on many more samples being gathered, and evaluated using TEM asbestos by weight. Those samples should be gathered in an approved, standardized manner (such as is set forth in Method 435) that employs composite collection practices rather than hand-picked pieces of core samples (which the tested samples were).

Using TEM to look at the same old core samples that were previously analyzed with PLM does have some value because we can now see how much asbestos the PLM method missed. PLM only detected asbestos in 2 of the 40 core samples, but the TEM method detected asbestos in 17 of the 40 samples, including in every rock type evaluated.

Both chrysotile and amphibole asbestos were discovered in the core samples. Chrysotile fibers tend to be smaller than amphibole fibers, making them more likely to become airborne and be transported great distances in the wind. Depending on weather conditions, they could be inhaled or deposited on surfaces in all parts of Nevada County for the 80-year duration of the project.

Note that the footnote on page 55 reads, "Samples containing naturally-occurring asbestos were from underground rock only; naturally-occurring asbestos is not known to outcrop at the surface of the Brunswick Site or Centennial Site." This is not the case – it could be that this was mistakenly left in the document from a version written before TEM was employed to get a closer look at the samples. While only 2 grab samples were taken from the surface of the 55-acre Centennial site, one of the two was found to contain 30-million chrysotile asbestos fibers per gram of rock, as is listed in the lab report for Sample Y962843 (ASUR Plan, unnumbered document page 106/131).

It is difficult to find the Health Risk Assessment among the many pages of the DEIR. It begins on unnumbered document page 356 of 1938 of Appendix E.1, as Appendix B of Appendix E.1. It should be noted that Appendix B of Appendix B of Appendix E.1, titled "Fugitive Dust TAC Concentrations" (starting on page 1,901 of the document) is missing asbestos. The Health Risk Assessment should be easier to locate.

The HARP report lists the maximum mitigated cancer risk as 3.34e-5 (group 543, p. 1839 of 1938) while the Appendix B, p. 1 reports the maximum cancer risk as 1.04e-5 (= 10.4e-6).

Asbestos Sampling and Monitoring

The NSAQMD has recommended that additional rock sampling be performed, and performed in a representative manner using composite samples, but it appears that no further sampling has been done (only further investigation of previously collected samples). There are still only 2 samples from the 56-acre Centennial site. All of the samples analyzed using TEM were previously analyzed using the inferior PLM method. The difference in the results from the two methods is large. PLM only detected asbestos in 2 of the 40 samples, but the TEM method detected asbestos in 17 of the 40 samples. This is mainly because PLM cannot detect small asbestos fibers, which are more easily entrained in the wind, can travel farther, and are inhaled deeper into the lungs.

It is unclear why the two serpentine samples originally evaluated using TEM were discarded from the 40-sample statistics and from consideration for the Health Risk Assessment. There were 42 samples analyzed using TEM, not 40. The two that were excluded are especially rich in asbestos. If all 42 samples are considered, the average asbestos concentration is 0.24% by weight.

In September 2020, the NSAQMD and Dudek communicated about monitoring. It would be ideal to have baseline monitoring data for at least a year before the project starts up. The NSAQMD suggested including a publicly accessible webcam (one for each site preferably) in the monitoring plan, as well as a MET site and a rain gauge. Monitoring specifics set forth in the Construction ATCM are available at CCR 93105(h)(3) and (h)(4). 40 CFR Part 58 (especially Appendix E) also contains relevant monitoring specifics.

Asbestos Emissions

Table 5 (App. E.1, document page 378/1938) lists construction emissions of .00003 tpy of asbestos, which is 0.06 lbs/year. This is incorrect. If we add the obvious dust from mitigated PM10 construction emissions due to off-road equipment (0.6 lbs/day) to the fugitive dust emissions (8.30 lbs/day) we get 8.9 lbs/day, or 3,248.5 lbs/year. TEM laboratory testing of 42 samples from the site yielded an average of 0.236355% asbestos content by weight. .236355 / 100 x 3,248.5 lbs/yr = 7.68 lbs/year, or 128 times the quantity of asbestos emissions presented in Table 5.

Dust emissions for the following 10 years are estimated at lbs/day from underground blasting (1.61) + ore processing (0.29) + fugitives (39.05) = 40.95 lbs/day, or 14,946.75 lbs/year. This comes to 35.33 lbs/year of asbestos emissions.

There is an Engineered Fill placement emissions table on unnumbered document page 303 that lists 37.95 lbs/day of PM emissions. The asbestos emission calculations are based not on the amount of asbestos present in the rock, but on the ASUR plan's goal of 0.01% asbestos in the engineered fill. The table at the top of the page includes emission factors. For the dumping of dump trucks, it includes emission factors for "material drop" from AP42, Table 13.2.4. The "material drop" emission factor is not for "material handling – blending." "Blending" implies disturbance that is continuous for some amount of time, whereas a material

drop is more or less instantaneous. The emission factor assumptions for the use of AP-42 section 13.2.4 should be explained. A material drop emission factor of 0.0001 lb/ton is used in the DEIR. However, the equation in 13.2.4 for material drop yields more than 6 times that amount if we apply a reasonable 5 mph wind speed and 3% moisture content.

Emissions Estimate Assumptions

On page 304, there are a few tables that are not explained. The rationale for using a silt content of 1.6% for the crushed rock and a moisture content of 15% for the sand tailings should be discussed. The normal ranges noted in AP-42 section 13.2.4 are a silt content of 0.44% to 19% and a moisture content of 0.25% to 4.8%. The choices taken in the DEIR for silt and moisture content result in lower emissions than the average anticipated values. Particularly since the waste rock has been crushed finely (beyond normal aggregate processing), the fill would have an increased concentration of fine particles/dust.

Additional assumptions on document page 304 that are questionable include a wind erosion area of 0.72 acres of active compaction, 0.34 acres access road and 1.00 acres either seeded or with covering underway. Elsewhere in the DEIR, it appears that more surface is to be disturbed that the area indicated in the assumptions on page 304. Likewise, the assumptions for bulldozing and compaction (2.43 hrs/day and 1.02 hrs/day respectively) seem to be less than indicated elsewhere in the DEIR.

The Logging and Chipping (described on page 4.3-56) is assumed to be for only 24 acres (Centennial and Brunswick sites combined). This is expected to take 11 years, so the assumptions divide 24 acres by 11 years to arrive at 2.18 acres per year, and it is assumed that logging and chipping will occur on only 1 day per year. It would be more realistic to consider that more than 2.18 acres might be cleared in a given year. Also, there is no mention of emissions associated with ongoing vegetation management.

Document page 306 contains logging & chipping emissions. There should be a source listed for the emission estimates. It is impossible to tell if the emissions are only from the equipment engines, engines plus tires, or engines, tires, root balls, fugitives from fans and loading limbs into the chipper, and so forth. Without an explanation there is no way to assess the validity of the numbers. From the tables on pages 307 and 308, it appears that those logging and chipping emissions listed on page 306 are only from the engines (which would be far less than if the entire process was evaluated). Following the chipping and logging estimates is a table that represents mobile sources associated with logging and chipping. However, it assumes that all operation is on paved roads and none of the vehicles are operating off-road, and only includes emissions directly from the vehicles (no fugitives). The emissions are based on EMFAC, which does not consider emissions from tires, fans and air displacement as vehicles navigate off-road to collect chips and logs.

The beginning of the Earthwork and Material Handling section (App. E-1, p. 24) reads, "Barren rock hoisted from the Brunswick shaft will be placed in the existing concrete silo located at the Brunswick Industrial Site. The barren rock will be transported from the concrete silo using a series of chutes and conveyors to a fully enclosed truck loading building. Barren rock may be



mixed with sands from the ore processing plant to create an engineered fill that meets appropriate geotechnical specifications for construction of development pads. Engineered fill would be transported from the ore processing facility to a receiving site, where it would be spread using a dozer."

Each transfer point along the "series of chutes and conveyors" is an emission point which is not accounted for in the DEIR.

Table 2 of the Health Risk Assessment lists the Base Elevation for the generators and diesel storage tanks in meters (placing them above 9,000'), whereas it should be feet.

The footnote for table 8 on page 28 of E.1 says, "Concentrate truck trip distance of 145 miles is based on the distance between the project sites and the Port of Oakland." There should be an explanation of why the 20 tpd of ore concentrate is going to the Port of Oakland. Is that where it is to be refined, or is it being shipped overseas for processing? If it is being transported overseas, the associated emissions should be included in the GHG analysis since GHG emissions are a global concern.

Unnumbered document page 184 of E.1 (for paved road fugitive emissions from vehicles) shows a table that makes no sense. It has fractions of vehicles making fractions of trips, and then rounds the VMT numbers that result before performing the final calculations. For instance, Freight Trucks have an average of 0.43 daily trips going 0.52 miles and lists their VMT as 0. It appears that the 0 miles travelled is the multiplied by the weight of the trucks, which would yield 0. It also shows only 1 concentrate truck trip per day, whereas elsewhere there are 10 concentrate trips/day. However, there are 5 concentrate truck trips listed on page 186 and 187. This is just an example. Not only concentrate trucks but also other vehicles show different mileage, different trips numbers, etc. throughout the emissions calculations throughout the document. These should all be corrected and standardized before the DEIR is considered adequate.

The emissions estimates assume that all on-site roads will be paved. This should be included as a condition or mitigation measure.

The spreading of 1,000 tons per day of engineered fill with a dozer should be considered in the off-road equipment emissions (dozers are considered to be off-road equipment).

Also, it is not clear how or where the rock is to be "mixed with sands from the ore processing plant to create an engineered fill that meets appropriate geotechnical specifications for construction of development pads." The off-road equipment list includes a "mobile auger blending plant," so it would be presumed that this is how the waste sand from the processing plant would be mixed with waste rock. Every time rock and dirt that contain asbestos are moved there is the potential for additional asbestos emissions. All of these emissions should be included in the Toxic Air Contaminant/Health Risk Assessment evaluation.

The last sentence under Earthwork and Material Handling reads, "Notably, for fill transported to off-site industrial sites (for year 2033 and beyond), emissions associated with fill placement were not included since it was assumed that the other industrial facilities are already receiving,



or would receive, fill from other sources." The big difference between fill transported from the proposed Mine to be deposited in unknown locations around the community contains asbestos. When considering airborne toxics it doesn't make sense to consider emissions from handling fill with asbestos in it as equivalent to emissions from handling fill without asbestos in it.

App. E-1, document page 380/1938 lists 3 diesel generators that would operate 8 hours per day, 7 days per week in perpetuity (operational). Yet, the emissions from these generators are not reflected in the various emission quantification efforts.

Table 4 (off-road construction emissions), p. 32 includes 9 portable diesel generators operating 6 hours/day, 6 days/week.

The Wastewater Septic System does not include any mention of how the wastewater is getting from the Brunswick mine area up the hill to the proposed septic field. The main buildings at the mine are at approximately 2740' and the upper portion of the septic field is at 2875'. Therefore, all of the sewage from the mine's 312 employees plus contractors, visitors and truck drivers has to be pumped a quarter mile up the hill across an elevation gain of 135'. If it is being pumped by a generator, those emissions should be quantified.

Emissions from construction of the septic leach field and quarter-mile sewage line running up hill to the septic system appear to be missing.

The OFFROAD model does not include fugitive emissions. It only includes engine emissions. The Operational Off-road Equipment list (App. E-1, document page 380/1938) lists plenty of off-road equipment at the Brunswick site. Table 8 (Off-Road Equipment Assumptions – Logging and Chipping) includes a grapple loader, a front-end loader, a skidder, a grinder and two excavators. PM/NOA emissions from those do not appear to be included in the TAC calculations, which specify that there would be zero emissions from off-road equipment. This doesn't seem possible given the amount of off-road disturbance from the variety of mobile off-road machinery, most of which moves dirt and rock as its primary function.

The "Earthwork and Material Handling Fugitive Dust" section starting on page 300 only includes a few of the construction activities that are anticipated (SF Creek Culvert Replacement, Pond Berm Repair, Service Shaft Collar and Building Pad). It assumes a serpentinite content (spelled "Sepentinite Concent" in the DEIR) in fill of 14.3%, with an asbestos content of 0.20%. A figure of 0.03% (which should be explained) appears to be derived from these numbers. Then there is a calculation of wind erosion that assumes a disturbed area of 4 acres. The resultant calculated fugitive dust emissions from wind erosion during construction is 0.41 tpy of PM10 and 0.02 tpy of PM2.5. The following unnumbered page (doc page 301) has an unlabeled table which seems to say that only 40,150 tons of fill would be placed per year (versus the proposed 365,000 tpy). The pages after that are unclear. For example, there is a sub-table called "Compaction" as part of the Fill Placement calculation series that notes a piece of equipment ("Cat563") that works for 0.06 hours per day. That is 216 seconds. On that same page is a bulldozer that moves 411.1 tons per hour and works 0.27 hours/day, which is 16 minutes and 12 seconds.

8

The reason for selecting 25 meters as the plume height and width for all of the line volume sources in Table 2 starting on page 8 of Appendix B of Appendix E.1 should be explained.

The DEIR cites AP-42, Ch. 13.3 as a source for blasting emissions information. ANFO is listed in that source as emitting 17 lb/ton of NOx. At 0.93 tpd of ANFO, that comes to 2.89 tons per year of NOx emissions from ANFO detonation. Nitrogen oxides are principally NO2, which is recognized as a TAC. These TAC emissions are not included in the DEIR. The "Underground Blasting and Crushing" section (p. 4.3-56) assumes no TAC emissions from blasting.

ASUR Plan

The NSAQMD is neither approving nor disapproving the ASUR Plan because there is no legal requirement for such a plan – it is part of the project planning documentation.

The ASUR Plan includes corrective actions for certain circumstances. The NSAQMD does not necessarily approve these actions in lieu of other actions or penalties that the NSAQMD or other agencies may prescribe or require. The ASUR Plan cannot be seen as being exclusively directive for the applicant or binding in any way on any agency, and should include a statement to that effect. The enforcement authority of agencies is unaffected by the ASUR Plan.

The ASUR Plan's shortcomings include difficulties with enforceability, uncertainty regarding the exact nature of control technologies to be used, the self-policing nature of the plan and a way to quickly evaluate its effectiveness.

The first page of the ASUR's Table includes the TEM % by weight, but the next two pages omit this statistic.

The summary table (1st page of Appendix C) is missing a sample. It appears to be sample Y962992, which has the highest concentration of asbestos of any of the rock samples (7.3 structures per nanogram, or 7,330,000,000 asbestos fibers per gram).

ASUR 5.0 paragraph 5 reads, "The great majority of mine tunneling in barren rock for the Idaho-Maryland Mine Project is expected to occur in the meta-andesite porphyrite "Brunswick Block". No asbestos was detected by PLM in samples from the meta-andesite porphyrite lithology. Asbestos was detected in six of the eighteen samples by TEM methods and the eighteen samples averaged 0.26 TEM structures per nanogram (s/ng) or 0.002% PCM asbestos by weight." Here again the conversion to PCM is unwarranted, since OEHHA's PCM conversion only applies to air monitoring samples. The TEM data sheets provide a calculated asbestos percentage, which averages to 0.192% asbestos by weight in the porphyrite samples. At this concentration, in the daily mining of 1,500 tons there would be 2.88 tons of asbestos. However, using the inferior PLM quantification technique there would appear to be no asbestos at all.

Similarly, Table 2 of the Vergence report illustrates the superiority of TEM to PLM analyses in the comparison of two results from the same core sample. The 1.1 foot-long core from hole #I-19-13, which was from a depth of 5090.50 feet to 5091.60 feet, was analyzed using both TEM

and PLM. The less reliable PLM method did not detect any asbestos but the TEM method detected 2.0% asbestos. The average asbestos content in the two TEM-evaluated samples of serpentinite was 2.8%.

The proposal to use PLM for compliance purposes may be convenient, but there is a big difference between PLM results and TEM results. TEM is preferred for asbestos quantification because it is able to detect smaller particles. A comparison between PLM and TEM results shows that there are a lot of asbestos fibers in the rock that are too small to be detected using PLM. Choosing to use PLM is, in effect, choosing not to see the asbestos.

Asbestos has been found in all of the kinds of rocks that were analyzed from the site (porphyrite, diabase, sand tailings, unmineralized serpentinite, weakly ankeritized diabase/serpentinite, ankeritized serpentinite, and serpentinite). With only a relatively few samples having been analyzed, there is no way to know how much asbestos is present in a given untested rock sample, but every fragment of rock or soil from the mine or the mine tailings could contain asbestos. When those rocks are broken or that soil is driven on or otherwise disturbed, asbestos fibers could be released to the air in unknown concentrations. Once airborne, tiny asbestos fibers can potentially travel many miles.

There is at least one serious mistake in the TEM lab reports. The sheet for sample Y962990 lists a "Calculated Asbestos Concentration (Weight %)" for chrysotile asbestos as .075% (29 million fibers per gram), so there is obviously an error in the reporting of the total as <0.001 %. The percentage of total asbestos can't be less than the percentage of a particular kind of asbestos.

Page 14, item 7 says that records of all analytical test work will be kept for a minimum of 7 years. Since asbestos related diseases often do not show up for 40 years or more, 7 years is not long enough for recordkeeping. Instead, the records should be kept (at least in electronic form) until at least 40 years after the mine closes.

Page 8, item 3 says, "Lithological units and gold mineralization will be adequately sampled and tested for naturally occurring asbestos…." The term "adequately sampled" is meaningless. Item 3 also includes some vague phrasing about testing using PLM and TEM. Is every sample to be tested both ways? How often? Also, in addition to converting TEM results to PCM with OEHHA's conversion formula, the TEM results should be reported and available to the public.

The ASUR Plan should include measures to prevent secondary asbestos emissions from workers' clothing and shoes. Historically, family members of individuals who have worked in mines where naturally occurring asbestos is present have been exposed to asbestos from the workers' clothing and shoes, resulting in asbestosis and mesothelioma. Asbestos exposures to the general public could also occur if workers carry asbestos-containing soil on their shoes and clothing into local places of business, such as restaurants, retail stores, fitness centers, etc. Showering on-site and changing shoes and changing and washing clothing at the end of a worker's shift is one way to prevent this type of secondary exposure. Alternatively, workers could wear protective suits and shoes that stay on-site. The manner of keeping asbestos from



leaving the site on workers' clothes, shoes and persons could be considered an airborne toxics mitigation measure.

The publication cited in the ASUR Plan, "NIOSH (2019). *Dust control handbook for industrial minerals mining and processing. Second edition*. https://doi.org/10.26616/NIOSHPUB2019124" discusses additional options for dust control, including the use of wind fences, fixed water spray systems and crust-forming agents, and covering inactive areas with clean gravel. The discussion of dome enclosures on page 357 of that document in particular should be reviewed (large ones can span a thousand feet and they can withstand 90-mph winds and heavy ice loads). Such technologies should be discussed/evaluated in the DEIR

As the tunnels progress and more samples are tested for asbestos, an ever-increasing knowledge base will develop. There should be a way to refine the ASUR Plan and reassess the project periodically. As a precedent, Teichert Aggregates has a 5-year conditional use permit review requirement for their Martis Valley operation near Truckee. If it is found that asbestos emissions are great enough to create a significant health risk, there should be a way to put the project on hold for as long as necessary to find ways to bring the asbestos emissions down, such as through additional or new technologies. It would be short-sighted to commit to the ASUR Plan for the entire life of the mine based on the few samples that have been tested so far. As time passes, technology advances. There may be a way to quickly monitor for asbestos emissions or assess the asbestos content of the rock body in the future. Control technology also advances, and someday there may be ways to further reduce the release of microscopic airborne asbestos fibers into the community.

Some of the gold veins are known to be hosted entirely in serpentinite. The NSAQMD recommends considering leaving those veins untouched for at least 40 years, by which time emission control technology is likely to have improved. Electrostatic mist screens, for example, show promise among emerging technologies.

Water

The Water Supply Assessment (WSA) is important because an abundant supply of water is necessary for the control of dust and toxics such as silica and asbestos. Unfortunately, it does not include enough detail to evaluate its accuracy. There should be an itemized list, or inventory, of water usage features so that reviewers can check to see if key elements are being overlooked or mischaracterized.

The water usage estimates are based on usage at "buildout." The document considers the first 10 years as the "construction" period because that is when the waste material is being deposited and compacted as engineered fill at the Centennial and Brunswick sites. It reads, "Because this WSA is assessing the impacts at buildout of the Proposed Project, the water demand during construction will not be included in buildout water demands." However, the buildout phase is not when the project would use the most water. That is, unless the eventual off-site compaction of engineered fill were to be included in water usage, that would increase the buildout consumption, especially since it would require an abundance of water due to the

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presence of asbestos in the fill and the resulting requirement to comply with the Asbestos Airborne Toxic Control Measures for all fill placement activities (not discussed in the DEIR).

The DEIR estimates 5,700 gpd of potable water for sinks, toilets, showers and laundry. It would be important to have adequate shower capacity at the facility for the hundreds of anticipated employees. Workers in the mine would continually be subject to air saturated with moisture to the point of it dripping off their clothing (the DEIR specifies that there would be 100% saturation of the air in the mine). Dust laden with asbestos and other toxic substances would stick to skin, hair and clothing. Workers should not be allowed to leave the site with asbestos dust on their bodies, clothes or shoes because they would carry the asbestos dust into public places or home to people they live with.

A key question regarding water use assumptions is if the non-potable water would be of high enough quality to use for "100 percent saturation of air" (estimated at 40,000 gpd). If it has elevated levels of natural contaminants (such as arsenic, mercury and other heavy metals, iron and manganese) or if it has too much of the proposed water treatment and ore processing chemicals, it may not be suitable for employees to breathe. Water pumped from the mine would contain numerous substances including sodium hypochlorite (bleach), ammonia (partly from detonation of 1,860 lbs/day of ANFO explosive), potassium permanganate, sulfuric acid, sodium hydroxide, sodium bisulfite, assorted lubricants and petroleum products lost from equipment, and reagents including Aerofloat 208 (odor of alcohol and sulfur), Aerophine 3418A, Aerofroth 70-MIBC (odor of alcohol), Magnfloc 10 and Scaletrol PDC9401.

The ASUR Plan proposes that unpaved areas will be watered for dust suppression every 2 hours, which should be considered carefully in the WSA. The NSAQMD is concerned that the water budgeted for the project might not be adequate to meet the dust control requirements. Since the dust contains asbestos, silica and numerous other toxic substances, adequate dust control is necessary. There should never be a situation where dust control is compromised because of water usage restrictions, particularly in the summer months when the potential for dust generation is greatest.

https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf contains some "rules of thumb" for estimating water usage. For example, grading uses approximately 10,000 gal/acre per day; 30 gallons is required for each cubic yard moved; and pre-wetting areas to be disturbed requires 1 acre-foot of water (325,851 gal) per acre of land. The Health Risk Assessment (page 3) says that 104 acres are to be disturbed.

A lot of water is also needed for grinding mills, crushers, conveyors, conveyor transfer points and drop points to control emissions of dust and asbestos.

AGENCY LETTER 12: SAM LONGMIRE, NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT

Response to Comment Agcy 12-1

This letter is superseded and replaced by Agency Letter 11. Please see comments made in Agency Letter 11 and Response to Comments Agcy 11-1 through Agcy 11-20 above.

Group Letter 1

Alliance For
Workforce Development, Inc.
Providing pathways to success

P.O. Box 1800
Grass Valley, CA 95945
(530) 265-7088
(530) 477-6891 Fax
www.afwd.org

March 23, 2022

Mr. Kelley:

The Alliance for Workforce Development, Inc. (AFWD) is Nevada County's local workforce development organization. We are dedicated to enhancing the quality of life throughout the communities we serve.

Grp 1-1 Our mission is to empower people to find job training and new opportunities to build or expand a career for themselves. Every day we work to help people who are trying to find a new path forward economically, sometimes under very difficult circumstances. We sit on the front lines of the current economic crisis. The effect of COIVD-19 in particular has caused tremendous disruption and displacement for many in the communities we serve.

Grp 1-2 We met with Rise Grass Valley CEO Ben Mossman to discuss recruiting and job training opportunities available through AFWD. Rise Grass Valley has signaled to us a willingness to recruit a diversified workforce, to conduct extensive on-site job training, and to work with our local schools and colleges to develop essential training programs for potential hires.

In addition to the direct jobs, Rise Grass Valley anticipates that roughly 300 indirect new jobs could be created by the economic multiplier that the mine will demand – anything from related construction work to demand for more restaurants and hotels. This can be a tremendous lift to our entire local economy and workforce.

Grp 1-3 We are very encouraged that Rise Grass Valley reached out to us to discuss a meaningful collaboration. We count on employers like them to proactively consider their future workforce needs, and to treat their growth in the community as a mutually beneficial partnership. Should the project move forward, we are committed to working with Rise Grass Valley for all their workforce needs.

If you have any questions, please feel free to contact me.

Sincerely,

Kristine ZuaZua

Kristine ZuaZua, Director of Programs
Alliance for Workforce Development
988 McCourtney Road
Grass Valley, CA 95949
530-265-7088

Serving Butte, Lassen, Modoc, Nevada, Plumas & Sierra Counties
A proud partner of America's Job Center of California℠ Network

GROUP LETTER 1: KRISTINE ZUAZUA, ALLIANCE FOR WORKFORCE DEVELOPMENT, INC.

Response to Comment Grp 1-1
The comment does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 1-2
The comment is noted for the decisionmakers. The comment does not address the adequacy of the DEIR and no further comment is warranted.

Response to Comment Grp 1-3
The comment is noted for the decisionmakers. The comment does not address the adequacy of the DEIR and no further comment is warranted.

Group Letter 2

April 4, 2022

Matt Kelley, Senior Planner
County of Nevada Community Development Agency
Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-8617

Delivered via email: idaho.MMEIR@co.nevada.ca.us and matt.kelley@co.nevada.ca.us

RE: Idaho-Maryland Mine Project Draft Environmental Impact Report, SCH# 2020070378

Dear Mr. Kelley,

On behalf of the Board of Directors, staff, and over 700 members of the Bear Yuba Land Trust (BYLT), I am submitting the following comment letter regarding the Draft Environmental Impact Report (DEIR) for the proposed Idaho-Maryland Mine (IMM) project (Project). BYLT also submitted a comment letter on the Notice of Preparation (NOP) that was dated August 17, 2020. We are disappointed to find that many of our comments were not specifically addressed in the DEIR at a level of detail commensurate with the environmental impacts of the proposed Project.

Grp 2-1

Who We Are

The mission of BYLT is to protect and defend the working and natural lands of the Bear and Yuba River Watersheds. The lands under our care include conservation easements covering over 18,000 acres of forests, ownership of land leased to Mountain Bounty Farm and a working cattle ranch on the Bear River, and the maintenance and construction of more than 45 miles of publicly accessible trails in Nevada and Yuba Counties. We believe that long-term planning, with a goal of sustainability and resilience in the face of many unknown climate change and development impacts, must be at the forefront of all decision-making. BYLT is accredited by the Land Trust Alliance (LTA) and is recognized as a land conservation organization that meets national standards for excellence, upholds the public trust, and ensures that conservation efforts are permanent.

PO Box 1004, Grass Valley, CA 95945 • *phone:* (530) 272-5994 • *fax:* (530) 272-5997 •
www.BearYubaLandTrust.org

Bennett Street Grasslands Conservation Easement

Impacts posed by the IMM Project to our 7-acre Bennett Street Grasslands Conservation Easement (Easement) located along East Bennett Street just below the Brunswick site and south of the Centennial site are of great concern (see Attachment 1, Map). This valuable natural asset, owned by California State Parks and protected by BYLT, is bisected by South Wolf Creek, into which the Project will be releasing at least 5.6 cubic feet per second (cfs) of potentially polluted residual mine water.

BYLT is legally bound to protect the conservation values of the Easement property from outside impacts in perpetuity. As stated in the Deed of Conservation Easement dated November 30th, 1999 (see Attachment 2, Conservation Easement), the natural, ecological, and aesthetic values of the Property (which includes South Wolf Creek) are to be preserved and maintained by the continuance of protection in perpetuity, and "to enhance the restoration of the ecosystem, the natural systems and processes, and the aesthetic values of the Property".

Grp 2-2

The rights conveyed by the Easement include "the right to identify, to preserve and protect in perpetuity, and to enhance the natural and open space, the ecological, scenic and aesthetic features, the water resources, and the natural flora and fauna on the Property." BYLT is required to monitor the Easement yearly and provide a report to State Parks. We are also required to implement a Management Plan prepared for the Easement. The report and Management Plan note that riparian thickets along the creek and associated grasslands provide important habitat including nesting and foraging opportunities for many bird species, including rare and endangered birds. Ecologists have noted that the grassland is one of the best examples of what Grass Valley looked like prior to European settlement. As a result, monitoring activities have been completed on the Easement by the local chapter of the Audubon Society, California State Parks, and other local bird groups such as Gold Country Avian Studies, which has conducted bird banding at the site for over 5 years. California State Parks has been managing various invasive species and conducting in-stream restoration in the creek to preserve the habitat values of this protected riparian corridor (Attachment 3, Photos).

Impacts to Legal Obligations of Bennett Street Conservation Easement

The proposed Project has the potential to significantly affect our ability to meet our legal obligations, i.e., to protect and defend ecological habitats contained within our conservation easements, yet this is not described anywhere in the DEIR. We are very concerned that the Project will adversely affect water quality and quantity in South Wolf Creek and the conservation values of this valuable Easement beyond what is described in the DEIR. As stated in the Deed, "the Property consists of six general ecosystems within the Northwest Sierra Nevada Ecological Subregion of California, with a large population of rare California Reedgrass Tall Closed Graminoid community, a madrone forest of unusual stature, and a montane riparian forest community which provides nesting, foraging, and cover for a variety of common wildlife species, including California black bear, and mountain lion". Yet, direct impacts to these sensitive habitats as a result of sending an additional 5.6 cubic feet per second (cfs) of

Grp 2-3

2

potentially contaminated wastewater through the Easement are not addressed in the DEIR. This is a violation of CEQA.

According to CEQA Section 15125(a), "An EIR must include a description of the physical environmental conditions in the vicinity of the Project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant." The obvious purpose of this requirement is "to give the public and decision makers the most accurate and understandable picture practically possible of the Project's likely near-term and long-term impacts." The Less than Significant impact finding for natural communities and special-status species is based on a study area that is far too narrow to make this conclusion.

As a land trust, BYLT has been entrusted by the community, its members, landowners, and local jurisdictions to protect and preserve our Easements. This is done using vital financial, administrative, and legal resources. To diminish our ability to provide these services and accomplish our mission reduces our ability to defend conservation values and broker new agreements with willing landowners. If we cannot guarantee protection, our mission is compromised. Yet, this is not discussed in the DEIR Land Use Section 4.9-2 (page 4.9-18) under consistency with plans and policies as required by CEQA.

This section of the DEIR should not just discuss County policies, but also the policies of partner organizations such as BYLT. In fact, Nevada County General Plan policies directly relate to BYLT, yet are not discussed or described. Excerpts from the General Plan include the following:

Objective 11.5: Support the acquisition, development, maintenance and restoration, where clearly consistent with General Plan policies, of habitat lands for wildlife enhancement.

Directive Policies Policy 11.10: Cooperate with State and Federal agencies and public and quasi-public organizations and agencies in the acquisition, restoration, and maintenance of habitat lands.

Policy 6.10: The County shall support the activities of the Nevada County Land Trust [now BYLT] and Truckee-Donner Land Trust to acquire and manage open space lands. These non-profit Trusts shall be encouraged to acquire open space through dedication or voluntary purchase from willing sellers of property of easements. The Trusts shall be encouraged to acquire land or other real property interests which could focus on lands which contain unique, valuable or sensitive resources reflecting environmental or biological sensitivity; scenic landscape units; community separators; historic, cultural, and archaeological content; and low intensity recreational potential.

These General Plan policies are not discussed in any section of the DEIR and the project's inconsistencies with these important policies is not identified. This is a violation of Section 15125 of the CEQA Guidelines and we ask that the section be revised and the DEIR recirculated with this information. The long-term viability of land trust property rights must be disclosed and defended so that we can best protect the conservation purposes of the Easement.

3

Habitat and Ecological Value of Bennett Street Conservation Easement

The Bennett Street Conservation Easement Property is documented habitat for the State-listed as Endangered willow flycatcher (*Empidonax traillii)* and three California Department of Fish and Wildlife (CDFW)-listed Species of Special Concern: olive-sided flycatcher (*Contopus cooperi*), yellow-breasted chat (*Icteria virens)*, and yellow warbler (*Setophaga petechia*). These birds have been documented within the grasslands and riparian corridor of the Property. In addition, the South Fork of Wolf Creek flowing through the Property possesses habitat for the following federal and California Department of Fish and Wildlife species of concern which have been reported in the nearby surrounding area: Foothill yellow-legged frog, (*Rana boylii*) and Northwestern Pond Turtle, (*Clemmys marmorata marmorata*). Many other non-listed species depend on the South Fork of Wolf Creek for habitat, and food sources found in this declining habitat in the Grass Valley area of Nevada County, California.

The Conservation Easement states, "WHEREAS, all of these natural, ecological, and aesthetic values are of great importance to the Grantor and to the people of the State of California, and are worthy of preservation; and WHEREAS Grantor desires and intends that the natural, ecological, and aesthetic values of the Property be preserved and maintained by the continuation of patterns of land use on the Property that will not interfere with or substantially disrupt the ecosystem or workings of the natural systems."

Grp 2-4

Again, we find no meaningful discussion of the ecological value of the Easement or a discussion of how the Project will affect the water quality and quantity that would flow through South Fork Wolf Creek post-Project affecting animal and plant communities in the Easement. The preparers of the DEIR seem to believe that the Easement is currently disturbed similar to the Centennial and Brunswick Industrial Sites. Nothing could be further from the truth. The condition of South Wolf Creek on the Easement has been protected for at least 24 years by BYLT. It is a natural and protected channel in this location, yet that is not recognized in the DEIR. This condition and the potential impacts of the Project must be analyzed in this context as required by CEQA and feasible mitigation measures, including rigorous pre-construction surveys and post-construction mitigation monitoring for these specific and other communities must be evaluated. In addition, the ecological values of the seasonal and perennial wetlands on the Easement must be evaluated for impacts.

For example, there is no specific discussion of the effects on benthic macroinvertebrates and amphibians within South Wolf Creek. This includes the federal- and state-listed foothill yellow-legged frog which may be most impacted by increased flows as tadpole eggs and invertebrates may get washed downstream and are unable to complete their life cycles. As benthic macroinvertebrate numbers decrease in the channel, fish, such as brown trout present in the creek, may also decline in numbers as their food source declines. To say that the proposed Project would not result in temporary or permanent impacts because encroachment would not occur within 100 feet of the waterway does not account for direct impacts just downstream to water quality, quality, and wildlife.

4

Impacts to Riparian Corridor

Increased flows in South Fork Wolf Creek may change the plant community composition and distribution along areas adjacent to the creek. Conditions may be too wet for some plant species to grow and they may be displaced from the site all together. This situation would not only affect plant species, but also the inter-related habitats for aquatic and nesting and foraging bird species that utilize the Easement. We can find no discussion of these CEQA impacts in the DEIR.

Grp 2-5

As currently proposed, the Project will alter the hydrology and hydroperiod of South Fork Wolf Creek. The current base flow of South Fork Wolf Creek is approximately 2 cfs. Under the proposed Project, flows would increase to over 7 cfs for 80 years during Project operations. The distribution of seasonal and perennial wetlands located within the Bennett Street Grasslands Easement would change over time in response to the changes in hydrology of the creek. How will this impact be monitored in the long-term? We can find no discussion of these CEQA impacts in the DEIR. Further, we can find no visual representations such as cross-sections of the creek to show how much water an additional 5.6 cfs will raise water levels. This is vital information for the decision makers and public to have when considering potential impacts.

Wildlife Migration/Movement Corridors

Grp 2-6

The discussion in the DEIR related to wildlife migration/movement corridors is limited to deer on the Brunswick and Centennial Industrial Sites This is inadequate. The corridor of the South Fork Wolf Creek and the entire Easement site are vital wildlife movement corridors that could be affected by changes to water quantity and quality. Evidence of numerous large mammal and raptor species is easily seen on the Easement property. The inter-related nature of ecological communities is not acknowledged in the DEIR. When one species is adversely affected either by poor water quality and a change in food sources, other species are affected as well. This impact, which is a specific question in Appendix G of the CEQA guidelines, has not been adequately answered. This is a violation of CEQA.

Insufficient Surface Water Quality Monitoring and Sampling

Grp 2-7

No baseline surface water quality data is included in the DEIR and therefore, the background concentrations of basic water quality parameters such as inorganic cations and ions, metals, total suspended solids, pH, dissolved oxygen (DO), and water temperature in South Fork Wolf Creek are currently unknown. When the mine begins operations and begins pumping water into the creek to dewater the mine shafts, the change in water chemistry will be unknown because there is no baseline data to compare to the Project conditions.

As previously stated, CEQA Section 15125(a) states that "An EIR must include a description of the physical environmental conditions in the vicinity of the Project." We cannot find any mention of baseline monitoring of surface water quality of South Fork Wolf Creek, especially considering concerns related to changes to pH, temperature, DO, and turbidity. Impacts to

5

water quality in the DEIR are founded on the assumption that compliance with NPDES-permit-regulated-discharge requirements will protect aquatic biological resources. This assumption is not adequate for this Project, especially when a baseline of existing conditions has not been provided, is a violation of CEQA.

We propose that baseline surface water sampling in South Fork Wolf Creek should be completed monthly to obtain surface water quality data that represents pre-Project conditions. In addition to monthly sampling, the following should be completed:

- Sampling during or just following the "first flush" storm event of the season (greater than 2 inches rain in Grass Valley); and
- Sampling during or just following qualifying rain events (greater than one inch of rain in Grass Valley).
- Both filtered and unfiltered samples should be obtained during each sampling event and analyzed for constituents of concern in addition to other metals and inorganic constituents. Once a statistically significant number of surface water samples is obtained, baseline data for each constituent of concern can be established. If and when discharge of treated mine water commences, sampling should continue at least quarterly and during storm events as described above. Data would be compared to the established background levels to determine whether water quality exceeds site specific water quality goals. There is no mention of post-Project surface water quality sampling. This testing is only meaningful with a statistically significant database of background surface water quality constituents.

Regional Water Quality Control Board Requirements

We find the following statement to be grossly insufficient with surface water compliance standards. The Project Description (DEIR page 3-15) states:

"Water produced during dewatering would be treated prior to discharge to South Fork Wolf Creek. It is anticipated that the discharge would occur in compliance with the Central Valley Regional Water Quality Control Board Order No. R5-2016-0076, National Pollutant Discharge Elimination System (NPDES) No. CAG995002, which was adopted on October 14, 2016."

Grp 2-8

The samples used to determine constituents of concern for water treatment came from the Brunswick Shaft. The drains off of Idaho Maryland Road would have been a more appropriate sample location to assess water quality of the pumped groundwater. A project of this magnitude should know and disclose at this stage exactly what Regional Board orders and permits to which it must comply. To not include actual regulatory requirements of what measures are required to meet Regional Board requirements pertaining to the discharge of potentially hazardous wastewater, does not give the public or decision makers a realistic understanding of the impacts of the proposed Project. What mitigation measures will the Regional Board require? To relegate the identification of mitigation measures to a future time is the definition of deferring mitigation, which is not allowed under CEQA.

6

There are no specific Regional Board requirements provided in the Project Description section of the DEIR. Therefore, we cannot be certain that "The water discharged into South Fork Wolf Creek is expected to be at least as good or better quality than the water typically flowing through South Fork Wolf Creek." (DEIR page 3-18). The document implies that because the Project has not yet been developed to a level of detail needed to include these important specific mitigation measures, they do not need to be included. CEQA requires that the project description supply the amount of information needed for evaluation and review of the environmental impacts (Section 15124 of the CEQA Guidelines). In addition, all mitigation must be identified and feasible. Mitigation measures are required to read as "shalls" rather than "woulds" and those included "as part of the Project", must so state.

We find that there is substantial evidence showing the creek's water quality would be adversely affected by Project-generated surface water runoff. Total maximum daily load (TMDL) was not used to measure this project impact; therefore, we find that the DEIR failed to determine its significance, either individually or cumulatively.

Grp 2-9

In addition, we are very concerned about turbidity and water quality impacts during construction of the water treatment facility and other grading at the Brunswick Industrial Site directly upstream from the South Fork Wolf Creek. While a Stormwater Pollution Prevention Plan (SWPPP) will be required, in our experience, these are generally inadequately monitored. Contractors often self-monitor and their BMPs are commonly installed inadequately. A third-party firm should be in charge of preparing and monitoring the SWPPP and all conditions and penalties for violations must be described in the DEIR. Otherwise, the mitigation is not identified and CEQA is violated because the mitigation is not included in the Project. CEQA does not allow the deferral of mitigation to the future.

Martis Valley Case Law Precedence

Grp 2-10

In the sections above, we have factually stated many areas in which the proposed project would result in potentially significant impacts to the Bennett Street Grasslands Conservation Easement. Yet, these impacts are not disclosed or discussed in the DEIR. A recent, local court case *(League to Save Lake Tahoe, Mountain Area Preservation, et al./California Clean Energy Committee v. County of Placer, et al. (Sierra Pacific Industries, et al., Real Parties in Interest) (2022)* Cal.App.5th., also known as the Martis Valley Case) sets important legal precedence for evaluating established CEQA rules and principles, including, but not limited to, those governing: applicable standards of review; baseline/environmental setting description; lead agency discretion regarding thresholds of significance, methodology for impact study, and significance determinations; cumulative impacts (including GHG) analysis; and requirements for adequate mitigation measures.

Similar to the conclusions of the Martis Valley Case, we find that the DEIR fails to provide baseline/environmental setting description; provides poor methodology for impact study, and significance determinations; cumulative impacts analysis; and adequate mitigation measures.

7

Alternatives

Section 6.4 of the DEIR attempts to describe an Environmentally Superior Alternative as required by Section 15126(e)(2) of the CEQA Guidelines. The section states that Alternative 2 is the Environmentally Superior Alternative, yet we believe a combination of Alternatives 2 and 4 is more appropriate and would meet the main objectives of the project while substantially reducing environmental impacts. This combination, which is feasible and reasonable (as defined by CEQA), would include no placing of mine tailings at the Centennial Site, yet would still include clean-up as required by DTSC. Further, reducing the extraction as described in Alternative 4 without extending the number of years the mine is in operation would further reduce impacts while also eliminating the need for fill to be deposited on the Centennial Site. This environmentally superior alternative would also reduce the potential for adverse water quality and quantity impacts to South Fork Wolf Creek, as described earlier in this letter. Please revise the DEIR to include this more Environmentally Superior Alternative.

Grp 2-11

Statement of Overriding Considerations

CEQA Guidelines Section 15093 states the following:

"CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable." The agency must state in writing the specific reasons to support its action to approve based on the Final EIR, supported by substantial evidence in the record.

Grp 2-12

We encourage the County Board of Supervisors to carefully consider how the economic benefit to mine operators and owners outweighs the significant environmental impacts of the proposed Project. The Board of Supervisors has the ability, in fact, it is their obligation, to deny the project based on its lack of benefit to the community.

Conclusion

We have identified many inadequacies of the DEIR in this letter. For these reasons, we believe the DEIR must be corrected and re-circulated for public comment. The CEQA process for this Project must give the decision makers and the public every opportunity to understand the potential impacts of the Project as well as to identify feasible, comprehensive, and specific mitigation measures. Otherwise, the public can have no certainty that far-reaching adverse impacts will not occur.

Grp 2-13

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For over 30 years, BYLT has safeguarded critical habitats and provided assurances to our community that we will protect the conservation values of the lands we are entrusted with. We are legally bound to protect the Conservation Easement values of the Bennett Street Grassland Conservation Easement and the Project puts our ability to accomplish our mission in legal jeopardy. For all of the above reasons, we find the Draft EIR to be legally insufficient to support the Idaho-Maryland Mine Project.

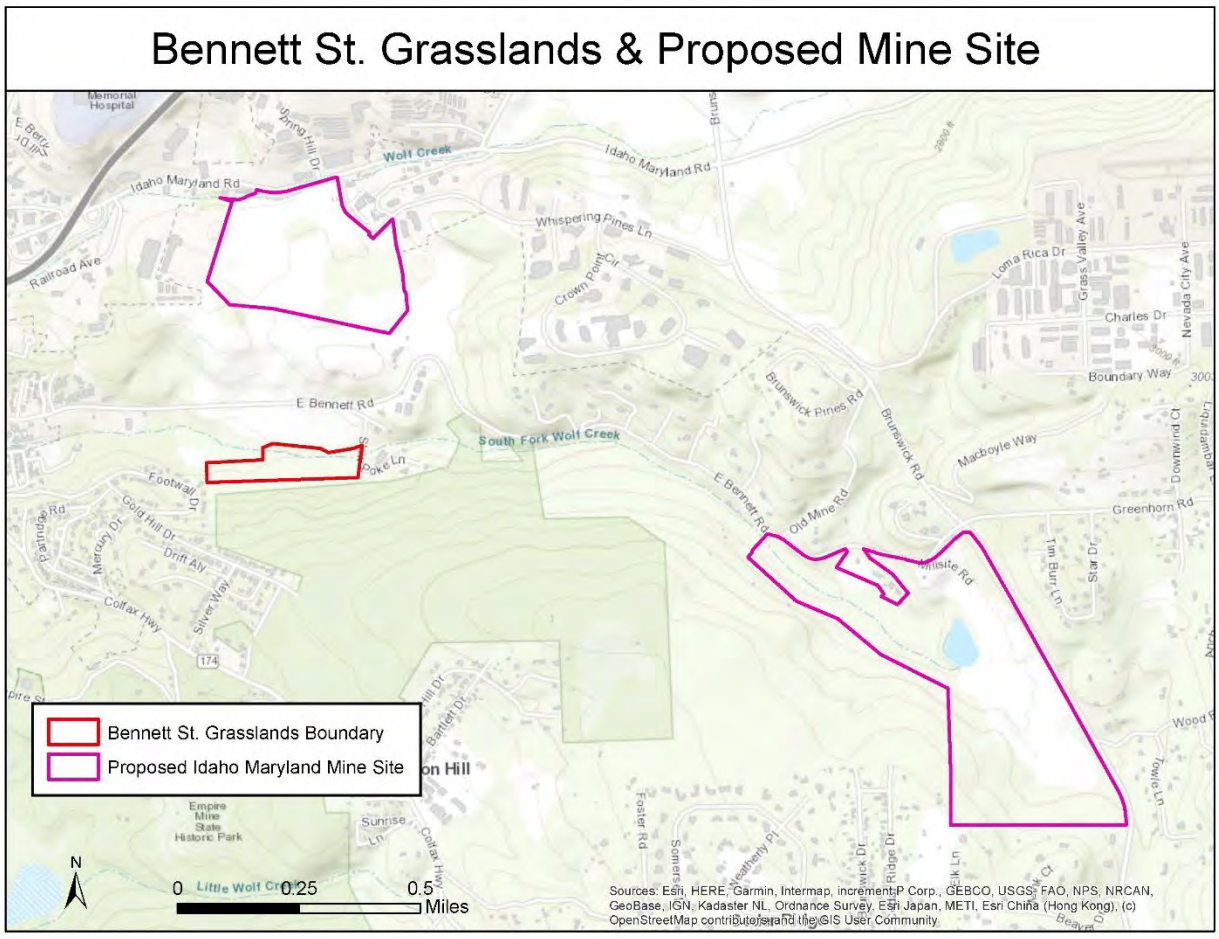
Respectfully Submitted,



Erin Tarr
Executive Director
Bear Yuba Land Trust
erin@bylt.org

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Attachment 1
Map of Bennett Street Conservation Easement and IMM Project Boundary


Bennett St. Grasslands & Proposed Mine Site
Bennett St. Grasslands Boundary
Proposed Idaho Maryland Mine Site
Idaho Maryland Rd
Wolf Creek
Whispering Pines Ln
Crown Point Cir
Railroad Ave
E Bennett Rd
South Fork Wolf Creek
Brunswick Pines Rd
Brunswick Rd
Old Mine Rd
Millsite Rd
Macboyle Way
Greenhorn Rd
Boundary Way
Charles Dr
Loma Rica Dr
Grass Valley Ave
Nevada City Ave
Colfax Hwy
Empire Mine State Historic Park
Sunrise Ln
Foster Rd
Somerset Dr
Feathery Pl
Ridge Dr
Tom Burr Ln
Star Dr
Footwall Dr
Cold Hill Dr
Drift Aly
Silver Way
Mercury Dr
Partridge Rd
Poke Ln
Bartlett Dr
Memorial Hospital
Spring Hill Dr
Downwind Ct
Lowland Ln
N
0 0.25 0.5 Miles
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Attachment 2
Bennett Street Conservation Easement

Received NCLT 6/14/00
15

RECORDING REQUESTED BY:
California Land Title Company #84434-BM
WHEN RECORDED MAIL TO:

Nevada County Land Trust
P.O. Box 2088
Nevada City, Ca. 95959

Nevada, County Recorder
Jewett-Burdick
DOC- 2000-0013132-00
Acct 1-California Title Co.
Wednesday, MAY 10, 2000 08:00:00
REC $19.00 MIC $1.00 AUT $15.00
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DPH/DH/1-15

THIS SPACE FOR RECORDERS USE ONLY

TITLE OF DOCUMENT DEED OF CONSERVATION EASEMENT

GRANTOR NAME John P. O'Brien, Claire E. O'Brien, Robert T. Roark

GRANTEE NAME Nevada County Land Trust

THIS DOCUMENT IS BEING RE-RECORDED TO INCLUDE LEGAL DESCRIPTION THAT WAS ELIMINATED FROM DOCUMENT IN ORIGINAL RECORDING.

THIS PAGE ADDED TO PROVIDE ADEQUATE SPACE FOR RECORDING INFORMATION
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#84434-BM

RECORDING REQUESTED BY:

Nevada County Land Trust

WHEN RECORDED MAIL TO:

Nevada County Land Trust
PO Box 2088
Nevada City, CA 95959

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Nevada, County Recorder
Jewett-Burdick
DOC- 1999-0942858-00
Acct 1-California Title Co.
Wednesday, DEC 15, 1999 08:00:00
REC $15.00 MIC $1.00 AUT $11.00
SBS $10.00 DOC $61.05
Ttl Pd $98.05 Nbr-0000014208
CNO/CO/1-11

Documentary transfer tax is $61.05
Computed on full value

DEED OF CONSERVATION EASEMENT

THIS GRANT DEED OF CONSERVATION EASEMENT (this "Easement"), made as of this November 30th, 1999, by Robert T. Roark, Trustee udt dated 4/13/84 whose address is Box 670, Grass Valley, California, 95945 and John P. O'Brien and Claire E. O'Brien husband and wife; and John P. O'Brien and Claire E. O'Brien as trustees of the John and Claire O'Brien Trust dated 3/30/95 whose address is 17072 Norlene Way, Grass Valley, California, 95949 (hereinafter referred to as the "Grantor"), and NEVADA COUNTY LAND TRUST, a California non-profit corporation whose address is P.O. Box 2088, Nevada City, California, 95959 (hereinafter referred to as the "Grantee"); (collectively, the "Parties");

WITNESSETH:

WHEREAS, Grantor is the owner of the following real property in Nevada County, California located at Bennett Street east of Grass Valley city limits more specifically described as a portion (portions) of Nevada County Assessor parcel numbers 09-560-06 and 09-560-23 (hereinafter referred to as the "Property"), described in Exhibit A attached hereto and made a part hereof; and

WHEREAS, the Property constitutes a valuable element of the foothill cottonwood-willow riparian forest and California native grassland habitat, and its ecological, scenic, and aesthetic and open space values as recognized in California acts and statutes; and

WHEREAS, the Property consists of six general ecosystems within the Northwest Sierra Nevada Ecological Subregion of California, with a large population of rare California Reedgrass Tall Closed Graminoid Community, a madrone forest of unusual stature, and montane riparian forest community which provides nesting, forage and cover for a variety of common wildlife and species, including California black bear, and mountain lion; and

WHEREAS, the Property does possess the habitat for the following federal and California Department of Fish and Game species of concern which have been reported in the nearby surrounding area: Foothill Yellow-legged Frog, *Rana boylii*, Northwestern Pond Turtle, *Clemmys marmorata marmorata*; and

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WHEREAS, maintenance of such habitat helps support many other non-listed species dependent on the water source, nesting habitat and food sources found on this declining habitat in the Grass Valley area of Nevada County, California; and

WHEREAS, all of these natural, ecological, and aesthetic values are of great importance to the Grantor and to the people of the State of California, and are worthy of preservation; and

WHEREAS, Grantor desires and intends that the natural, ecological, and aesthetic values of the Property be preserved and maintained by the continuation of patterns of land use on the Property that will not interfere with or substantially disrupt the ecosystem or the workings of the natural systems; and

WHEREAS, Grantor, as the owner in fee of the Property, owns the rights to identify, to preserve and protect in perpetuity, and to enhance the restoration of the ecosystem, the natural systems and processes, and the aesthetic values of the Property; and

WHEREAS, Grantor desires and intends to transfer certain of such rights to the Grantee for the express purpose of furtherance of the identification, preservation and protection in perpetuity and the enhancement and restoration of the ecosystem, the natural systems and processes, and the aesthetic values of the Property; and

WHEREAS, Grantee is organized to preserve and conserve natural areas and significant land for ecological, scenic, aesthetic, charitable, recreational and educational purposes; and

WHEREAS, the State of California has recognized the importance of private efforts toward the preservation of natural systems in accordance with the laws of California; and

WHEREAS, the Grantee is a qualified private organization under the terms of California State Code and is qualified to receive and hold conservation easements as provided in California Civil Code Sections 815 and 816; and

WHEREAS; the Grantee is an organization described in Section 170 (h)(3) of the United States Internal Revenue Code qualified to receive and hold conservation easements;

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and pursuant to state code, Grantor hereby conveys to Grantee this Easement, for the express purposes as set forth herein, consisting of rights hereinafter enumerated, on, over, and across the Property.

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SECTION I - RIGHTS CONVEYED

The rights conveyed by this easement are the following:

A. Identification and Protection. The right to identify, to preserve and protect in perpetuity, and to enhance the natural and open space, the ecological, scenic and aesthetic features, the water resources, and the natural flora and fauna on the Property, in the manner set forth in this Easement; subject, however, to Grantor's reserved rights as described in this Easement.

B. Access. The right to enter upon the Property to inspect the same and enforce the rights herein granted, and to observe, study, and make scientific observations of its ecosystems, at such times and frequency as is reasonable for the furtherance of the express conservation purposes of this Easement and in a manner that will not unreasonably interfere with the use of the Property by Grantor, or with the rights of the others on the Property, if any. Notwithstanding the foregoing, in addition, Grantee shall have the right of immediate entry upon the Property if, in Grantee's sole judgment, such entry is needed to prevent damage to or the destruction of the conservation purposes of this Easement.

C. Injunction and Restoration. The right to enjoin any activity on, or use of, the Property which is inconsistent with this Easement, and to enforce the reasonable restoration of such areas or features of the Property as may be damaged by such activities and consistent with the management plan by the Nevada County Land Trust, the Nevada County Conservation Alliance and The Empire Mine State Historic Park, California Department of Parks and Recreation (the "Management Plan") .

SECTION II - GENERAL EFFECT OF EASEMENT

A. Perpetual Restrictions. This Easement shall run with and burden the title to the Property in perpetuity and shall bind Grantor and all future owners and tenants of the Property.

B. Permitted Uses in General. This Easement is in gross, shall confine the use of the Property to activities such as are consistent with the express conservation purposes of this Easement, the terms of this Easement, and ecological study.

C. Dedication of Premises. Pursuant to the terms of applicable state code, the Property preserved by this Easement is declared to be open and natural land, and may not be converted or directed to any uses other than those provided for in this Easement.

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SECTION III - PERMITTED USES AND PRACTICES

The following uses and practices, are not inclusive of all permitted uses and practices, are illustrative of permitted uses and practices that are presently or may hereafter be recognized by and acceptable to the Grantee as being consistent with and in furtherance of the express purposes of this Easement, and, as such, these and other consistent uses and practices may not be precluded, prevented, or limited by this Easement.

A. Boardwalk. Installation of a boardwalk to minimize impacts of study and educational activities after consideration of the environmental impacts of such a boardwalk, and whose construction shall be minimally intrusive and consistent with the management plan.

B. Hazardous Tree Removal. Removal of hazardous trees or portions thereof, if as determined by Grantee, if there is imminent danger to life or property.

C. Implementation of Management Plan. Implementation of recommendations in the management plan to restore and/or maintain the health of native grasslands and riparian and aquatic habitats that ensure long-term sustainablitiy of priority elements.

D. Residual Rights. Except as expressly limited by this Easement, Grantor may exercise and enjoy all rights as owner of the Property, including the right to use the Property for any purpose not inconsistent with this Easement.

SECTION IV - NOTICE

A. Form. Whenever a provision is made under this Easement for giving any notice, the notice shall be deemed to have been given if personally delivered, with signed receipt, or mailed by the U.S. registered or certified mail, return receipt requested, addressed to the Party entitled to receive it at the address indicated below, or at another address provided from time to time. If either Party is required to obtain the other Party's prior written approval before performing any act or undertaking any enterprise, then the Party desiring to undertake any such act or enterprise shall not do so until the party has satisfied the notice provisions of this section and prior approval provisions of Section V herein.

B. Notice to Grantor: P.O. Box 670, Grass Valley, California, 95945, or to such other address as the Grantor may designate in writing.

C. Notice to Grantee: P.O. Box 2088, Nevada City, California, 95959, or to such other address as the Grantee may designate in writing.

SECTION V - PRIOR APPROVAL OF ACTIONS BY GRANTEE

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A. Grantor's Written Notice. Prior to the commencement of any activity, use, or enterprise which requires Grantee's approval, Grantor will notify Grantee in writing, as set forth in Section IV herein. Such notice must detail the timing, scope, methods and anticipated results of any proposed activity.

B. Grantee's Written Response. The Grantee shall have thirty (30) days from the date that it receives such notice, as indicated by the registered or certified return receipt, to review the proposed activity, use, or enterprise, and pursuant to the notice provisions set forth in Section IV herein, to notify Grantor of Grantee's approval of and/or any objections that Grantee may have to the proposed activity, use or enterprise. Objections, if any, shall be based upon Grantee's opinion that the proposed activity, use or enterprise is inconsistent with the purpose and/or provisions of this Easement. If, in the Grantee's judgment, the proposal set forth by Grantor can be modified to conform with the purposes and provisions of this Easement, then the same response shall inform Grantor of the manner in which the proposed activity can be modified to be consistent with this Easement. Except as provided in Paragraph C of this Section, Grantor can commence or conduct the proposed activity, use, or enterprise only if it receives Grantee's express written approval, and only in the manner explicitly proposed by Grantor and approved by Grantee.

In the event it is Grantee's opinion that the proposed activity is objectionable, based on the foregoing criteria, then, and in that event, Grantee shall make a good faith effort to advise Grantor how the proposal set forth by Grantor can be modified to conform with the purposes of the provisions of the conservation easement. The written response from Grantee shall then inform Grantor of the manner in which the proposed activity can be modified to be consistent with the conservation easement.

C. Grantee's Failure to Respond. If the Grantee fails to provide a written response, as provided under Section IV herein, to a written proposal properly sent to Grantee by Grantor, within thirty (30) days after Grantee receives the proposal, then the proposed activity, use or enterprise automatically shall be deemed consistent with the terms of this Easement, subject to the provisions set forth at Section XII(N) herein, and Grantee will have no further right to object to the activity described in the proposal.

D. Acts of God. Grantor will not be obligated to send any notice to Grantee, and Grantee will not be entitled to bring any action against Grantor, with respect to any reasonable and prudent activity undertaken by Grantor in a good faith effort to prevent, abate, or mitigate injury to the Property from fire, flood, storm, earth movement, acts of war, and similar causes beyond the control of Grantor.

SECTION VI - PROHIBITED USES AND PRACTICES

The Grantor states and agrees that the following prohibited uses and practices are not inclusive of all prohibited uses and practices, are illustrative of prohibited

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uses and practices that are presently or hereafter recognized by Grantee as being inconsistent with the purposes of this Easement and shall be strictly prohibited:

A. Introduction of non-native plant and animal species.

B. Erection or placement of any utilities, billboard, sign, fence or structure of any kind on, in or above the Property except with prior written approval by Grantee.

C. Deposition of any soil, trash, ashes, garbage, waste, landfill or any other toxic, noxious or objectionable material.

D. Excavation, dredging or removal of loam, gravel, soil, rock, sand or other material; building of any roads or trails; or any other change, temporary or permanent, in the general topography of the land, except with prior written approval by Grantee. Under no circumstance may any roadway or trail interfere with movement, nesting, forage or other normal activities and behaviors of animals on the Property or with the normal growth of plants on the Property as agreed upon by the Grantee.

E. Placement on, in or above the Property of advertising of any kind or nature whatsoever..

F. Activities, action or uses detrimental to water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation as so determined by Grantee in its reasonable judgment..

G. Livestock grazing.

H. Construction of or placement of fences, except, with the prior written permission of Grantee, such fences as specifically have a maximum of four strands of smooth wire, a bottom wire no lower than 18 inches from the ground and an upper wire not higher than 421 inches from the ground.. No fences shall be built by Grantor on or over the Property in any event except within 2 feet of the Property boundary line or roadway edge. Under no circumstances may any fence interfere with movement, nesting, forage, and other normal activities and behaviors of animals on the Property or with the normal growth of plants on the Property.

I. Cutting, destroying, or removing trees, brush or other vegetation, except as necessary for public safety or the health of the Property as determined by Grantee and with the prior written approval by Grantee.

J. Construction or placement of any recreational facilities, including, but not limited to, picnic tables, campfire rings, barbecue facilities, camping accommodations, or sports fields, on the Property except with the prior written approval by Grantee and consistent with the approved Management Plan.

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SECTION VII - BREACH AND RESTORATION

A. Notice and Remedy. If a violation of any restriction contained in Section VI of this Easement, whether by Grantor or by a third party, comes to the attention of Grantee, Grantee promptly shall notify Grantor, as provided in Section IV herein, of such violation. Grantor shall have thirty (30) days after receipt of such notice to undertake actions, including restoration of the Property, that are reasonably calculated to swiftly correct or otherwise remedy the effects, impacts and or conditions caused by such violation. If Grantor fails to take such corrective action, within thirty (30) days, Grantee may at its sole discretion, undertake such actions, including appropriate legal proceedings, as are reasonably necessary to effect such corrections, and the reasonable cost of such corrections, including Grantee's expenses, court costs, and legal fees, shall be paid by Grantor, provided Grantor is determined to be responsible for the violation as finally judged by a court of competent jurisdiction..

B. Restoration. Grantor and the Grantee further intend that should Grantor undertake or cause to be undertaken any activity which requires the prior approval by Grantee without so obtaining such prior approval by Grantee in the manner specified herein, then Grantee shall have the right to force the restoration of the Property affected by such activity to a condition similar or equivalent to the condition that existed prior to the undertaking of such unauthorized activity, by restoring soils, replanting suitable domestic vegetation, or taking such other action as Grantee deems necessary to achieve restoration. In such case, the costs of such restoration and Grantee's expenses, including but not limited to costs of suit and legal fees, shall be borne by Grantor or those of its successors or assigns against whom a judgment is entered, or in the event that Grantee secures redress without a complete judicial proceeding, by Grantor or those of its successors or assigns who are otherwise determined to be responsible for the unauthorized activity. Nothing contained in this Easement shall be construed to preclude Grantor from exhausting its legal remedies in determining whether the proposed activity to which Grantee has objected is inconsistent with this Easement. The parties hereto covenant and agree that the obligation to restore the Property to its prior condition, as provided in this Section VII, may be enforced only against that party or parties who shall have caused such damage, including, but not limited to Grantor and the heirs, personal representatives, successors or assigns of Grantor.

SECTION VIII - REAL ESTATE TAXES

Grantor agrees to pay any and all real property taxes and assessments levied by any competent authority on the Property.

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SECTION IX - INDEMNITY

Grantor agrees to bear all costs of operation, upkeep and maintenance of the Property, and agrees to indemnify Grantee against all claims and obligations arising from such operation, upkeep, and maintenance activities.

SECTION X - ASSIGNMENT OF EASEMENT

Grantee may not transfer or assign its interest in the Property created by this Easement except to a "qualified organization" (within the meaning of Section 170 (h) (3) of the Internal Revenue Code) which is organized or operated primarily or substantially for one or more of the conservation purposes specified in Section 170 (h) (4) (a) of said Code. Any such "qualified organization" shall agree to enforce the conservation purposes protected by this Easement. Grantee agrees that it will make a reasonable effort in the event of any assignment to choose an assignee which is a qualified organization other than a governmental unit referred to in Section 170(c) (1) of the Code, which has conservation of natural resources as a substantial organizational purpose and provided further, that Grantee represents to the Grantor that its present intention is to assign its interest in this Easement only in connection with a dissolution of Grantee.

SECTION XI - BASELINE DATA

Grantee acknowledges that a preliminary inventory of biological resources and physical condition relating to the Property (the Baseline Data") has been completed by competent naturalists familiar with the Property. Copies of the Baseline Data are on file in the Grantee's offices in Nevada City, California. The Parties acknowledge that the purpose of the Baseline Data is to identify and document the condition of the Property as of the date of the execution of this Easement. In the event of a controversy arising with respect to the nature of the biological and/or physical condition of the Property, neither Party shall not be foreclosed from obtaining, producing or procuring any and all other relevant or material documents, surveys, reports and other information to assist in the resolution of such controversy.

SECTION XII - MISCELLANEOUS PROVISIONS

A. Amendment. Nothing in this Easement shall be construed to preclude Grantor from making a subsequent conveyance of rights in the property to further protect its conservation values, provided, however, that any such subsequent conveyance shall not impair any conservation purpose sought to be advanced by this Easement.

B. Binding Effect; No Third Party Benefits. This Easement shall be binding on all successors and assigns of both Parties and inure to the benefit of the respective successors and assigns of both Parties. Nothing in this Easement shall be

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deemed to create rights in or benefits for any third parties. Each assignee or purchaser must agree to be bound by the terms of this Easement.

C. Condemnation. If the easement is taken, in whole or in part, by exercise of the power of imminent domain, Grantee shall be entitled to compensation in accordance with applicable law.

D. Enforcement. Grantor intends that enforcement of the terms and provisions of this Easement shall be at the discretion of Grantee, and that Grantee's failure to exercise its rights under this Easement in the event of any breach of this Easement by Grantor shall not be deemed or construed to be a waiver of Grantee's rights under this Easement in the event of any subsequent breach.

E. Estoppel Certificates. Upon request by Grantor, Grantee shall within twenty (20) days execute and deliver to Grantor any lawful document, including an estoppel certificate, which certifies Grantor's compliance with any obligation of Grantor contained in this Easement and otherwise evidences the status of this Easement as may be requested by Grantor.

F. "Grantor" and Grantee". The terms "Grantor" and "Grantee", as used in this Easement, and any pronouns used in place thereof, shall mean and include the above-named Grantor, and its heirs, personal representatives, executors and assigns, and the Nevada County Land Trust, and its successors and assigns, respectively.

G. Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purpose of appropriate California state code and the conservation purposes set forth above. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purpose of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

H. Partial Invalidity. If any provision of this Easement or the application of this Easement to any person or circumstance is found to be invalid, the remainder of the provisions of this Easement, and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

I. Recordation. Grantee shall record this instrument in timely fashion in the official records of Nevada County, California, and may re-record it at any time as may be required to preserve Grantee's rights in this Easement.

J. Subsequent deeds. Grantor agrees that reference to this Easement will be made in any subsequent deed, or other legal instrument, by means of which Grantor conveys any interest in the Property (including any leasehold interest), and that a copy of this Deed of Conservation Easement will be attached thereto.

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K. Titles. Section and paragraph titles and subtitles are for convenience only and shall not be deemed to have legal effect.

L. Waiver of Certain Defenses. Grantor hereby waives any defense of laches, estoppel, or prescription.

M. Waiver of Rights. Any waiver of any of the terms hereof shall be enforceable only to the extent it is waived in a writing signed by the Party against whom the waiver is sought to be enforced. Any waiver shall be only effective for the particular instance for which it is granted and shall not constitute a waiver of a subsequent occurrence of the waived event not constitute a waiver of any other provision hereof, at the same time or subsequently.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Easement on November 30 1999

GRANTORS:

Robert T. Roark, Trustee udt dated 4/13/84

John P. O'Brien, Trustee
John and Claire O'Brien Trust dated 3/30/95

Claire E. O'Brien, Trustee
John and Claire O'Brien Trust dated 3/30/95

GRANTEE:

NEVADA COUNTY LAND TRUST

Elizabeth S. Fry
President

NEVADA COUNTY LAND TRUST
Ronald Mathis
President

(final rev. 11/12/99)

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State of California

County of Nevada

ALL-PURPOSE ACKNOWLEDGMENT

On November 30, 1999 before me, D. Stewart

personally appeared Robert T. Roark, John P. O'Brien, Claire E. O'Brien and Elizabeth S. Fry

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

D. STEWART
Comm. #1092191
NOTARY PUBLIC - CALIFORNIA
NEVADA COUNTY
Comm. Exp. March 24, 2000

Signature

All Purpose Acknowledgment
1C4521CA (06/94)

~~END OF DOCUMENT~~

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STATE OF CALIFORNIA
COUNTY OF Nevada } SS.

On May 8, 2000 before me, the undersigned a Notary Public, personally appeared Ronald Mathis personally known to me (or proven to me on the basis of satisfactory evidence) to be the person(s)whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal.

Signature D. Stewart

D. Stewart
Name (Typed or Printed)

Notary Public in and for said County and State

MGC1 D. STEWART COMM. # 1256809 NOTARY PUBLIC-CALIFORNIA NEVADA COUNTY COMM. EXP. MARCH 24, 2004 MGC1

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A portion of the lands situated in the County of Nevada, State of California conveyed by John L. Wilcox and Evangeline H. Wilcox, husband and wife, and Lee D. Roark and Dorothy A. Roark, husband and wife, to Robert T. Roark, Trustee U/D/T dated April 13, 1984 as to a 1/2 interest, and John P. O'Brien as to a 1/2 interest, by Grant Deed dated May 15, 1987 and recorded May 18, 1987, as File No. 87-13323 of Official Records of Nevada County, said lands being within the South half of Section 26, Township 16 North, Range 8 East, M.D.M., said portion being more particularly described as follows:

COMMENCING at a point from which the South one quarter corner of said Section 26 bears South 01° 25′ East 693.00 feet, said point being a corner on the Northerly line of that certain parcel of land conveyed to the State of California, by Deed recorded March 10, 1975, in Book 730, of said Official Records at Page 633, being also an angle point on the Southerly line of the lands described in said Grant Deed recorded as File No. 87-13323;
thence from said POINT of COMMENCEMENT along said Northerly and Southerly line North 89° 30′ 27″ East 516.02 feet to the TRUE POINT OF BEGINNING of the herein described parcel;
THENCE leaving said Northerly and Southerly line North 211.16 feet
thence North 80° 14′ 51″ East 89.48 feet;
thence South 81° 22′ 43″ East 270.59 feet;
thence North 20° 30′ 29″ East 200.00 feet;
thence South 69° 29′ 31″ East 111.05 feet;
thence North 89° 39′ 06″ East 312.77 feet;
thence South 87° 52′ 00″ East 167.90 feet;
thence North 81° 58′ 28″ East 165.06 feet more or less to the Easterly line of the lands described in said Grant Deed recorded as File NO. 87-13323;
thence along said Easterly line South 07° 56′ West 346.51 feet to the above referenced Northerly and Southerly line, said point being marked with a "T" rail on a North line of the Town Talk Placer Mine according to said Grant Deed recorded as File No. 87-13323;
thence along said Northerly and Southerly line South 89° 30′ 27″ West 1126.00 feet to the TRUE POINT OF BEGINNING.

The above described parcel contains 7.65 acres more or less.

This property description has been prepared by me, or under my direction, in conformance with the Professional Land Surveyor's Act.

Jerome P. Klopotek
L.S. 4301 Exp. 6/30/00

LICENSED JEROME P. KLOPOTEK LIC. No. 4301 STATE OF CALIFORNIA

EMPIRE MINE S.H.P.
9/2/99
O'BRIEN TO LAND TRUST
CONSERVATION EASEMENT

Page 1 of 1

END OF DOCUMENT

Attachment 3
Bennett Street Conservation Easement Photos





Attachment 3 Photos





Attachment 3 Photos

GROUP LETTER 2: ERIN TARR, BEAR YUBA LAND TRUST

Response to Comment Grp 2-1

This is an introductory comment and does not provide a comment on a specific environmental issue associated with the project. Comment noted.

Response to Comment Grp 2-2

This is an introductory comment recognizing the existence and location of the Bennett Street Grasslands conservation easement and does not provide a comment on an environmental issue associated with the project; rather, the comment expresses general concerns regarding the project's impacts to the 7-acre Bennett Street Grasslands Conservation Easement. The commenter provides specific concerns in the following sections of the letter. Please see the below responses to comments.

Response to Comment Grp 2-3

This is an introductory comment outlining the commenter's legal obligations to the Bennett Street conservation easement and generally expresses concern that the DEIR does not recognize the conservation easement in the environmental setting and land use sections. The commenter is correct that the Bennett Street conservation easement is not specifically identified in the DEIR, but incorrectly assumes this means impacts to surrounding land uses were not analyzed. The DEIR addresses impacts to surrounding receptors and land uses where appropriate and dependent on the specific resource analysis. For example, the aesthetics analysis analyzes impacts to the surrounding viewshed through visual simulations from those viewpoints. The hydrology analysis looks at both groundwater impacts to surrounding well owners and impacts associated with discharge to South Wolf Creek on the water quality and sedimentation. In addition, the biology section analyzes impacts to transitory species such as birds, raptors, and other wildlife that could exist in the region. As a result, the DEIR correctly analyzes the proposed project's impacts on the environment and is not required to analyze how the project may affect legal obligations of surrounding landowners. The commenter also does not explain how the project conflicts with any of the listed policies.

Regarding the commenter's concerns about the project's potential to impact the water quality and quantity in South Wolf Creek, please see Master Response 35 – Discharge to South Fork Wolf Creek, and Master Response 36 – Flows in South Fork Wolf Creek.

Response to Comment Grp 2-4

The commenter raises various general comments regarding certain special-status and migratory species that may be impacted by the project and the potential for offsite impacts due to South Wolf Creek discharge. The commenter does not offer evidence of any specific impact, but speculates that an impact could result. However, as stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." Please see Master Response 37 - Birds and Raptors, addressing general comments concerning the olive-sided flycatcher (*Contopus cooperi*), yellow-breasted chat (*Icteria virens*), and yellow warbler (*Setophaga petechia*). Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog, regarding impacts to amphibian species. Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water

Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. Regarding benthic macroinvertebrates, please see Response to Comment Grp 31-12.

Response to Comment Grp 2-5

The Bennett Street Grasslands are located in "Reach D" of the geomorphic assessment for South Fork Wolf Creek. Proposed discharge from the project to South Fork Wolf Creek would range from 1.9 cfs to 5.6 cfs. As shown in Table 5.5 of Appendix K.1 of the DEIR, an increase from 2 cfs to 6 cfs (4 cfs increase) would increase the depth of water from approximately 0.69 ft to 0.91 ft (2.6 inches increase in depth). At 10 cfs the max depth is estimated at 1.09 feet. The discharge would result in a minor increase in water depth and total water depth would be less than a "bank full" event which is estimated at a depth of approximately 1.3 ft for Reach D (See Table 5.1 of Appendix K.1). Bankfull is a term used to characterize the channel dimensions of the channel under the most frequent flows (between a 1- and 2-year flood) identified by change in bank slope, vegetation, or absence and presence of sedimentation. The high-water mark depth for Reach D is approximately 5.6 feet (See Table 5.1 of Appendix K.1). The project would not result in water levels in the Creek exceeding a normal bankfull event or flooding outside of the creek channel and therefore would not affect vegetation adjacent to the creek or interrelated habitat. A series of master responses have been prepared to address potential impacts associated with treated water discharge into South Wolf Creek. Please see:

- Master Response 36 - Flows in South Wolf Creek and Wolf Creek,
- Master Response 32 - Temperature of Mine Water Discharge,
- Master Response 35 - Discharge to South Wolf Creek, and
- Master Response 33 - Groundwater Dependent Vegetation

Response to Comment Grp 2-6

The CEQA guidelines require analysis of substantial interference to "the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites." Migration is defined as the seasonal movement of animals from one habitat to another. Various animal, bird, and fish species are not automatically considered migratory just because they move from one location to another. Migration serves a purpose for the species such as winter/summer habitat for foraging or breeding. It is acknowledged, and analyzed in the DEIR impact analysis (see Section 4.4.4), that species exist within the project site that are common to the area. Potential impacts to these species were analyzed and mitigation measures have been provided where it was determined impacts to species could occur as a result of project activities, including preconstruction surveys and agency permitting. The only migratory species acknowledged by the County General Plan is deer migration corridors. Impact 4.4-4 addressed the project's impact to this potential migratory corridor and concluded it would be less than significant. The commenter does not raise any specific impact that would be caused by the project, but speculates that impacts could result. CEQA does not require analysis of speculative impacts. (CEQA Guidelines Section 15384.)

In addition, the commenter identifies South Fork Wolf Creek as a vital wildlife movement corridor that could be affected by changes in water quantity and quality. For these concerns, please see Master Response 35 – Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. It is also noted that DEIR Impact 4.4-3 requires the preparation of aquatic resources management plans that will mandate setbacks and other requirements to minimize

impacts to Wolf Creek, South Fork Wolf Creek, and surrounding habitat, which is consistent with General Plan Policy 13.1 (i.e., retain non-disturbance open space to promote continued viability of contiguous or inter-dependent habitats by avoiding fragmentation of existing habitat areas and preserving movement corridors between related habitats). Draft management plans were included as Appendices F.5 and F.8.

Response to Comment Grp 2-7

The commenter asserts that there is no surface water quality baseline data presented in the DEIR. However, this is incorrect, as sampling was performed within South Fork Wolf Creek (See Master Response 35 – Discharge to South Fork Wolf Creek) to ascertain existing water quality in the creek. The commenter requests that specific samples be taken from South Fork Wolf Creek to establish baseline water quality; however, as discussed above, sufficient sampling has already been conducted to analyze the project's potential water quality impacts.

Response to Comment Grp 2-8

The commenter asserts that the DEIR Project Description did not provide enough detail on how water discharged into South Fork Wolf Creek would not cause a significant impact to water quality. However, the Project Description is not the portion of the DEIR that analyzes project impacts; rather the project's potential water quality impacts are analyzed in detail in Chapter 4.8 of the DEIR. As discussed in great detail in Chapter 4.8 of the DEIR, the project may have a potentially significant impact on water quality and therefore Mitigation Measure 4.8-1(a) is required to address these potential impacts. This mitigation measure requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. The NOI shall include evaluation of potential constituents of concern and demonstrate that the water treatment plant (WTP) design shall successfully treat mine water to meet the water quality standards and treatment goals.

Please see Master Response 32 - Temperature of Mine Water Discharge, Master Response 35 - Discharge to South Fork Wolf Creek, and Master Response 36 - Flows in South Fork Wolf Creek.

The commenter states that there is substantial evidence showing that the creek's water quality would be adversely affected by the project-generated surface water run-off and that total maximum daily load (TDML) was not used to measure this project impact. The commenter does not provide this substantial evidence, specify what surface runoff would affect the creek's water quality, or the commenter's definition of TDML and how the project impact would be measured and analyzed by TDML. In regard to surface water runoff from engineered fill, please see Master Response 8 - Mine Waste Characterization. Mitigation Measures 4.8-1(b) and 4.8-1(c) require Construction and Industrial Stormwater Pollution Prevention Plans (SWPPP). As discussed in Chapter 4.8 of the DEIR and stated on page 4.8-49 of the DEIR, SWPPP would address any activities that would have the potential to release pollutants to stormwater, including material and chemical storage, vehicle operation and maintenance, and material handling and transport.

Response to Comment GRP 2-9

DEIR Section 4.8.4, Impact 4.8-1, analyzed the proposed project's impacts on water quality and determined project construction could result in a potentially significant impact. The DEIR requires a construction stormwater prevention and pollution plan as Mitigation Measure 4.8-1, which reduces the impact to a less than significant level. The County has a mitigation monitoring and

reporting program included with the Final EIR, which will allow the County to have monitoring and enforcement authority over project mitigation and conditions of approval. The commenter's assertion that the applicant would fail to comply with the storm water pollution prevention plan is speculative, and CEQA does not require analysis of speculative impacts. Moreover, the County and RWQCB have enforcement authority over the mine operator's implementation of the SWPPP.

Response to Comment Grp 2-10

The commenter points to the League to *Save Lake Tahoe Mountain Area Preservation Foundation v. County of Placer* (2022) 75 Cal.App.5th 63, court decision to support its assertion that the DEIR is inadequate. Specifically, the commenter asserts that the DEIR does not provide adequate baseline description, methodology, cumulative impacts analysis and adequate mitigation measures. The environmental baseline is provided in extensive detail in each resource section of the DEIR; cumulative impacts are analyzed throughout the DEIR for each resource area; and the DEIR includes numerous mitigation measures designed to reduce impacts where feasible. The present project is distinguishable from the project in the cited case, and the commenter provides no specific example of how they are similar.

Response to Comment Grp 2-11

The commenter states that a combination of Alternative 2 and Alternative 4 should be considered, which would eliminate placement of fill material on the Centennial Site but also reduce extraction as proposed in Alternative 4. Section 6 of the DEIR considered project alternatives. As summarized in DEIR section 6.2, and provided in CEQA Guidelines section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis since they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the public and decisionmakers. The Alternative proposed by the commenter is not anticipated to eliminate any of the significant impacts of the project, and would also lessen the project's benefits by reducing employment and making the project less financially feasible.

Response to Comment Grp 2-12

Please see Master Response 1 - Non-EIR/Administrative Issues.

Response to Comment Grp 2-13

The comment generally summarizes the content of the letter. Please see Responses to Comments Grp 2-2 through Grp 2-12. Please also see Master Response 1 - Non-EIR/Administrative Issues.

Group Letter 15

March 31, 2022

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA 95959

Dear Supervisors Sue Hoek, Heidi Hall, Ed Scofield, Dan Miller and Hardy Bullock:

As Board Directors, entrusted with the representation of over 8,000 BriarPatch Co-op owner-members, we are writing to express our opposition to the proposed reopening of the Idaho-Maryland Mine by Rise Gold Corp.

Grp 3-1 BriarPatch is driven by Ends Policies which include environmental stewardship, a stronger local food system, and a community-focused healthy workplace. We are deeply committed to improving the quality of life for our shoppers and staff. Rise Gold plans and their Draft Environmental Impact Report contain several troubling aspects that are counter to these unwavering values.

Grp 3-2 This project is expected to use 12% of Nevada County's electrical supply, more than all the rest of the County's businesses combined. We have worked hard as an organization toward a net zero energy goal and are inspired to see the county reduce their carbon footprint as well. This would erase all gains made toward that end. Additionally, with PSPS and catastrophic weather events, we question the judgement of one single business using so much energy, thus compromising the grid.

Grp 3-3 With an alarming drought, there are serious concerns about our watershed. The Co-op has implemented strategies that have saved an average of 150,000 gallons each month. Rise Gold plans on pumping more than a million gallons a day for decades. Further, we are very concerned about

Grp 3-4 arsenic, ammonia, and other contaminants from treated mine wastewater polluting downstream irrigation water and prohibiting farm use. Self-monitoring of water quality is not a high enough bar for Rise Gold, especially given the track record of the company's CEO.

Grp 3-5 Air quality is another major concern, especially during peak fire season. Rise Gold's 'dump site' is just a mile from the Co-op's front door and there will be atmospheric exposure to employees, as well as shoppers. The safety of our staff is of the highest priority. Our owner-members are very health conscious and we do not want their shopping experience polluted.

Grp 3-6 As you review public comments on this issue, we urge you to consider what is best for the quality of life for the residents of this community. We ask that you vote against approval of the mine, affirming your contract with your constituency that you are acting in the best interest of all.

BriarPatch Food Coop * 290 Sierra College Drive * Grass Valley CA 95945

Sincerely,

Alana Lucia, Board President

Rachel Berry, Board Vice-President

Katie Ivy, Board Secretary

Mark Fenton, Board Treasurer

Kwong Chew, Board Director

Jonathan Collier, Board Director

Kali Feiereisel, Board Director

Richard Drace, Board Director

Alan Weisberg, Board Director

Cc: Nevada County Planning Commission (Suite 170)

BriarPatch Food Coop * 290 Sierra College Drive * Grass Valley CA 95945

GROUP LETTER 3: MARY HUNTER, BRIARPATCH FOOD CO-OP

Response to Comment Grp 3-1

The commenter's opposition to the proposed project is noted for the decisionmakers. Please see Master Response 1 - Non-EIR/Administrative Issues.

Response to Comment Grp 3-2

This commenter is concerned with the electrical power usage associated with the project and that it would negate progress towards net-zero energy goals. The commenter is also concerned with Public Safety Power Shutoffs (PSPS) and catastrophic weather events.

The commenter is correct that the proposed project would create new demand for energy resources. However, the threshold for significance for energy impacts established by CEQA Guidelines Appendix G is not whether a project would use energy, but whether a project would use energy in an inefficient or wasteful manner. The DEIR's discussion of Impact 4.3-4 summarizes the various measures that would be implemented to reduce the project's energy demand including the use of high-efficiency off-road equipment, the use of Tier 4 Final compliant engines for emergency generators, and fleet compliance with federal and state fuel efficiency standards. (DEIR, p. 4.3-86–88.) The DEIR concludes that implementation of these measures would ensure that the project does not result in the inefficient or wasteful use of energy and the impact would be less than significant. Please also see Response to Comment Agcy 8-17. Furthermore, Impact 4.3-10 determined that the project would not conflict or interfere with any State adopted plans for renewable energy production or energy efficiency. (DEIR, p. 4.3-88–90.)

CEQA Guidelines Appendix G also determines the significance of impacts based on whether a project requires or results in the relocation or construction of new or expanded electrical power facilities. (DEIR, p. 4.11-19.) The DEIR found that impacts related to requiring the relocation or construction of new or expanded electrical power facilities would be less than significant. (DEIR, p. 4.11-31.) The electrical grid system in the project area is well developed and PG&E has provided a will serve letter for the project. (DEIR, p. 4.11-35.) The commenter provides no evidence to support its statement that the project would "compromise" the electrical grid.

The portion of the comment regarding the potential for catastrophic weather events to compromise the power-grid does not address the adequacy of the DEIR and does not warrant further response but is noted for the decisionmakers.

Response to Comment Grp 3-3

This comment expresses concern regarding the area's watershed and the project's anticipated water demands in light of the drought that California is experiencing.

Regarding the project's anticipated water demands for both potable and non-potable uses, the DEIR found that there are sufficient water supplies available to serve the proposed project as well as existing and reasonably foreseeable future development during normal, dry, and multiple dry years and that the project's impacts to water supplies would be less than significant. (DEIR, p. 4.11-43). The DEIR evaluates the project's potential impacts on groundwater resources (see Impact 4.8-2 on DEIR pages 4.8-54 through -68) and concludes that with implementation of Mitigation Measures 4.8-2(a) through 4.8-2(c), impacts to groundwater supplies would be less than significant. The DEIR further evaluates the sufficiency of available water supplies to meet

the project's demands (see Impact 4.11-7 on DEIR pages 4.11-35 through -43) and concludes that available supplies would be sufficient, and no mitigation is required.

Response to Comment Grp 3-4

The commenter is also concerned with contaminants in the treated mine wastewater and that self-monitoring is insufficient given the "track record of the company's CEO."

Please see Master Response 35 regarding the discharge to South Fork Wolf Creek. The DEIR found any impacts associated with violation of any water quality standard or waste discharge requirements would be less than significant after mitigation. (DEIR, p. 4.8-41.) Impact 4.8-1 in the DEIR addresses the potential for project wastewater to contain elevated levels of relevant contaminants. (DEIR, p. 4.8-41–53.) The DEIR acknowledges that the "proposed project's construction and operations involve multiple activities that could result in adverse effects to water quality." (DEIR, p. 4.8-51.) However, the project's "proposed water management and treatment, and adherence to permit requirements [of the RWQCB] would avoid significant impacts to water quality…" (DEIR, p. 4-8.51.) The DEIR describes the specific requirements for regulatory compliance in Mitigation Measures 4.8-1(a) through 4.8-1(e). Coverage under the Limited Threat Discharge permit would require ongoing water quality sampling and testing, with oversight by the RWQCB, to demonstrate that the proposed water treatment plant is successfully treating mine water to meet the water quality standards and treatment goals of the permit. All samples, data and analysis would be verified and evaluated by qualified RWQCB staff, and the RWQCB would have enforcement authority.

While comments related to the CEO of the Project Applicant are not relevant for CEQA purposes, this topic is addressed in Master Response 3 – Operator Responsibility.

Response to Comment Grp 3-5

The commenter is concerned with the air quality impacts of the project, especially during peak fire season.

The DEIR addresses potential air quality impacts of the proposed project in Chapter 4.3, "Air Quality, Greenhouse Gas Emissions, and Energy" and found that impacts associated with air quality would be less than significant after mitigation. (DEIR, 4.3-66, -78, -84.) Specifically, Impact 4.3-2 addresses the potential to expose sensitive receptors to substantial pollutant concentrations. (DEIR, 4.3-78–84.) The DEIR concludes that "project-related CO emissions would not exceed the one-hour or eight-hour thresholds, and, as such, the project would not expose sensitive receptors to excess concentrations of CO." (DEIR, p. 4.3-82.) The DEIR further demonstrates "that emissions of [toxic air contaminants] would not result in health risks to nearby receptors in excess of NSAQMD thresholds. Furthermore, criteria pollutant emissions from project construction, operations, and reclamation would not expose receptors to substantial concentrations of pollutants." (DEIR, p. 4.3-82.) Mitigation Measure 4.3-2 addresses the potential for exposure to existing levels of asbestos in project site fill materials by requiring development and implementation of an Asbestos Dust Mitigation Plan. (DEIR, p. 4.3-82.) With implementation of this mitigation measure, the impacts to air quality would be less than significant. Please also see Master Response 18 - Air Quality Thresholds, and Master Response 19 – NSAQMD Criteria Pollutant Thresholds during Operations.

Response to Comment Grp 3-6

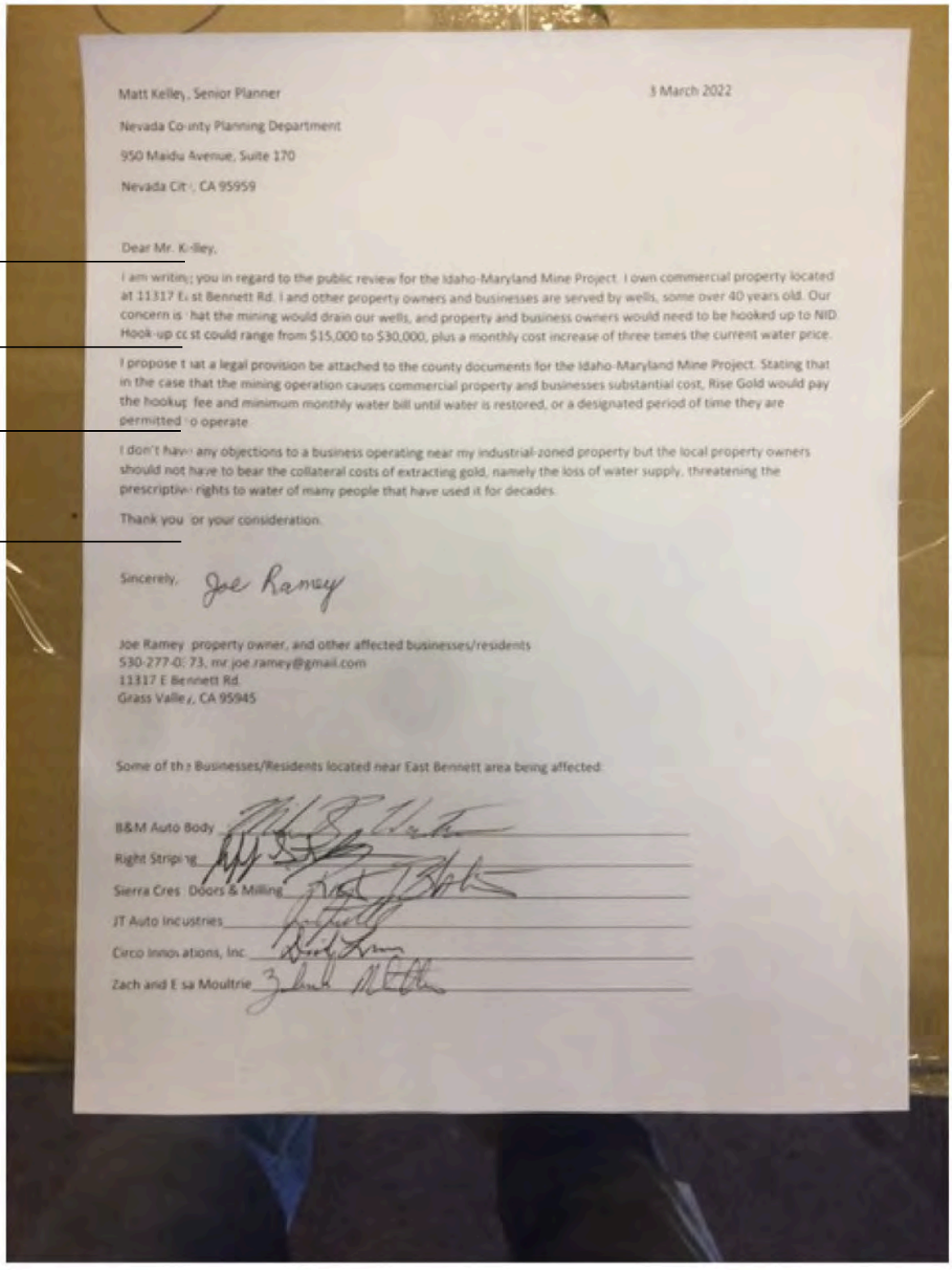
The commenter's opposition to the project is noted for the decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues.

Group Letter 4

Grp 4-1

Grp 4-2

Grp 4-3



Matt Kelley, Senior Planner

3 March 2022

Nevada County Planning Department

950 Maidu Avenue, Suite 170

Nevada City, CA 95959

Dear Mr. Kelley,

I am writing you in regard to the public review for the Idaho-Maryland Mine Project. I own commercial property located at 11317 East Bennett Rd. I and other property owners and businesses are served by wells, some over 40 years old. Our concern is that the mining would drain our wells, and property and business owners would need to be hooked up to NID. Hook-up cost could range from $15,000 to $30,000, plus a monthly cost increase of three times the current water price.

I propose that a legal provision be attached to the county documents for the Idaho-Maryland Mine Project. Stating that in the case that the mining operation causes commercial property and businesses substantial cost, Rise Gold would pay the hookup fee and minimum monthly water bill until water is restored, or a designated period of time they are permitted to operate.

I don't have any objections to a business operating near my industrial-zoned property but the local property owners should not have to bear the collateral costs of extracting gold, namely the loss of water supply, threatening the prescriptive rights to water of many people that have used it for decades.

Thank you for your consideration.

Sincerely, Joe Ramey

Joe Ramey property owner, and other affected businesses/residents
530-277-0[illegible]73, mr.joe.ramey@gmail.com
11317 E Bennett Rd.
Grass Valley, CA 95945

Some of the Businesses/Residents located near East Bennett area being affected:

B&M Auto Body

Right Striping

Sierra Cres Doors & Milling

JT Auto Industries

Circo Innovations, Inc

Zach and Elsa Moultrie

GROUP LETTER 4: JOE RAMEY, BUSINESS OWNERS (MULTIPLE SIGNATURES)

Response to Comment Grp 4-1

The commenter owns property near the project site and is concerned that the dewatering of the mine will impact the groundwater well service the property. Water wells in this area (E. Bennett Industrial Area) have been evaluated in the DEIR and are predicted to experience minimal drawdown of 1 to 2 feet from mine dewatering (see page 79 of Appendix K.2) and no mitigation for these properties is proposed. However, if groundwater monitoring during the initial dewatering determines that mitigation is required for these properties, the Project Applicant would be required to fund the associated costs to connect to NID. The commenter is referred to Chapter 4.8 (Hydrology and Water Quality) of the DEIR and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 4-2

The commenter requests that the Project Applicant be required to pay any costs associated with the connection to NID in the event a property's groundwater well is impacted. The mitigation measures for the project already specify the requirements for the applicant to fund any necessary well mitigation. The commenter is referred to Chapter 4.8 (Hydrology and Water Quality) of the DEIR and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 4-3

The commenter states that nearby property owners should not have to pay the connection cost to NID as a result of the project. The commenter is referred to Response to Comment Grp 4-1.

Group Letter 5

California Native Plant Society

Redbud Chapter CNPS

Mr. Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902 (530) 265-1423

Via email: Idaho.MMEIR@co.nevada.ca.us

Dear Mr. Kelley,

Thank you for the opportunity to comment on the Draft Environmental Impact Review for the Idaho Maryland Mine.

This letter, submitted on behalf of the California Native Plant Society and its local Redbud Chapter, is focused on the flaws in the DEIR relating to Biological and Aquatic Resources for the Centennial and Brunswick sites.

I. The DEIR's use of a project definition that excludes the Centennial Cleanup violates CEQA.

Grp 5-1

The DEIR fails to meet CEQA requirements by omitting the cleanup in its analysis of impacts. Because the preparation for reopening and subsequent operation of the IMM cannot proceed without the cleanup, the two constitute a single project for the purposes of CEQA and their environmental impacts must be analyzed together.

The *Guidelines for Implementation of the California Environmental Quality Act* define the term "project" broadly: "'Project' means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: ... (3) An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies." 14 CCR Sec. 15378 (a).

The DEIR has excluded the cleanup of the Centennial site and improperly defined the Idaho Maryland Mine "project" as everything but the cleanup plan that is currently under review by

the Department of Toxic Substances Control ("DTSC"). This is contrary to CEQA: "The term 'project' refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. *The term 'project' does not mean each separate governmental approval.*" 14 CRR Sec. 15378 (c) (Emphasis added.)

CEQA's broad definition of "project" is intended to prevent "a proponent or a public agency from avoiding CEQA requirements by dividing a project into smaller components which, when considered separately, may not have a significant environmental effect. ..." *Nelson v. County of Kern*, 190 Cal. App. 4th 252 (2010).

In *Nelson*, the Federal Bureau of Land Management had conducted an environmental review of a request for a permit for a surface mining operation and had issued the permit. Kern County then limited its review to a consideration of whether it should approve the reclamation plan for that mine. The Appellate court concluded that the County was required to review "*both* the mining operations and the reclamation plan. Both aspects were integrally related and constituted the whole of the action or the entire activity for which approvals were being sought. ... [T]he reclamation plan was simply the final phase of the overall usage of the land proposed by [the applicant] ... ." 190 Cal. App. 4th 272.

Here, the cleanup is "simply the [first] phase" of the land usage; the mine and the cleanup are "integrally related" and constitute "the entire activity for which approvals [are] being sought."

In treating the cleanup as "separate," the DEIR focuses on "isolated parts of the whole" of the IMM project, "overlooking" and distorting its cumulative impacts and failing to inform the public and decision makers of significant environmental impacts. In so doing, it thwarts the purposes of CEQA. *McQueen v. Board of Directors* (1988) 202 Cal.App.3d 1136, 1144.

This flaw – excluding the Centennial site cleanup from the DEIR's CEQA review – is inherent in the original Notice of Preparation ("NOP") issued July 17, 2020. The NOP declares that that the "project applicant" is working with DTSC to clean up the Centennial site "*separate from the proposed project.*" (Emphasis added) (NOP p. 5)

After declaring the cleanup to be "separate" from the mine, the NOP describes the mine project in such a manner that it is clear the mine is dependent on the cleanup, not a separate project. Thus, the Centennial site "currently cannot be developed" because of contamination caused by historic "deposition of mine tailings on the site" (NOP p. 5), but the IMM will nonetheless (1) use the Centennial site (after the cleanup) for depositing 1.6 million tons of *additional* mine waste, and (2) reclaim the Centennial site for reuse or sale after the mine closes 80 years later.

Specifically, the NOP Site Plan for the Centennial Site calls for 44 acres of the 56-acre site to be buried in new mine waste *after* the cleanup. (NOP p. 2; see also NOP Figure 7, "Site Plan – Centennial Industrial Site") ("Attachment A.") This same Figure is later used in the DEIR (Chapter 3, Page 3-16, Figure 9, "Site Plan").

In addition, the "reclamation plan" described in the NOP notes that after the closure of the mine, the Brunswick and Centennial "fill slopes would be revegetated with an erosion-control seed mix to reduce erosion and maintain fill slope stability. The fill pads would be maintained until they are used or sold for future industrial purposes." (NOP p. 9; see also DEIR Chapter 3, pp. 3-42, 3-46 and 3-47.)

Clearly, neither the dumping of 1.6 million tons of additional mine waste on the Centennial site nor the reclamation of land "to be used or sold for future industrial purposes" after the mine closes is possible without the cleanup. There is no basis whatsoever for the County to claim the cleanup is a "separate" project.

Such a separation of the mine project into arbitrary segments is explicitly forbidden by CEQA. Accordingly, the County's assertion that the cleanup is a "separate project" clearly must fail. The separation of the cleanup from the mine is artificial and misleading.

II. The CEQA Review of the Cleanup and the Mine Reopening Must Encompass the "Whole Project" and Must Not be Segmented or Reviewed in a "Piecemeal" Manner.

Under CEQA, "a project must not be broken into smaller parts, each of which alone might qualify for a Negative Declaration, in an attempt to avoid preparing an EIR." Mitigated Negative Declarations, CEQA Technical Advice Series, California Office of Planning and Research, p.2 *https://opr.ca.gov/docs/MND_Publication_2004.pdf. See also Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App.3d 151.

"CEQA forbids 'piecemeal' review of the significant environmental impacts of a project." *Berkeley Keep Jets Over the Bay Committee v. Board of Port Commissioners* (2001) 91 Cal.App.4th 1344, 1358. Agencies cannot allow "environmental considerations [to] become submerged by chopping a large project into many little ones—each with a minimal potential impact on the environment—which cumulatively may have disastrous consequences." *Bozung v. Local Agency Formation Com* (Cal. 1975) 13 Cal.3d 263, 284 (superseded by statute on other grounds).

The California Supreme Court set forth a piecemealing test in *Laurel Heights Improvement Assn. v. Regents of University of California* (Cal. 1988) 47 Cal.3d 376. "We hold that an EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects." *Laurel Heights*, 47 Cal.3d 376, 396.

There may be improper piecemealing when the reviewed project legally compels or presumes completion of another action. (*Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 272 [When reviewing a reclamation plan, the County should have included mining operations

that necessitated it]; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 732 [32 Cal.Rptr.2d 704] [EIR for residential development should have included sewer expansion that was a "crucial element" of development].

Here, the cleanup and the mine reopening application are part of one project requiring a single EIR. The same proponent, Rise Gold, dba Rise Grass Valley (RGV), sponsored the RAP and is also the applicant for the mining permit. The completion of the RAP is a prerequisite to the mine reopening, and the DEIR "presumes" the approval and completion of the RAP. The County has used the separate RAP review not only as a basis to disregard the wetlands and other biological resources at the Centennial site, but also as a tactic to justify using a hypothetical future "adjusted baseline" in the DEIR to avoid any assessment of the true environmental impacts of the mine.

The cleanup has been treated as a separate project even though it is on the same property as the Mine Project, with the same aquatic resources and environmental issues, and despite the fact that the mine cannot be reopened and operated without the cleanup.

Instead, the DEIR conveniently wipes the wetlands off the map. See, for example, DEIR Chapter 4.4 Biological Resources page 4.4-12, Figure C "IMM Project Baseline after DTSC Cleanup" which includes a blank 28-acre area labeled "Clean-up Area – DTSC Project." (Attachment "B")

The separation of the review of the cleanup from the mine project has enabled the County, with the aid of the DTSC, to attempt to evade any meaningful evaluation of the cumulative environmental impacts of the cleanup and the mine on the wetlands, riparian areas, and other important natural resources of the Centennial Site.

The fact that these two environmental reviews are taking place in tandem has obscured the impacts of the mine on aquatic and other biological resources at the Centennial site. The DEIR reflects the fundamental defects of this process; it omits any assessment of major environmental impacts on the Centennial site.

The results of this fragmented process include a DEIR that denies the existence of any protected wetlands and riparian areas at the Centennial site, premised on a flawed draft RAP that has not been approved.

Indeed, if the DEIR and RAP are approved in their current forms, the protected Centennial aquatic resources will be destroyed without any evaluation of environmental impacts. This is a textbook case demonstrating why CEQA policy prohibits "piecemeal" review. The Centennial Site and the Mine project are a single "project" and must be reviewed as such under CEQA. *See Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1222.

III. The County Improperly defers to DTSC's review of the cleanup as proposed in Rise Gold's Remedial Action Plan (RAP) in its MND.

Instead preparing its own EIR for the cleanup (as part of this DEIR), the County is deferring to the DTSC's use of a Mitigated Negative Declaration ("MND") process to review the cleanup plan. This amounts to splitting the analysis of the IMM project's environmental impacts across two types of environmental review documents, which is prohibited by CEQA.

The California Court of Appeals in *Farmland Protection Alliance v. County of Yolo* 71 Cal. App. 5th 300 (2021) reaffirmed that "'once evidence is presented that a project might have a substantial impact on the environment -- in any area -- the lead agency *must* proceed to prepare an environmental impact report *'for the proposed project.'* " (Citing *Muzzy Ranch Co. v. Solano County Airport Land Use Com.* (2007) 41 Cal.4th 372.)

An MND is appropriate only if there is no substantial evidence that a project might have a significant effect on the environment. *(Pub. Res. Code Section 21064.5).* Here, there is clearly substantial, indisputable evidence that the mine project "might have a significant effect on the environment." One specific example is the cleanup's environmental impact on the Centennial site wetlands and streams. This substantial evidence was presented during the DTSC process, and in the DEIR (including Appendices) itself.

Grp 5-2

The June 19, 2020, *Technical Memorandum for Centennial Industrial Site: Remedial Action Plan Project – Biological Resources Impact Assessment* submitted as part of the DTSC MND review shows that 4.35 acres of the 4.37 acres of mapped wetlands and .19 acres of the .6 acres of mapped streams would be "impacted" by the cleanup project (See p. 7, Tables 3.0 and 4.0 of the Technical Memorandum). At page 13, it is made clear that the wetlands will cease to exist: "Disturbance within the Centennial Industrial Site from the implementation of the RAP Project is estimated to fill a maximum of 4.35 acres of mapped wetlands and 0.19 acres of intermittent and ephemeral streams within the Centennial Industrial Site."

Thus, the plan is to dredge and fill essentially ~~all of~~all the wetlands and almost 30% of the mapped streams on the property. These impacts clearly constitute "significant environmental impacts."

Circulated for comment in July, 2021, the DTSC's draft MND and Draft Final Remedial Action Plan ("RAP") offered no alternatives that would preserve any of the mapped wetlands on the Centennial site. Instead, the plan is to use over 129,000 cubic yards of soil from these *uncontaminated* wetlands and streams as *clean fill* to "cap" and backfill the contaminated areas being remediated. See green dotted line surrounding wetlands on the "Overview of Proposed Remedial Action" map of the Centennial area (RAP Fig. 5). (Attachment "C") This area matches the outline of the "Clean-up Area – DTSC Project" on Attachment B. None of the alternative cleanup plans considered by the RAP called for using offsite sources of "clean fill" so that these wetlands could be preserved. Instead, they are to be destroyed.

Numerous comments on the MND and RAP were submitted, by Redbud CNPS and others, specifically challenging the failure to include the cleanup as part of the DEIR and presenting substantial evidence that the cleanup project as proposed could (and would) have significant environmental impacts in several areas.

Several comments also challenged the failure to consider alternatives that would preserve any portion of the wetlands. The DTSC is still reviewing the draft RAP and consulting with legal counsel, and has not approved the cleanup plan, or selected any of the alternative options described in the draft MND.

Yet the County's DEIR continues to attempt to sever the cleanup from the mine. The January 29, 2021 DEIR Appendix F-3, "Updated Technical Memorandum for Centennial Industrial Site: Idaho-Maryland Mine Project – Biological Resources Impact Assessment" notes in passing the mapped wetlands and streams at the Centennial Site mentioned above, then dismisses them as part of the so-called "separate" cleanup.

"The environmental cleanup work at the Centennial Industrial Site will be completed under the DTSC voluntary cleanup program and is outside the scope of the IMM Project. It is estimated that the cleanup program will cause a surface disturbance of 26.56 acres ... which will incorporate impacts to approximately 4.35 acres of mapped wetlands and 0.19 acres of mapped streams within the Centennial Industrial Site. Therefore, the impacts and associated mitigation of approximately 4.54 acres of wetlands and streams within the Centennial Industrial Site will be incorporated into the DTSC voluntary cleanup project and is outside the scope of the IMM Project." DEIR Appendix F-3 p. 2.

The above statement makes it clear that there will be no remaining wetlands to protect or mitigate on the Centennial site *because the wetlands will no longer exist.* If the plan were to retain any existing wetlands, or to restore or recreate wetlands elsewhere on the site, the DEIR would be required include them in the Updated Technical Memorandum and in the Centennial aquatic resources management plan. It does not.

As noted previously, maps of the on-site Centennial "borrow areas" (the designated sources of the 129,100 cubic yards of "clean fill") make it clear that the fill *will be taken from wetlands and riparian areas, not from other uncontaminated areas of the site.* (See, e.g., Attachment C)

CEQA requires that options to avoid and minimize adverse impacts to uncontaminated wetlands be considered and adopted, unless the impacts are unavoidable. Here, the adverse impacts can be avoided and there are alternatives. Clean fill can be brought in from off-site, or from other areas of the Centennial site, and *the uncontaminated wetlands and riparian areas can be preserved.*

Neither DTSC's Final CEQA Initial Study or the DEIR addresses adverse impacts to the wetlands caused by the cleanup, and there is no analysis of how such impacts can be minimized or avoided.



Instead, the Centennial Biological Resources Impact Assessment (Nov. 12, 2019) states that the mine project *"would have no impact on mapped wetlands within the Centennial Industrial Site* given that *any fill or dredge of mapped wetlands ... will occur as part of the site remediation project approved through DTSC prior to the development of the IMM Project."* P. 5. (Emphasis added.) In other words, there will be no wetlands left after the cleanup, so the EIR for the mine project is not required to identify, analyze, or mitigate any adverse environmental impacts to wetlands.

Thus, the DEIR itself, as well the DTSC MND for the RAP, includes substantial evidence that many aspects of the Centennial cleanup project mandate preparation of a full DEIR. As lead agency, the County cannot ignore that evidence. The County must prepare a new DEIR that analyzes the impacts of the project in its entirety, including both the cleanup and the mine construction and operations.

IV. The DEIR Fails to Establish an Appropriate Environmental Baseline

An EIR is required to describe the baseline physical conditions on the project site which the lead agency will use to determine whether an impact is significant. (CEQA Guidelines, §15125(a)(1)). An EIR is deficient when it "completely fails to properly establish, analyze, and consider an environmental baseline." *See Communities for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70, 89 (Cal. Ct. App. 2010). "When an EIR omits relevant baseline environmental information, the agency cannot make an informed assessment of the project's impacts." *Id.*

Grp 5-3

This project fails to accurately describe the environmental baseline in several ways: (1) the "adjusted baseline" is speculative, improper, and hides from the public the true environmental impacts to the Centennial site; (2) the DEIR's use of an adjusted baseline for the Centennial Site obfuscates the actual impacts of both the cleanup and the IMM on plants and habitats at both sites; and (3) the Centennial and Brunswick aquatic and biological resources assessments and management plans do not meet CDFW, CNPS, and other protocols and standards. For example, botanical and aquatic resources surveys were conducted late in the summer, outside many plant species' blooming period, and during the dry season when not all species and wetlands would be observable. Accordingly, they cannot be relied on as evidence that all special-status plants and all wetlands on the project site have been identified.

A. The DEIR's choice of an "adjusted" baseline using only hypothetical future conditions violates CEQA.

Grp 5-4

The DEIR's use of a future "adjusted baseline," set after the cleanup has theoretically been completed, violates CEQA. In general, the baseline for evaluating the environmental impacts of a project is the existing condition of the site. Although a future baseline may be used in addition to the existing conditions when appropriate, the California Supreme Court held in *Neighbors for*

Smart Rail v Exposition Metro Line Construction Authority (2013) that a DEIR may not substitute a future baseline for an existing baseline unless there is substantial evidence that using an existing conditions baseline would be "misleading" or "uninformative" to the decision maker and the public.

Here, the reverse is true: it is the use of a solely future baseline that is "misleading" and "uninformative." Indeed, the DEIR's maps of aquatic resources and vegetation communities on the Centennial site appear to be deliberately misleading: both maps have a large blank area (characterized as 28.25 acres of the 56-acre site) described as "Area *Previously Disturbed* by DTSC clean-up project (Estimated)" *(Emphasis added)*. This description creates the false impression that these future conditions are in fact the current conditions.

This "future-only adjusted baseline" is used for five of the 13 environmental issues reviewed, including Biological Resources, without providing any substantial evidence to justify this choice. The premise of the adjusted baseline is that because the Centennial site "will" be cleaned up at some indeterminate time in the future, the environmental impacts of the mine should be measured as if the cleanup has already been completed.

As explained above, the premise underlying the "adjusted" baseline is unfounded for several reasons. First, the DTSC has not selected a specific cleanup plan, has never approved the proposed RAP, and the RAP may never be approved. Second, the DTSC MND review process is flawed and is based on a segmentation that is improper under CEQA. Third, as held in a 2021 California Court of Appeals case, applying two different types of environmental review (an MND and an EIR) to different portions of the same project violates CEQA. *Farmland Protection Alliance v. County of Yolo* (2021) 71 Cal. App 5th 300. The remedy is to start over and review all portions of the project using an EIR.

Based on this improper definition of project which excludes the Centennial cleanup, the DEIR and several of the supporting biological resources assessments and management plans flatly and repeatedly assert that the IMM will have "no impact on the wetlands" at the Centennial site, an assertion which is patently false.

B. The DEIR's Use of an Adjusted Future Conditions Baseline for the Centennial Site Obfuscates the Project's Impacts on Plants and Habitats.

Grp 5-5

Section 4.4.2 of the DEIR states that: "for the purposes of this biological resources analysis, the environmental baseline for the Centennial Industrial Site has been adjusted to be consistent with anticipated site conditions at the completion of the separate Centennial Industrial Site Clean-up Project. It is estimated that approximately half of the Centennial Industrial Site will consist of graded and revegetated areas under the post-remediation condition." (DEIR p. 4.4-2).

CEQA Guidelines make clear that "A lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates

with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record." (14 C.C.R. § 15125(a)(2)).

There is no substantial evidence to support the use of a future baseline this case. The cleanup has not taken place, the wetlands are presently intact, and the intermittent and ephemeral streams still exist. Moreover, as noted above, the draft Remedial Action Plan for the Centennial site has not been approved, and no specific plan has been selected.

The DEIR adjusted baseline relies on "estimates" of the aquatic resources and vegetation communities that will exist on site once the cleanup is completed, yet the parameters of the estimates are vague:

"[T]he exact acreages of each aquatic resource type cannot be precisely established for the baseline condition given that the baseline has been adjusted to account for the planned remediation efforts that will be conducted under DTSC oversight pursuant to the RAP that has been prepared and publicly reviewed for DTSC approval. Final disturbance acreages to aquatic resources as a result of remediation activities may vary from current estimates. As a result, the disturbance acreages identified herein are conservatively estimated." (DEIR 4.4-10)

This statement asserts that using the adjusted baseline makes it impossible for the DEIR to provide specific or accurate estimates of amount of each aquatic resource type that will be impacted by the project.

In other words, because the RAP has not been approved, and because no specific cleanup plan has been chosen, it is unknown what remediation "efforts" will be undertaken, or what the effects of those "efforts" will be.

This means that the baseline fails to provide any way to accurately measure the resulting environmental impacts. Accordingly, the DEIR has chosen a future baseline that is purely hypothetical.

This lack of certainty undermines the purposes of CEQA. By relying on an undefined future baseline, the DEIR fails to properly analyze the project's potential impacts to wetlands and special status plant species on the Centennial site, among other environmental impacts. Indeed, it is the proposed future baseline, and not the existing conditions, that is misleading and "uninformative" to decision makers and the public.

The future environmental baseline also violates CEQA's intent and its requirement of public disclosure. "An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the



project." (14 C.C.R. § 15121(a)). The public should be given a clear idea of the environmental impacts on the actual environmental setting, not conservative estimates that are subject to change because the DEIR failed at the outset to accurately describe the environmental setting.

This uncertainty is in stark contrast to DEIR Appendix F-1, "Aquatic Resources Delineation of Waters of the United States and State of California" for the Centennial Site, which clearly delineates 4.37 acres of mapped wetlands and .6 acres of streams, including intermittent and ephemeral streams, on the Centennial site. (pp. 5-1 to 5-4)

See also DEIR Appendix F-5, "Centennial Aquatic Resources Management Plan" ("ARMP"). As noted above in Section III, the plan notes that 4.54 acres of wetlands and streams "inside the area of disturbance for the IMM Project" will be impacted, but that the "impacts and associated mitigation" for these aquatic resources "will be incorporated into the DTSC voluntary cleanup project and is [sic] outside the scope of the IMM." Appendix F-5 p. 5-1.

The ARMP goes on to state that "After the environmental cleanup work at the Centennial ... Site is complete, ... engineered fill [will be trucked from the Brunswick ... Site to the Centennial Site." There would be a total surface area disturbance of approximately 44 acres, "including the previously disturbed area from the DTSC cleanup project..." The portion of the disturbance assigned by the DEIR to the IMM Project "would disturb approximately 0.033 acres to mapped streams."

The DEIR thus proposes mitigation only for this 33/100 of an acre (~1472 sq feet, about the size of a small house) of mapped streams, and no mitigation whatsoever for the 4.54 of wetlands and streams mapped in the Aquatic Resources Delineation.

The use of a future "adjusted baseline" together with the "piecemeal" project description obscures the actual impacts to wetlands and other biological resources on the Centennial Site. It also prevents any meaningful evaluation of those environmental impacts or appropriate mitigations for those impacts. These are all serious violations of CEQA that undermine and obstruct its purposes.

C. The Botanical and Wetland Surveys and Management Plans Do Not Meet CEQA Standards

1. Botanical and Wetland Surveys Were Not Seasonally Appropriate to Identify Plants and Wetlands on the Project Site.

Grp 5-6

Reconnaissance surveys for this project were done in December 2018, and protocol-level surveys were conducted in July and August 2019. The wetland surveys were done in December, July, 2019, and August 27, 2020. The late-summer surveys fall outside of the blooming periods for many of the special-status plants that have potential to occur on the project site, and at a time that many wetland features would not be evident. Because the surveys were deficient,

they may have failed to confirm special-status plants and wetland features that are in fact present on site. Any analysis, conclusions, or mitigation measures for impacts to special-status plants and to wetlands are inaccurate and not based on substantial evidence.

An independent peer review by Madrone Ecological Consulting found many deficiencies in the biological aquatic resources assessments and management plans.

These include failure to conduct appropriately timed surveys for special status plants at both the Centennial and Brunswick sites. The Madrone Peer Review noted that surveys were only conducted in July and Aug 2019. Botanical surveys were conducted for the Centennial Industrial Site on July 1, 10 and 14, 2019, and for the Brunswick Area, on July 1, 14, and August 16, 2019.

California Department of Fish and Wildlife (CDFW) "Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities" require that botanical field surveys be conducted in a manner that maximizes the likelihood of locating special status plants and sensitive natural communities that may be present. Surveys must be conducted at the times of year when plants will be both "evident" and "identifiable," usually during flowering season.

The Protocols also provide that:

*Surveys are to be spaced throughout the growing season to accurately determine what plants exist in the project area, which usually involves multiple visits to the project area in early, middle and late season.

*When special status plants are known to occur in the types of habitat present in a project area, reference sites are to be observed to determine if the special status plants are identifiable at the times of year the surveys take place.

*Additional botanical field surveys may be necessary [if], for example, ... surveys were not conducted at the appropriate time of year; were not conducted during a sufficient number of years to detect plants that are not evident and identifiable every year [e.g., fritillaries]; or if fire history or other conditions have changed since the last botanical survey was conducted.

*Because adverse conditions from yearly weather patterns may prevent botanical field surveyors from finding or accurately identifying some special status plats in a given year, all adverse conditions should be discussed in the survey report.

The Madrone Peer Review concluded that the field surveys for several potential special-status species were not conducted in accordance with the CDFW Special-Status Plant Survey Protocols in several respects:

A. "Surveys were not conducted during the identifiable season of all target species. Outside of the "identifiable season" plant species may no longer be visible ... may be less

evident (easily overlooked), and are often not possible to identify to a level necessary to determine rarity."

The only surveys were done in July and August 2019, which is later than the blooming season of several flowers. Citing data from the California Consortium of Herbaria, the Madrone review noted that Stebbins' morning glory, Butte County fritillary, and Cedar Crest popcornflower have never been documented as blooming as late as July or August, and thus they would not have been both evident and identifiable at the time the surveys were conducted. [*"Stebbins' morning glory is almost always documented in May or early June, Butte County fritillary is almost always documented in March or April, and Cedar Crest popcorn flower has only been collected in April or May." Madrone Report p. 4.*]

The Madrone Review also identified Red Hills soaproot, finger rush, and dubious pea as plants typically identifiable earlier than July.

The Review concluded that "Surveys were not conducted during the identifiable season of all target species" and recommended that "full, protocol-level surveys for [six] plant species be conducted." It appears that no such additional surveys were conducted.

B. The Madrone Review also noted that "The CDFW survey protocol requires site visits for special-status plants with potential to occur on a project site ... [yet] Reference visits were conducted for only one of the target plant species. ... Without reference site visits, it is hard to know if the target plants were identifiable when the surveys were conducted." It appears that no additional reference site visits were conducted.

C. Citing CDFW Protocol requirements that surveys and plant lists be comprehensive, the Madrone Review identified a number of plant species that had been omitted from the pant list. In addition, the Review observed that no species from the genera Sidalcea and Fritillaria. The Review expressed concern regarding these omissions, because species of these two genera (Sidalcea and Fritillaria) appear on the list of special-status plants with potential to occur within the Study Area. The Review expressed concerns that the Biological Resources Reports failed to identify and document these genera, and recommend that an additional special-status plant survey be conducted during the blooming period for the special status species in these genera." Madrone Review p. 5. It appears that no additional special-status plant surveys for these species were conducted.

Grp 5-7

D. The Madrone Review noted that CDFW Protocols require that special-status plant surveys include a discussion of sensitive natural communities, and that the biological assessments did not include any discussion of sensitive natural communities. Madrone

recommended that sensitive natural communities be discussed." It appears that no discussion of sensitive natural communities was added to the biological resources assessments.

In addition to these observations of the Madrone review, a wildfire in August, 2021, burned substantial portions of the Centennial Site; this fire triggered the "changed conditions" provisions of the CDFW. Some of the special status plants present or potentially present on the Centennial site are fire adapted. Such adaptations include seeds that germinate after fire, or basal resprouting of burned plants. Biological surveys were required after the fire to locate new post-fire seedlings.

See *Effects of a firebreak on plants and wildlife at Pine Hill, a biodiversity hotspot*, J.M. Klip, M.R. Caldwell, D.R. Ayres, and V. Meyer California Fish and Wildlife, Fire Special Issue, pp. 58-81 (2020) (Pine Hill Flannelbush seeds are cued to germinate by fire's heat; over 1,100 Pine Hill Flannelbush seedlings were found within 13 months of 1983 experimental fire, with no additional seedlings sighted until 2020 when several piles of vegetation were burned a year earlier in 2019.)

Grp 5-8

See also Effects of Fire on the *Demography of Three Rare Chaparral Plants (Calystegia stebbinsii* [and two others]), Conference paper at Symposium of the Botanical Society of America (2009)(D.R. Ayres) (in plot that had no Calystegia stebbinsii [Stebbins' morning glory] before fire, C. stebbinsii germinated profusely the first spring after the fire, and began blooming heavily three years after fire).

Accordingly, a new survey is necessary to determine the effects of the fire on the existing Pine Hill Flannelbush and on seedbanks that may contain dormant C. stebbinsii seeds at the Centennial site. An additional survey needs to be done for post-fire seedlings of the protected rare C. stebbinsii. In addition, the Management Plan for the Pine Hill Flannelbush requires updating to determine which if any of the Pine Hill Flannelbush were killed or damaged by the fire; whether any resprouted, and whether there are new seedlings that need to be protected and incorporated into the management plan.

The DEIR does not indicate that any post-fire surveys have been done; early spring of 2022 would be the best time to initiate such surveys.

2. Mitigation Measures Improperly Defer Plant Surveys

Deferring surveys is improper under CEQA for numerous reasons. Deferring environmental assessment to a future date is contrary to the "policy of CEQA which requires environmental review at the earliest feasible stage in the planning process." *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 307 (Cal. Ct. App. 1988). "Environmental problems should be considered at a point in the planning process 'where genuine flexibility remains.' . . . A study conducted after approval of a project will inevitably have a diminished

Grp 5-9

influence on decision making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA." *Id.* (internal quotations and citations omitted).

CEQA also gives the public the right to review projects before they are approved and provide public comment. The public is entitled to be informed of the results of plant surveys and how the project will impact plants and vegetation present on the project site. Delaying surveys until some vague, undefined time in the future after the project has been approved is contrary to these principles. Finally, delaying surveys until immediately prior to construction can make avoidance of special-status plants impracticable. If species are discovered during the survey that were not accounted for in the project design, last minute changes to project design are often prohibitively expensive, or impossible altogether.

The DEIR should not rely on preconstruction surveys to make up for the late-season or botanical surveys conducted in 2019 or for the lack of post-fire surveys in 2022.

Conclusion

Grp 5-10

For the reasons described above, we respectfully request that the DEIR be redone, and that it include a review of the entire IMM project and cleanup, so that a full and accurate assessment of the true environmental impacts of this project can be completed and re-issued for public review.

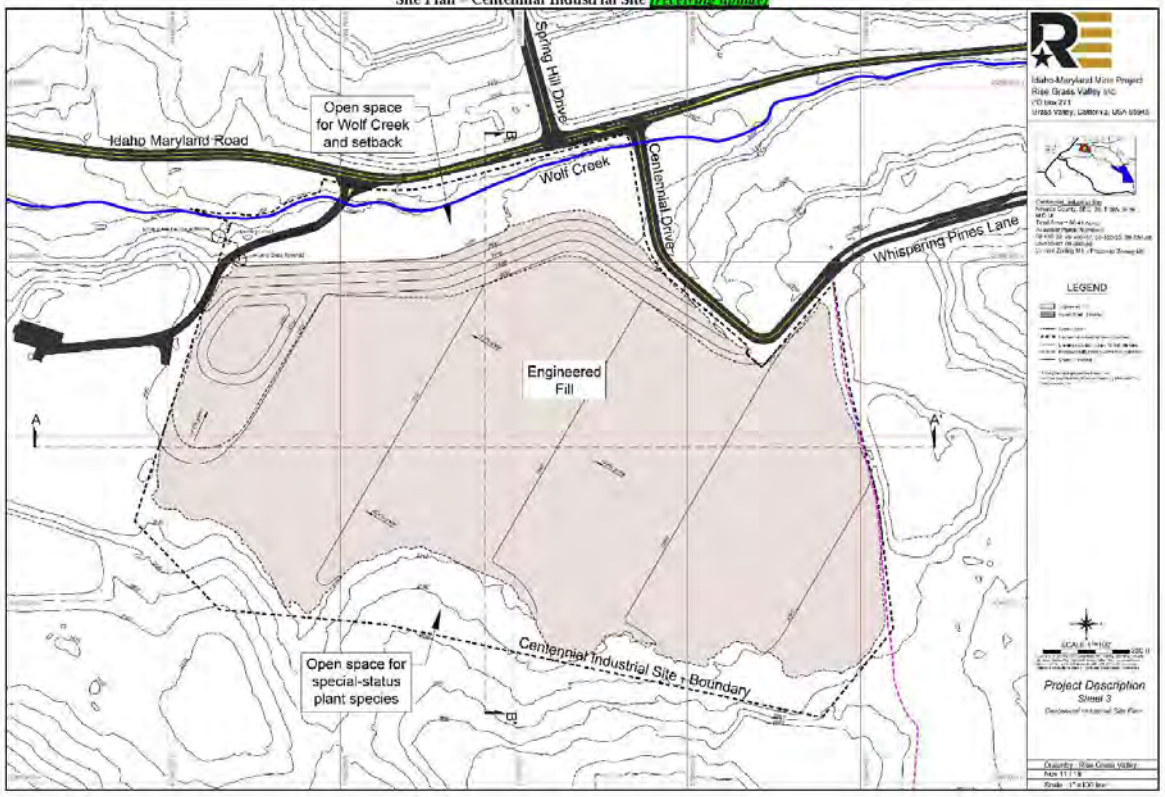
Sincerely,

Isabella Langone
Conservation Program Manager
California Native Plant Society
ilangone@cnps.org

Jeanne Wilson
Co-Chair, Conservation Advocacy
Redbud Chapter, CNPS
jxwmotes@icloud.com

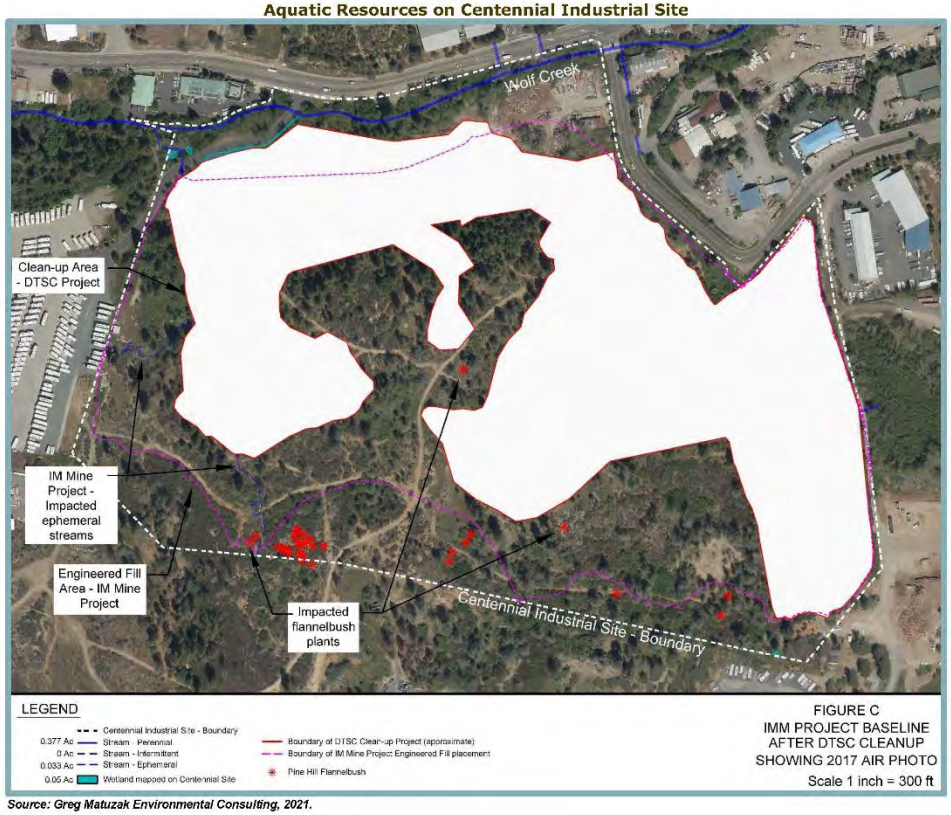
Attachment A

Figure 7
Site Plan – Centennial Industrial Site *(receiving update)*



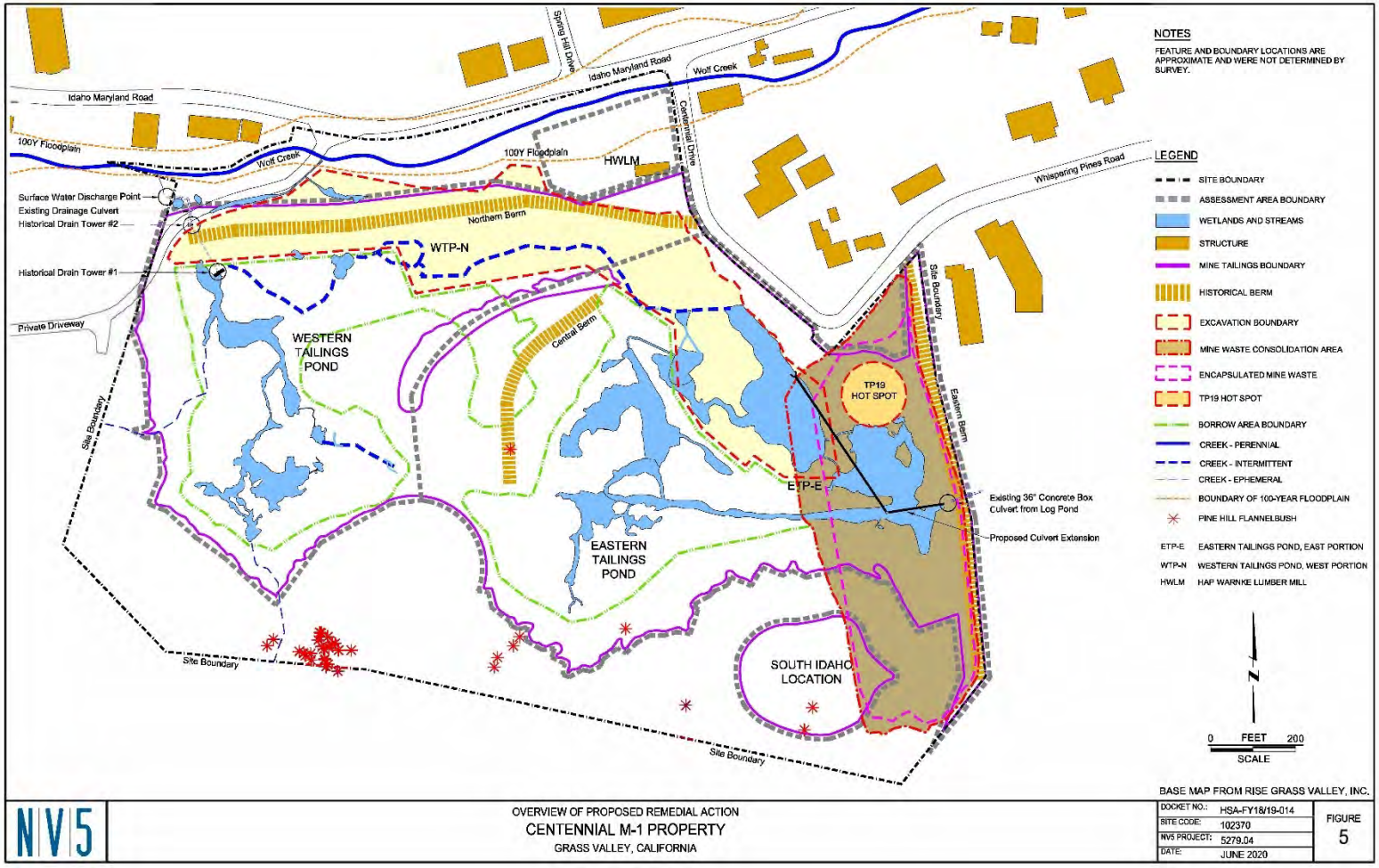
Attachment A

Figure 4.4-3
Aquatic Resources on Centennial Industrial Site



Source: Greg Matuzak Environmental Consulting, 2021.

Attachment C



GROUP LETTER 5: JEANNE WILSON, CALIFORNIA NATIVE PLANT SOCIETY – REDBUD CHAPTER

Response to Comment Grp 5-1
Please see DEIR section 1.3 and Master Response 4 - Clean-Up Project is a Separate Project Under CEQA. Please also see Response to Comment Grp 20-8.

Response to Comment Grp 5-2
Please see DEIR section 1.3 and Master Response 4 - Clean-Up Project is a Separate Project Under CEQA. Please also see Response to Comment Grp 20-8.

Response to Comment Grp 5-3
Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA, and DEIR Section 1.3 regarding use of an adjusted environmental baseline at the Centennial property given the separate Centennial M-1 Clean-Up project under review by DTSC.

Regarding the commenter's position the technical studies are inadequate because of the timing of biological surveys, please see Master Response 30 - Technical Study Adequacy, Master Response 31 - Rare Plants, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 5-4
Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA, and DEIR Section 1.3 regarding use of an adjusted environmental baseline at the Centennial property given the separate Centennial M-1 Clean-Up project under review by DTSC. The Centennial Site cannot be used as part of the project unless and until the DTSC cleanup project has already been completed. Thus, the baseline used in the DEIR is appropriate for the Centennial Site and related impacts. Please also see Response to Comment Grp 20-8.

Response to Comment Grp 5-5
Please see DEIR Section 1.3 and Master Response 4 - Clean-Up Project is a Separate Project Under CEQA. Please also see Response to Comment Grp 20-8. As noted in D EIR Section 4.4.2, the estimates included in the DEIR are conservative and overinclusive of potential impacts areas in the event minor changes to the separate DTSC clean-up project occur.

Response to Comment Grp 5-6
The commenter asserts that botanical and wetland surveys were not adequate due to timing issues. Please see Master Response 30 - Technical Study Adequacy, Master Response 31 - Rare Plants, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog. As noted by the commenter, extensive peer review of the technical studies were conducted by the County's independent consultant. Following review and comment, technical studies were revised and resubmitted to the County in consideration of the County consultant's comments. The County accepted the revised technical studies and used the information to perform their biological impact analysis.

Response to Comment Grp 5-7
Please see Response to Comment Grp 5-6 above.

Response to Comment Grp 5-8
Please see Master Response 31 - Rare Plants, and Appendix G to this Final EIR, which includes the results of a rare plant survey conducted after the wildfire cited by the commenter. Mitigation

Measures 4.4-1(a) and 4.4.1 (b) require the applicant to implement the Centennial Pine Hill Flannelbush Habitat Management Plan, obtain an ITP from CDFW for impacts to Pine Hill flannelbush, complete another set of protocol-level special status plant surveys, and consult with Nevada County Planning Department, as well as CDFW and/or USFWS if the plant is state- or federally-listed. Therefore, no additional mitigation is required to reduce potential impacts to special status plants to a less than significant level.

Response to Comment Grp 5-9

This comment is conclusory in nature, stating that the DEIR defers mitigation and does not sufficiently identify performance standards. The comment does not identify any specific mitigation measures that are deficient. In the case *Center for Biological Diversity v. California Department of Conservation, etc*. (2019), the court explains that "[g]enerally, it is improper to defer the formulation of mitigation measures…However, an exception to this general rule applies when the agency has committed itself to specific performance criteria for evaluating the efficacy of the measures to be implemented in the future, and the future mitigation measures are formulated and operational before the project activity that they regulate begins." (36 Cal.App.5th 210, 239.) The court determined both conditions were met and upheld the deferred mitigation measures. Similarly, the mitigation measures presented in the DEIR require compliance with specific performance standards and regulatory requirements, and also require implementation prior to project activities begin.

The DEIR included rare plant surveys, conducted by experts in the field and with knowledge of the region, as Appendices F.6 and F.11. These technical studies were peer reviewed by the County's independent consultant and, once those comments were addressed, the County utilized this information to prepare their impact analysis. As concluded in the DEIR, impacts to special status plants are potentially significant and mitigation measures were provided. The mitigation measures require conducting preconstruction surveys prior to onsite surface disturbance to ensure no new special status plant species would be impacted by project construction. The DEIR clearly identifies potential special status plant species that may be impacted by the project. The mitigation measure clearly establishes performance standards and timing for when preconstruction surveys shall be conducted and what should occur based on the results of those surveys. As a result, the DEIR clearly identifies the potential impacts to special status plants and provides enforceable mitigation measures. In addition, please see Master Response 31 - Rare Plants and Appendix G to this Final EIR, which includes the results of a rare plant survey conducted after the wildfire and release of the DEIR. Mitigation Measures 4.4-1(a) and 4.4.1 (b) require the applicant to implement the Centennial Pine Hill Flannelbush Habitat Management Plan and complete focused special status plant surveys. Therefore, no additional mitigation is required to reduce potential impacts to special status plants to a less than significant level.

Response to Comment Grp 5-10

The commenter requests that the DEIR be revised and recirculated with the DTSC cleanup project included in the Project Description. The commenter's specific comments are addressed in Responses to Comments Grp 5-1 to Grp 5-9. The County has concluded that the DEIR is adequate, and recirculation is not required.

Group Letter 6

Community Environmental Advocates FOUNDATION

PO Box 972, Cedar Ridge, CA 95924-0972
www.cea-nc.org / email: info@cea-nc.org

February 22, 2022

Nevada County Board of Supervisors
950 Maidu Avenue.Ste. 200
Nevada City, CA 95959
bdofsupervisors@co.nevada.ca.us

RE: The County has NOT made a determination on the Idaho-Maryland Mine

Dear Supervisors:

Grp 6-1 As you may be aware, Idaho-Maryland Mine owner Rise Gold Corp has sent out yet another mailer to Nevada County residents, this time claiming that "Nevada County **has just completed** the most thorough environmental study in its history," along with numerous unresolved claims about the project. The mailer includes a form for supporters to mail in to Rise Gold.

We want to bring your attention to another letter that was sent to well owners in the mine area. (Copy included)

Grp 6-2 The letter states: "**The County has determined** that no domestic water wells will be drained by mine dewatering," that "**The County has determined**, using a safety factor of 100%, that several wells...could be impacted...to a maximum of 10 feet," and "**The County has determined** that there is no threat to water quality to domestic water wells from the Idaho-Maryland Mine Project."

Grp 6-3 We feel that it would serve the public interest for the County to issue a clarifying statement regarding the status of the Draft EIR and the status of determinations by the County.

Thank you.
Sincerely,
Ralph

Ralph Silberstein, President
CEA Foundation
ralph@cea-nc.org
ralphasil@gmail.com
530 277 2039 (c)

Rise Grass Valley Inc.
333 Crown Pt Circle, Ste 215
Grass Valley, CA 95945 USA

February 11th, 2022

[redacted]
Grass Valley, CA 95945

Mr. [redacted],

The Idaho-Maryland Mine Project proposes reopening the Idaho-Maryland underground mine with facilities constructed on the Brunswick Industrial site located south-west of the Brunswick Road and E. Bennett Road intersection. Nevada County has recently issued (January 4th, 2022) a Draft Environmental Impact Report (the "DEIR") for the Idaho-Maryland Mine Project. Rise has reviewed this document in detail over the last month and we are reaching out to you to provide further information on our project.

Rise Grass Valley Inc. (Rise) is the owner of the mineral rights, starting 200 feet and deeper beneath your surface property including all necessary and convenient rights to extract them, excepting the right of entry to the surface land. To access its mineral estate, Rise must first dewater the underground mine, and because your property is on a well, extensive research and modeling by certified, licensed hydrogeologists took place to assure us, the County and you how your well might be affected. While Rise does own the mineral rights deeper than 200 feet below the surface, Rise respects your surface property rights and is committed to being a good neighbor and community member. Out of an abundance of caution, Rise plans to provide you the option to connect to NID water at Rise's expense.

The hydrogeologic analysis was peer-reviewed by an independent California-licensed hydrogeologist. The County has determined that no domestic water wells will be drained by mine dewatering. The County has determined, using a safety factor of 100%, that several wells in the East Bennet Road area could be impacted by a reduction in the water column of wells ranging to a maximum of 10 feet. It should be noted that the water level in the existing mine workings is already approximately 100 feet below the depth of groundwater in your area, which illustrates that the mine is not hydrologically connected by significant fractures to the shallower groundwater well due to the impervious nature of the surrounding rock. Nevertheless, to ensure that you have 100% confidence in an uninterrupted access to water, Rise has committed to construct, at its own cost, an extension of the Nevada Irrigation District (NID) potable water system along E. Bennett Road which could service your property if you choose. This construction and connection would take place before any mine dewatering commences. Thus, you will have the option of either connecting to NID water, at Rise's cost, and/or continuing to use your domestic well. The County has determined that there is no threat to water quality to domestic water wells from the Idaho-Maryland Mine Project. Water does not flow upward from the mine

workings to feed your well, and as the water in the mine workings is removed, that would continue to be the case.

If you decide to utilize NID potable water, Rise will fund the connection to your property. The value per property owner, including capacity charges, is estimated at approximately $85,000. Rise would also pay for your ongoing water charges as long as you own your property. A high-quality water supply from NID would alleviate your ongoing treatment and monitoring of your current well. In addition, this water supply is reliable and not interrupted during our area's increasingly frequent power outages.

If requested by the landowner at the time of NID connection and service to their properties, Rise will pay to close property owners' wells using certified well drillers and under Nevada County regulations.

If the Nevada Board of Supervisors approves the project, we will proceed with the detailed design of the potable water line. We will consult with you about your preference in meter location and desire to connect to the NID potable water system.

The Idaho-Maryland Mine Project also has direct benefits to fire protection for your property. The extension of the water pipeline along E. Bennett Road will allow for installing of fire hydrants and allow firefighters to respond to fires in your area much more efficiently. Rise has also agreed to provide Ophir Hill Fire Protection District with a new fire engine and additional firefighters which will significantly enhance their ability to provide excellent service in your area.

Your property is over 1/2 of a mile away from the Brunswick site, and it would not be impacted by noise during operations. Rise will not route truck traffic along E. Bennett Road adjacent to your property. Technical analysis, performed by an expert PhD, shows that the anticipated vibrations from drilling and blasting underground are negligible, and in almost all situations, drilling and blasting will be unnoticeable and undetectable.

Rise recently engaged RCLCO Real Estate Consulting, a highly respected firm, on the potential effect of the Idaho-Maryland Mine Project on local real estate values in the local area. RCLCO found no negative impact on home prices based upon case studies or recently opened mines. However, due to demand created by employment, homes sold closer to a mine actually achieve higher pricing than those sold farther away. We believe the extension of NID water service will increase the value of your property, as will the economic impact of the 300+ high-paying jobs and approximately 300 indirect jobs that the project will create.

You can learn more about the Idaho-Maryland Mine Project at www.risegrassvalley.com and our company at www.risegoldcorp.com. If you are interested in more information, have any concerns, or wish to support our project please contact me and I would be pleased to arrange a

meeting in our Grass Valley office or at the Brunswick site. If you would like to meet in person or speak further about our project and the proposed NID water service, please contact me by phone or email as below.

Sincerely,

Ben Mossman
President, Rise Grass Valley, Inc.
CEO, Rise Gold Corp.
(530) 433-0188
info@risegoldcorp.com

GROUP LETTER 6: RALPH SILBERSTEIN, COMMUNITY ENVIRONMENTAL ADVOCATES FOUNDATION

Response to Comment Grp 6-1

The comment is noted. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues.

Response to Comment Grp 6-2

The commenter summarizes the contents of a mailer provided by the applicant, which is provided as an attachment for the County to review. The comment does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 6-3

The comment is noted but does not address the adequacy of the DEIR. Please also see Master Response 15 – Adequacy of Groundwater Monitoring Wells.

Group Letter 7

Community Environmental Advocates FOUNDATION
PO Box 972, Cedar Ridge, CA 95924-0972
www.cea-nc.org / email: info@cea-nc.org

March 30, 2022

To: Members of the Nevada County Planning Commission, Nevada County Board of Supervisors, and Nevada County Planning Department Staff

Attn: Matt Kelley, Senior Planner
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
Email: matt.kelley@co.nevada.ca.us
DEIR Comment Email: idaho.mmeir@co.nevada.ca.us

Comments on the Draft Environmental Impact Report for the Idaho-Maryland Mine Project

To All Concerned:

Grp 7-1

This letter is written on behalf of Community Environmental Advocates Foundation, The Sierra Fund, South Yuba River Citizens League, Wolf Creek Community Alliance, the state office and the Redbud Chapter of the California Native Plant Society, Sierra Foothills Audubon Society, Sierra Nevada Group Sierra Club, Friends of Bear River, Nevada County Climate Action Now, Brunswick Manor HOA, San Juan Ridge Taxpayers Association, Earth Justice Ministries, Elders Action Network, Patagonia, Friends of Banner Mountain, the Wells Coalition, Sierra Streams Institute, Brunswick Pines Road Association, Wawona Madrono Homeowners Association, and members of the Nevada County community at large who have identified many issues of concern regarding the potential reopening of the Idaho-Maryland Mine (Mine, Mine Project, or Project) Grass Valley.

As a coalition of community and environmental organizations in Nevada County, we appreciate the opportunity to provide public comment on the Draft Environmental Impact Report (DEIR) released by Nevada County for public review on January 4, 2022, addressing the environmental impacts of re-opening and operating the Mine for the next 80 years.

We are concerned about the long-lasting environmental impacts that the Mine Project would cause and the inadequacy of the environmental analysis of the DEIR. A number of key points are provided here. More detailed and complete comments from individuals and organizations are being submitted separately.

Note documents cited and submitted under separate cover:

- Baseline Environmental Consultant Report, Feb 15, 2022 (Baseline).
- Salter Report, March 9, 2022 (Salter).
- Comments on the Idaho-Maryland Draft EIR - 16Mar22, Center for Science in Public Participation (CSP2).

PROJECT DESCRIPTION

1 The DEIR does not adequately define the Mine Project to include the Centennial site and accordingly, fails to identify all potential impacts.

Grp 7-2

The DEIR fails to adequately address impacts associated with the Centennial Industrial Site (Centennial). This site is the location of hazardous waste left over from past Idaho Maryland Mine operations. The DEIR assumes that the Centennial site will be cleaned up before the use of the site for deposition of new mine waste. Yet the significant work which is needed to accomplish this clean-up is not disclosed nor evaluated in the DEIR. Rather, the DEIR assumes that the clean-up has already been accomplished, and uses the post clean-up conditions as the baseline for some of its environmental impact assessments.

The DEIR does not describe the current physical conditions of the Centennial site or include the necessary clean up of the existing contamination at that site as part of the Project because it assumes that Centennial will be cleaned up prior to the start of construction. As discussed above, the clean up for Centennial has not been approved by Department of Toxic Substances Control (DTSC) and it is unclear when DTSC might approve the clean up. Consequently, it cannot be excluded from this DEIR. As a result, any assumptions about baseline conditions for purposes of assessing impacts to the Mine Project are speculative at best, and at worst, significantly underestimate the actual impacts of the Project.

The current conditions of the Centennial site must be used as the DEIR baseline in order to meet the CEQA requirements for a full analysis of the impacts of the Mine Project. Moreover, the Centennial clean up should be included as part of the Project to address the whole of the action under CEQA. In order to accurately assess impacts, the existing conditions, or baseline, of the Project must be the current state of the Centennial site, not a speculative future condition.

2 Construction time estimates are inadequate and affect noise, traffic, air, and other impact areas.

Grp 7-3

Construction time estimates in the DEIR are contradictory and inadequate. For example, the DEIR states in several instances that the Project is estimated to have a twelve month construction phase, but also states that the construction of the water treatment facility alone would take eighteen months.

Furthermore, neither of these estimates - twelve or eighteen months - is sufficient to capture all phases of construction. As just one example, the applicant would have to complete significant grading and underground development before initiating the eighteen month construction of the water treatment facility. Similarly, the water treatment facility would have to be completed before dewatering of the mine could begin. Dewatering is a six month process. After dewatering has been completed, the new shaft for ventilation and emergency access would have to be constructed to the 1000' depth by working upwards from below. Then, before beginning any actual new mining, the tunnels would need to be restored sufficiently to allow for construction of the underground rock crushing facility. All of these activities must happen sequentially, not in parallel. Therefore, a more reasonable estimate of construction length for the Project would be four to six years, clearly resulting in significantly different annual and cumulative impacts than the ones identified in the DEIR.

Grp 7-4

The DEIR should be revised to provide an accurate description of each construction project, including its intended duration. This revised description must also include the sequencing of construction projects. Until this information is provided, the DEIR preparers will be unable to properly assess the annual and cumulative impacts on air, noise, traffic, aesthetics, and other resource areas.

3 The DEIR has not demonstrated that mine waste disposal by off site sales would be viable.

The DEIR indicates that the applicant (Rise) plans to sell waste rock on the open market if it is still being produced after the two proposed waste rock piles reach capacity (DEIR Project Description). The Regional Water Board has jurisdiction over the disposal location requirements for mine waste rock. Although the DEIR does not disclose this, the concept of selling waste rock is an unrealistic and infeasible proposal unless the Water Board has determined that such discharges would not pose a threat to water quality. Accordingly, the Project should not rely on this concept and the DEIR should identify all impacts associated with alternative disposal methods.

Grp 7-5

Even if the mine waste can be sold, the market for aggregates varies significantly by season. During rainy seasons, it may be necessary to stockpile the aggregate onsite, but there are no provisions for onsite storage in the DEIR or an assessment of impacts related to such storage. As reported by the Center for Science in Public Participation (CSP2), dispersing waste rock and other mine waste over large areas without containment often results in contamination (e.g., Calcine mercury mine tailings used for road construction in San Luis Obispo County). (CSP2)

The absence of provisions for temporary waste rock storage (and the associated analysis of its impact) creates strict operational constraints and potential impacts on all phases of processing have not been addressed in the DEIR. The DEIR should be revised to include an analysis of these impacts.

4 Mine waste and ore processing stockpiling: proposed processes may not be viable due to the necessary safeguard controls for asbestos.

Grp 7-6

(See "ASUR Plan Analysis.pdf", attached as a reference to this letter. Portions of that document are summarized here.)

The plan described in the DEIR for managing asbestos-laden mined materials is inadequate. Asbestos is likely to be released during underground blasting, crushing, and ore processing. It also is released during material handling, on-road transport, placement grading and compaction. The DEIR states that the Asbestos Management Plan would ensure that average mined material and engineered fill contains less than 0.01% asbestos. (DEIR 3-20) Testing the asbestos content, however, does not control the amount of asbestos in the actual material mined. To control the average amount of asbestos in output materials (and to avoid significant impacts related to asbestos exposure), the DEIR must ensure that asbestos levels do not exceed this threshold. Currently, the DEIR does not include any evidence that asbestos levels will not exceed this threshold.

The testing process may require up to two weeks before the results are known, yet the Project calls for daily mining activity to continue during this time. This daily mined material would have to be stockpiled while awaiting the test results, which could expose workers to dangerous levels of asbestos. The DEIR does not disclose this fact nor does it analyze the associated impacts.

In addition, if the running average of asbestos in the daily mined material exceeds the required threshold, batches containing higher asbestos levels would have to be stockpiled in order to be later mixed with batches having lower asbestos levels. The DEIR does not disclose this fact nor does it analyze the associated impacts.

Grp 7-7

The mineral processing described in the DEIR does not address the need for stockpiling materials or address the likely impacts of such efforts. The Asbestos Management Plan provided in the revised DEIR must detail all of the steps necessary to carry out the correct management of this hazardous waste, including the location and organization of stockpiled materials, and adequate safeguards to avoid fugitive dust emissions and potentially hazardous conditions.

HAZARDS AND HAZARDOUS MATERIALS

5 The DEIR inadequately describes potentially hazardous waste rock and mine tailings management.

As pointed out by Baseline Engineering Consultants (Baseline), the legacy contamination from prior mining indicates that the types of rock historically mined at the site contain heavy metals and, when excavated, these waste rock and mine tailings have been found to contain contaminants that pose a potential risk to people and the environment.

Grp 7-8

"Neither the DEIR Project Description nor the Hazards and Hazardous Materials section adequately describes how future waste rock and mine tailings generated by the proposed project would be managed to ensure that they do not pose a health hazard to people or the environment (as the placement of similar waste materials from the same mine did in the past)" (Baseline).
The revised DEIR must provide adequate information about the potential risks of the waste rock tailings and all potential impacts.

WATER QUALITY

6 Drill core testing for water quality impacts is inadequate.

Given the size and scope of the proposed Project, there was an insufficient quantity of drill core rock analyzed to determine the mine's true impact on water quality.

By way of illustration, between 2017 and 2019, the applicant drilled for, and extracted, a total of 67,500 feet of rock core. But of these 67,500 feet of drill core, only 0.68% were submitted for analysis. And of the few samples that were submitted for analyses, a dearth of information is provided regarding the sample materials' true weight, volume, particle size, and sampling technique. Nor are the drill logs for these core samples available for review, so the actual dates, precise locations, drift angles, widths, final depths, etc. are unknown. Several times the DEIR refers the reader to a "separate report" which will explain some of these omissions, but no such report is found in the document or its appendices.

Grp 7-9

In addition to the limited sample size and the inadequate sampling details, four different labs were employed to carry out the analyses of the submitted samples, but the samples did not have a proper chain of custodies (COC) processes. The COC is a process that tracks the movement of samples through their collection, safeguarding, and analysis lifecycle between the mine applicant and the labs, but the COCs do not reflect the written account found in the DEIR.

The revised DEIR must provide an explanation for the discrepancies in the chains of custodies for the samples submitted to labs and provide evidence that the samples are scientifically reliable.

This insufficient and unreliable data affects the accuracy of any analysis based on this data, such as an analysis of the metal leachate content of rock. Since metal leachate from mine rock affects water quality, analyzing metal leachate is one of the key concerns regarding the rock tailings produced by the Project. The limited amount of core material sampled and the imprecise manner in which the details of the core samples are reported makes the metal leachate analysis unreliable and leads the DEIR to underestimate potential impacts.

Grp 7-10

The revised DEIR should include a full set of data and drill logs that can be reliably analyzed by the public.

Grp 7-11

7 Assessments of the current mine water chemistry are inadequate.

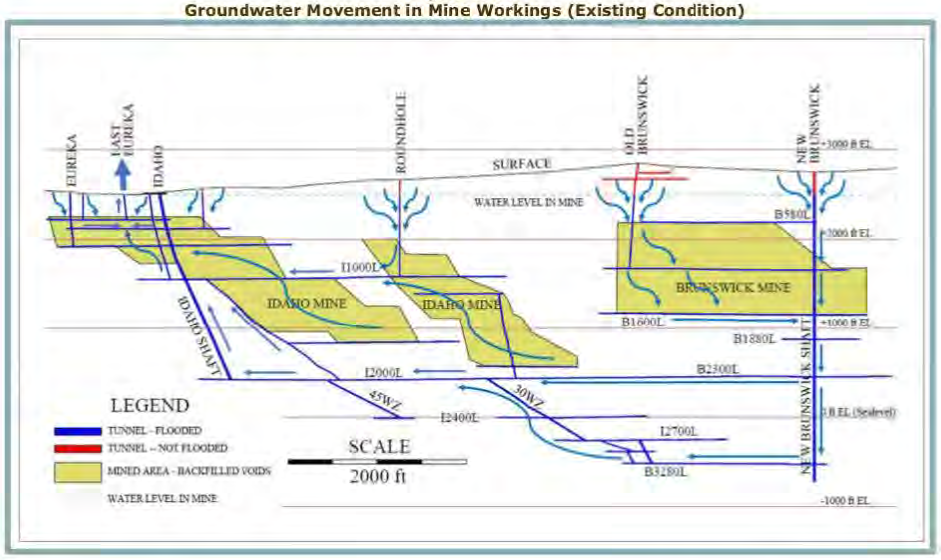
The Hydrology Report (DEIR Appendix K.2, Table 4-10, p120) uses discharge screening limits and data from the New Brunswick shaft to define water treatment criteria. However, a more accurate sampling of mine water would be from the drains located along Wolf Creek rather than from the New Brunswick shaft, as described in the analysis of mine water flow (see DEIR Figure 4.8-7), which shows water entering the New Brunswick shaft then flowing downward through the

Grp 7-12

extant mineworks to exit the drains at Wolf Creek (Eureka drain, East Eureka drain, etc). Only a few samples taken from the drains were reported, but these samples are much more representative of the mine water chemistry and indicate higher levels of Iron, Manganese, Arsenic, Aluminum, and Zinc than the New Brunswick shaft samples (DEIR K.2 Tables 3-6).

In order to get an accurate assessment of the contaminants flowing out of the mine under varying conditions, regular testing must be conducted over time at the Mine drains. The testing must also be conducted seasonally during differing rates of outflow. Moreover, in order to provide the public with a conservative estimate of potential impacts, the DEIR should use the results from the drain samples rather than the New Brunswick shaft, which would show potential water quality impacts from higher level of metals, arsenic and zinc.

Figure 4.8-7
Groundwater Movement in Mine Workings (Existing Condition)



8 The hydrology study incorrectly assesses the potential for long term acid mine type drainage.

Grp 7-13

The Empire Mine, adjacent to the Idaho-Maryland Mine, provides clear evidence of the potential for contaminants that could be discharged from the Mine and from tailings and mine waste intended to be deposited on the surface or back within the Mine as backfill. Mine water discharged from the Empire Mine has excessive levels of arsenic, iron, and manganese.

The EMKO hydrology study used in the DEIR dismisses the potential for acid drainage which could affect water quality in Wolf Creek. Instead, the DEIR claims "Any acid generated during the oxidation would be quickly neutralized by the carbonate minerals in the host rock" and cites neutral or high (non acid) pH values. (DEIR 4.8-49, 50) However, the short term method used by EMKO is not a reliable method for predicting the long term potential for contaminants to be discharged from mine waste. Results would be more reliable using long term tests, on the order of months rather than hours or days.

The waste rock's potential to produce poor quality effluent should be thoroughly characterized using appropriate tests to the satisfaction of the Water Board (e.g., ASTM D 5744) over a sufficient period, also to the satisfaction of the Water Board (e.g., 40 weeks).

Accordingly, more extensive testing of mine waste rock and tailings must be conducted to assess the potential for contaminant leaching from mine waste. Long term dynamic testing must be conducted to accurately identify potential impacts to water quality. Due to variations in geology as mining progresses, repeated testing of the mine waste must be done.

Grp 7-14

The revised DEIR must specify how long-term monitoring of acid mine type drainage would be accomplished and identify mitigation measures capable of ensuring that any unanticipated contaminants do not adversely affect water quality. Without providing such testing and identifying feasible and effective mitigation measures, the impact must be identified as significant and unavoidable.

9 It is not adequate to defer analysis of mine waste, a potential hazard, to some future date without providing substantial evidence that the proposed actions will not result in environmental impacts.

Grp 7-15

The mine waste has not been adequately tested and one must conservatively conclude that it has a high potential for causing water quality impacts, given that similar local historic mining activities resulted in the detrimental environmental impacts that persist today. The DEIR fails to conduct the necessary impact analysis. Instead the document asserts that impacts will be remedied by obtaining an expedited General Order permit from the Water Board (DEIR section 4.8 page 50). As Baseline points out, this process is insufficient:

"It is not adequate to state that the project will get permits without providing substantial evidence that the proposed action will not result in environmental impacts, particularly when very similar historic actions have been demonstrated to result in environmental impacts that have persisted for decades." (Baseline)

The revised DEIR must provide a valid and reliable analysis of the mine's waste products and identify specific and achievable mitigation measures to assure these water quality impacts are reduced to less than significant levels. Alternatively the revised DEIR must identify such impacts as significant and unavoidable.

HAZARDS - AIR QUALITY

10 The DEIR provides no evidence that the project's long-term NOx, ROG, and PM10 emissions will be mitigated to a less-than-significant level.

Grp 7-16

The DEIR fails to adequately mitigate the Project's air quality impacts. It relies on a bare minimum of mitigation measures recommended by the Northern Sierra Air Quality Management District (NSAQMD) to address air quality impacts, and these measures only address emissions during a one year period of construction. As we explain above, construction will certainly last longer than one year. In addition, the mitigation measures do not address the long-term emissions that will result from 80-years of mining operations associated with the Project. As a result, there is no evidence that the Project's long term emissions have been mitigated to a less-than-significant level, as concluded by Baseline Engineering Consultants (Baseline).

The revised DEIR must identify feasible and effective mitigation measures that address emissions from 80-years of mining to ensure that emissions are kept at less-than-significant levels. Otherwise, the EIR must identify these long term impacts as significant and unavoidable.

11 The DEIR Health Risk Assessment uses invalid meteorological data to characterize emissions.

Grp 7-17

Toxic Air Contaminants (TAC) are toxins which may cause or contribute to an increase in death or serious illness from cancer and other acute or long-term diseases. (See Health Risk Assessment Critique (HRA Critique), attached as a reference to this letter.) TACs may cause health damage even at extremely low levels, and are generated by, among other sources, vehicles, off-road equipment, blasting emissions, and fugitive dust. TAC ingredients include particulate matter from diesel emissions, asbestos dust, silica dust, heavy metals, ammonium nitrate fuel oil, hexavalent chromium, and radon – all of which would be produced by mining activity, and which can become airborne, traveling on wind currents toward population centers around Nevada County.

The data used for the Health Risk Assessment model in the DEIR that relies on meteorologic information about the quality, quantity, speed, and direction of travel of air toxins is not appropriate for the Grass Valley area. The DEIR model relies on data from the Blue Canyon site, an area with a significantly different meteorological profile than that of Grass Valley. Blue Canyon, located on Highway 80, bears little meteorologic resemblance to Grass Valley: it deviates from Grass Valley in elevation, temperature, rainfall, snowfall, wind speed, and wind direction. Using Blue Canyon's meteorologic data does not correlate with Grass Valley meteorologic data under most circumstances, and makes any TAC statistic derived from the model unreliable.

The DEIR's Health Risk Assessment must be revised using meteorological data applicable to Grass Valley in order to accurately assess the potential health impacts of the mine's toxic air.

12 Drill core testing for airborne contaminants is inadequate.

Grp 7-18

As documented in "Sampling Procedures" (Sampling) (attached as a reference to this letter), TACs silica and asbestos are insufficiently described in the DEIR. Even though several hundred tons of rock would be mined and surface-stored each day, none of the core samples taken from the exploratory drill cores were tested for the contaminant silica. It also appears that when the original core samples were taken, drilling was stopped when serpentinite, an asbestos bearing rock, was encountered and, since drill logs are not available for review, the depth and width of the asbestos-containing serpentinite deposits encountered cannot be determined.

The rock types identified in the mineralized zone contain substantial amounts of silica (silicon dioxide, quartz), and the tailings would contain fine particles of respirable crystalline silica, a TAC. The laboratory that the applicant used for all metals analyses, ACZ Laboratories, is certified to perform both silica and silicon dioxide tests yet not a single sample was analyzed for these parameters (Sampling).

The revised DEIR should provide a full set of data about the samples analyzed for silica and asbestos. To the extent this data set fails to analyze silica and asbestos, further analysis and revisions of the DEIR are required to adequately identify impacts.

13 The management of fugitive dust after it leaves the mining facilities is inadequate.

In 1986, asbestos was identified by the California Air Resources Board (CARB) as a TAC. CARB also determined that there is not enough scientific evidence to identify an asbestos threshold level below which no significant adverse health effects are anticipated (17 CCR 93000, Implementation Guidance Document 2017, CARB pg 1), (HRACritique),

Grp 7-19

As a TAC, asbestos, as well as respirable crystalline silica, fall under the non-criteria air pollutant category because they lack an identified safe "threshold level below which no significant adverse health effects are anticipated." There are no established limits for monitoring emissions of non-criteria air pollutants, silica and asbestos, into the ambient environment. The Health Risk Assessment is based on 30 years of exposure, so the cumulative effects from 80 years have not been addressed. Both silica and asbestos are inert substances not subject to environmental degradation that will have potential impacts beyond the 80-year project permit. (HRACritique)

The revised DEIR should establish asbestos mitigation protocols and robust monitoring systems of waste rock during transport and disposal to ensure the protection of workers and the public from the adverse health effects associated with the TACs, asbestos, and respirable crystalline silica. Without identifying clear and achievable mitigation measures, the DEIR must identify this as a significant and unavoidable impact.

HYDROLOGY AND WATER QUALITY

14 The proposed project would intentionally affect local groundwater resources.

The proposed Project would significantly affect local groundwater resources by dewatering the mine, lowering groundwater levels. The dewatered groundwater resources would be converted to surface water that is discharged into existing creek channels and quickly conveyed out of the area. The applicant's consultants have prepared a numerical groundwater model to attempt to predict how this proposed long term dewatering effort would affect overlying and surrounding groundwater levels.

Grp 7-20

An incorrect assumption was made in the groundwater model used to predict dewatering impacts, which led the DEIR to significantly underestimate groundwater drawdown, both in magnitude and areal extent. The groundwater model was calibrated based on pumping rates from the historical Idaho Brunswick Mine and only one water level measurement collected from the flooded (i.e., inactive) Union Hill shaft in 1956. Using only one water level measurement from 64 years ago to calibrate a complex bedrock aquifer system over a large region is inappropriate and introduces a significant amount of uncertainty to the model. (Baseline)

The revised DEIR must rely on a corrected groundwater model in order to accurately predict the extent of the well drawdown caused by the predicted 80 years of mine-dewatering and dewatered maintenance. Based on existing reports, the Project is likely to impact significantly more wells than the number of wells identified in the DEIR.(see "Safeguards for Well Owners and the Idaho-Maryland Mine", CEA Foundation) This is a significant impact that will affect hundreds of Grass Valley residents and must be addressed in a revised DEIR.

15 The basic constructs of the DEIR's groundwater model have significant errors and omissions making them unreliable.

The basic data needed to build a valid groundwater hydrological model are missing. The document "Review of the Idaho-Maryland Mine DEIR Groundwater Model" (Model Review) by Silberstein examines deficiencies in the model, as summarized here.

Grp 7-21

The mine water drains from several locations along Wolf Creek near Centennial Drive, and the DEIR provides only rough approximations of the mine water outflow rates from these areas. What's more, these outflow data are contradicted by more reliable records from previous studies which indicate ten times more outflow than the amount the DEIR discloses. (Model Review) Similarly, mine water inflow analysis is based on sparse mine water level data from the New Brunswick shaft. Only 12 water level measurements were taken at random times of the year between 2003-2007, and just 3 measurements in 2018-19). In addition, the utility of these measurements is incorrectly interpreted. The water level reaches a limit when it exceeds the level of the drains from which the mine water flows and doesn't reflect what could be substantial

Grp 7-22

inflow. Without a measurement of the outflow, the amount of inflow cannot be determined by the water level in the New Brunswick shaft. Essentially, no water balance assessment is provided.

Grp 7-23 Furthermore, data from private wells within the area is old and limited to just a few years. No usage data is provided, so seasonal variations in water levels are of limited use.

Grp 7-24 Critical data such as reduction in groundwater recharge from precipitation are also incorrectly calculated, failing to include the 75 acres of low-permeable mine waste to be dumped on the two sites.

Grp 7-25 Moreover, the groundwater model does not include the new access shaft, which would create a local area of groundwater drawdown. In fact, it appears that numerous existing mine features that are within a few hundred feet of the surface were also not evaluated in the ground water model. These mine features would contribute to the downward transmission of ground water from the near surface fractured rock areas.

These are all elements that are critical for constructing a reliable groundwater model to identify dewatering impacts.

Grp 7-26 In addition, there are three major faults and numerous minor faults in the mineral rights area. These impact the transmission of water and introduce a high level of uncertainty in the accuracy of a model which, as stated in the Groundwater Model report (DEIR Appendix K.3), assumes the geology is homogeneous. Common assumptions such as the correct anisotropic ratio for the groundwater transmission calculations may not be accurate.(Model Review, 3.g.)

Taken together, the groundwater model is seriously deficient with respect to data reliability, initial conditions, and modeling assumptions, calling into question its ability to accurately depict the Project's impacts.

Grp 7-27 Finally, use of modeling in a fractured rock system has limited value. Modeling that relies upon uniform rock, which is consistent from place to place, behaves in a more predictable fashion than rock that is in bedrock systems having multiple faults and irregularities. It is critical to provide for long term monitoring and extended protections due to the challenges inherent in modeling groundwater in this complex hydrogeologic setting.

The revised DEIR must provide accurate and adequate information and comprehensive analysis to determine the extent and the severity of the impacts upon groundwater resources and wells. Without this analysis, the revised DEIR must identify such impacts as significant and unavoidable.

WELLS AND WATER MONITORING

Grp 7-28 16 The DEIR inappropriately defers the collection of additional water monitoring data to the future.

The DEIR acknowledges that more groundwater level data is needed to assess the potential impacts of the proposed Project on groundwater levels. Mitigation Measure 4.8-2(a)(4) (DEIR section 4.8 pg 67) states that this needed water assessment be conducted "once dewatering of

the underground mine workings commences." This is internally inconsistent and would not be achievable. Once dewatering begins, it will be impossible to measure baseline levels. Consequently, this mitigation measure is impossible to implement. Mitigation measures under CEQA must be achievable, enforceable, and must be capable of actually reducing the Project's impacts.

The DEIR inappropriately defers the collection of additional data (via a Groundwater Monitoring Plan) to the future. CEQA does not allow the deferral of important studies necessary to characterize impacts because it denies decision-makers the information they need to make well-reasoned decisions regarding the viability and impacts of a Project.

Groundwater monitoring networks will need to be established in advance of the Project, and the resulting data will need to be included in the revised DEIR. The consequences of not committing to full compliance with General Plan Policy 2.17 are dire for local property owners who rely on groundwater. (Baseline)

17 Relying on fifteen monitoring wells to estimate the impacts on all water supply wells around the mine area is inadequate.

Grp 7-29

The DEIR relies on fifteen monitoring wells to estimate impacts on water supply wells but it does not explain how it arrived at this number of wells or their location. In complex fractured bedrock spread out over thousands of acres, monitoring water levels at fifteen locations could not possibly provide the needed data to ensure that groundwater impacts to hundreds of existing water supply wells in the Project vicinity are immediately identified and mitigated (Baseline,p12).

The revised DEIR must provide reliable data regarding the Project's monitoring regime in order to provide an accurate accounting of groundwater impacts.

18 Potential impacts to wells are underestimated and the proposed mitigations are inadequate.

Grp 7-30

The DEIR relies on a Well Mitigation Plan to allegedly protect wells from mining impacts. The Nevada County General Plan (Policy 17.12, item 1) states that:

*"In approving mining projects which **according to expert opinion** may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses:*

1) The County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water."

In contrast to the opinion of the DEIR consultant EMKO (DEIR Appendix K.9, p1), numerous experts have stated that there is the potential for a significant threat to water supply for wells in the area beyond those identified in the DEIR. Notably, Baseline Engineering unambiguously states that, *"...it is Baseline's expert opinion that the project may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses in a much wider area than is indicated in the DEIR."* (Baseline)

The DEIR relies on a Well Mitigation Plan to purportedly protect wells from potential mining impacts. Yet, the Well Monitoring Plan does not demonstrate that impacts would be mitigated.

BIOLOGICAL RESOURCES

19 Proposed mine dewatering activities have the potential to have a significant impact on dependent biological resources.

Grp 7-31 The DEIR fails to adequately address biological and aquatic resources, and hydrological impacts to those resources.

The DEIR's biological surveys exclude an entire reach of South Fork Wolf Creek (SFWC). Species of special concern are inadequately considered and qualitative data for benthic macro-invertebrates (BMI) is missing. (Wolf Creek Community Alliance (WCCA), Benthic Macroinvertebrate Analysis, 2007)

Aquatic resources are excluded through an inaccurate hydrological assessment of the full length of SFWC, ignoring the connectivity of the creek upstream and downstream of the culvert on the Mine property, thus failing to consider the movement of trout and other aquatic species.

Grp 7-32 Hydrological impacts due to mine dewatering into SFWC are inadequately studied, mischaracterized, or not considered. The initial dewatering rate of 2500 gallons per minute (gpm) would be followed by 80 years of subsequent operational dewatering at 850 gpm and as much as 2500 gpm. The DEIR fails to adequately consider this long-term higher rate of

Grp 7-33 discharge. Nor does the DEIR consider the seasonality of stream flow, loss of streambed or streambank habitat, changes in temperature, differences in Specific Conductance (EC), and

Grp 7-34 habitat for BMI. Drawdown of the water table due to dewatering is also underestimated and its impacts to meadow, wetland, and forest habitats are not considered. Further, the DEIR fails to consider chronic and cumulative impacts to BMI, trout, and other aquatic species, including

Grp 7-35 special concern amphibians. (WCCA)

Overall, because the DEIR does not adequately address biological and aquatic resources or sufficiently analyze hydrological impacts, this document must be revised.

20 Mine water discharges would overheat South Fork Wolf Creek.

Grp 7-36 Mine water temperature ranges between 14 and 15 degrees Celsius. The Project must not change the temperature of water discharged into the South Fork of Wolf Creek by more than 5 degrees Fahrenheit (2.8C) per NPDES requirements.(DEIR Appendix K.2, p108) Water from the mine will be pumped into the seven acre treatment pond. From there it will be run through the treatment facility and discharged into the creek. The DEIR's Hydrology study provides only a few data points (April and August of 2019 and Jan 2020) to determine the range of values for the creek flow and temp. However, over 15 years of monitoring by WCCA provides data

indicating that the temperature of the creek often falls substantially below 10C, and that these temperatures commonly occur during low flow times.

The revised DEIR must include studies that reliably predict the mine water's outflow temperatures from the treatment pond into SFWC. To do this, the EIR must include thermal modeling of the treatment pond, including the temperature impacts due to the treatment processing plant, flow through rates, cooling under different weather conditions, solar gain, evaporation, precipitation, etc. In order to avoid impacts to the SFWC and the species that inhabit the Creek, the revised DEIR must demonstrate that the discharge temperature and flow rates, combined with the temperature and flow rates of the stream over a range of conditions would not result in temperature changes in the stream in excess of 2.8C (5F) degrees.

GREENHOUSE GAS EMISSIONS AND ENERGY

21 The DEIR relies on an arbitrary threshold for greenhouse gas emissions.

Grp 7-37

The DEIR states greenhouse gas (GHG) emissions from mine operations would be just under 10,000 metric tons (MT) of GHG carbon dioxide equivalent (CO2e) per year. This number was chosen as a bright□line threshold based on other air districts in California that included Placer County, Sacramento Metropolitan Area, the Bay Area and Southern California. Neither the Northern Sierra Air Quality Management District (NSAQMD) nor the County have adopted numerical thresholds of significance for GHG emissions that would apply to the Project. The DEIR does not discuss the justification provided by each air district for adopting the 10,000 MT CO2e per year threshold, nor does it provide substantial evidence for applying this threshold to the project to demonstrate how it will achieve a fair share of the statewide GHG reductions goals for 2030 and beyond.

The DEIR must be revised to identify and provide justification for a GHG threshold of significance that will achieve the statewide GHG reductions goals for 2030 and beyond over the proposed 80 year lifetime of the mining permit. (Baseline)

22 The DEIR underestimates GHG emissions from haul trucks.

Grp 7-38

The DEIR states that the Centennial Industrial Site will be used for mine waste dumping to form "engineered fill" during the first 5 years of mine operations. The DEIR's analysis assumes that the Centennial Site remediation to remove toxic mine waste would be completed before the mine opens. However, since the remediation of the Centennial Site is not included in the DEIR analysis and, as indicated in the Project Description, may not be completed in any specified timeframe, "...it is speculative at best to assume that the Centennial Industrial Site will be available for fill placement." (Baseline)

To accurately account for the Project's GHG emissions, the DEIR should have assumed an additional five years of offsite hauling at the beginning of operations. This additional hauling would generate significantly more emissions than disclosed in the DEIR. This also holds true for criteria air pollutants as well.

The GHG emission should be updated in the revised DEIR to include the prospect of the Centennial Site being unavailable for mine waste dumping.

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23 Mining energy requirements would eliminate gains attained through the Nevada County Energy Action Plan.

The Nevada County Energy Action Plan calls for a 51% reduction in GHG emissions for electricity use by 2035, which is in close alignment with state goals. The Plan calls for residential energy reduction savings from building efficiency of 42 million kilowatt hours per year (kWh/Yr).

The DEIR states the amount of electricity required to operate the mine would be approximately 49 million kWh/Yr (DEIR p. 4.3-59), which would erase any residential electricity savings attained by the Plan.

Grp 7-39

The total non-residential electricity use of the county in 2017 was 53 million kWh/Yr. So, GHG emissions from this this one mining project alone would almost equal all other non-residential electricity use in the County and wipe out the projected 9 million kWhYr non-residential building efficiency savings.

Asking residents and business owners to cut down on their use of electricity while allowing the GHG emissions from the mine would be highly counter-productive and unfair. The DEIR must explain how the project intends to comply with the emission goals of the Nevada County Climate Action Plan.

The California Air Resources Board 2017 Climate Change Scoping Plan stated: "Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." Given these facts, the DEIR must establish a net zero threshold for new GHG emissions from the Project and declare the project has significant and unavoidable impacts.

NOISE AND VIBRATION

Grp 7-40

24 Nighttime Noise Impact is Not Adequately Addressed.

The analysis "Acoustical Comments on Draft Environmental Impact Report, Salter Project 22-0039" (Salter) provides comments on the DEIR's analysis of the noise and vibrations for the Project.

Salter determined that nighttime noise is not adequately addressed in the DEIR. The DEIR outright dismisses the potential for noise impacts due to sleep disturbance and inappropriately excludes this consideration from the DEIR analysis. The combination of nighttime industrial activities amongst a community that currently enjoys low ambient noise levels represents a significant risk for Project noise to impact the community, annoy residents, and cause sleep disturbance.

A revised DEIR should provide a comprehensive analysis of nighttime noise impacts, identify these as potentially significant impacts, and identify appropriate mitigation, including limitations on nighttime noise, to protect nearby residents. (Salter)

25 Engineered Fill Operation Noise is Underestimated.

Grp 7-41

The DEIR underestimates operational noise from the Project's engineered fill operations (Impact 4.10-2). This 5 to 6-year long activity could generate noise levels at least 10 to 18 dB higher than predicted in the DEIR. This is a significant deficiency in the impact analysis. As such, the project's noise levels could be 20 to 35 dB louder than current median/background ambient noise levels, causing a severe impact. In addition, in several instances, the DEIR fails to adequately address impacts to sensitive receptors located farther away from existing roadways that currently have a lower background noise (Salter). The DEIR must be revised to correct these deficiencies and omissions.

26 Blasting Vibration Impact is Not Adequately Addressed.

Grp 7-42

The DEIR fails to adequately evaluate blasting vibration impacts (see Impact 4.10-4). Blasting operations have the potential to subject nearby residents to "strongly perceptible" and borderline "unpleasant" vibration on a regular basis for the rest of their lives. These perceptible and unpleasant vibrations must be considered a significant impact in the DEIR.

In particular, the DEIR fails to include crucial guidance from the U.S. Office of Surface Mining Reclamation and Enforcement Blasting Guidance Manual restricting blasting vibration during evening and nighttime hours. If blasting must be allowed at these sensitive times, the DEIR must incorporate adequate mitigation with a notably stricter limit at all sensitive receptors (Salter).

HAZARDS

27 Potential mine flooding and worker safety from groundwater occurrence in mine workings.

Grp 7-43

In the DEIR's discussion of the Union Hill Mine, it is noted, "The Union Hill Mine workings are within 95 feet to 180 feet of workings of the Brunswick Mine at three to four different levels. During the post WWI period, the combined Idaho-Maryland Mine workings were completely dewatered. In 1956, the water level at the Union Hill Mine was reported to be within 20 feet of

the top of the shaft, suggesting that the complete dewatering of the adjacent mine workings resulted in no more than 10 to 20 feet of water level decline in the Union Hill Mine."

There are two important points to note in this discussion, (1) the Union Hill Mine is very close to the Idaho-Maryland at several levels; and, (2) there has been a possible weak hydraulic connection between the two mines, which is only logical.

There is no discussion in the DEIR of the potential impacts for the Idaho-Maryland Mine if flooding were to occur during mining. According to ITASCA's report (DEIR Appendix K.3, Figure 2-3), there are extensive abandoned mine workings above and adjacent to the Idaho-Maryland Mine that would remain flooded after the Idaho-Maryland is dewatered. If a conduit between these two mines were to open, for instance due to the widening of a fracture related to blasting vibrations or a seismic event, the flood of water into the Idaho-Maryland could be rapid and catastrophic for anyone working in the mine.

The DEIR must be revised to evaluate the potential risks of flooding during mining operations, including potential risks to mine workers. (CSP2)

28 Voluminous updraft from Mine ventilation air discharge may condense to form a water vapor cloud or fog resulting in a potential air traffic hazard.

Grp 7-44

The mine ventilation system would discharge 200,000 cfm of saturated air at 68F degrees from the top of the headframe with an upward velocity of 7.7 ft/sec. The headframe is located within the airport safety zone. Under some weather conditions, this large volume of air exhaust may form a persistent cloud plume, or fog, which could be a potential visibility hazard for aircraft. Also, the large mass of air moving upwards may create turbulence. In addition to aesthetic impacts, the DEIR should assess the potential hazards to aircraft of this large volume of saturated air (see MineExhaustMoisture report, attached as a reference to this letter).

29 The DEIR's evaluation of seismic hazards due to faults and mining is inadequate.

Grp 7-45

The mine project would target potential ore bodies that are more or less bounded by the Morehouse fault, the 6-3 fault (Weimar), and the Idaho fault, as well as numerous lesser faults. While the faults in this area are designated as being in a type C fault zone, with low seismicity and a low rate of recurrence, the DEIR does not analyze the effect that a seismic event would have on the mine or workers in the mine. (For further details, see FaultingHazards, attached as a reference to this letter) .

Throughout the 80 year life of the proposed project, expansion of mine works will remove 30 million tons of rock mass, and change the overall competency of the surrounding bedrock. In addition, several million tons of mine waste will be positioned over or near the faults. Finally, at the end of mine operations, the mine will re-flood, leading to an additional potential increase in seismic activity due to the re-introduction of hydrostatic pressures. (FaultingHazards)

The seismic reports discussed in the Geology section of the DEIR are not up to date and, even if updated, would not meet the requirements for a probabilistic seismic site analysis. (CSP2, p7)

Grp 7-46 The revised DEIR must include a complete and comprehensive analysis of the potential hazards due to seismic activity as a result of the Mine Project.

Conclusion

Grp 7-47 The DEIR lacks critical information necessary to identify all potentially significant impacts associated with a large underground mining project close to a populated area with complex groundwater and geologic conditions, and accordingly, fails to comply with CEQA requirements. As detailed above:

- The toxic legacy of the Idaho Maryland Mine at the Centennial site is incorrectly assumed to be already remediated in the DEIR for five resource areas, which leads to an underestimation of impacts, particularly in biology and hazards impacts;

Grp 7-48
- Health issues due to air quality and noise impacts are vastly underestimated;

Grp 7-49
- There is no proposal for managing the stockpiling and containment of waste and related runoff on site;

Grp 7-50
- The DEIR defers analysis of mine waste analysis;

Grp 7-51
- Asbestos and silica release are not evaluated;

Grp 7-52
- The groundwater model has significant errors, omissions, and is unreliable leading to a gross underestimation of groundwater and well impacts to nearby residents;

Grp 7-53
- Well monitoring is inadequate to evaluate impacts to the hundreds of existing wells in the project vicinity.

Grp 7-54 The DEIR lacks an accurate project description, lacks data and analyses needed to make informed determinations, and fails to provide effective and feasible mitigation measures. For these reasons, the document is inadequate under CEQA. The DEIR should be revised and recirculated to comply with CEQA.

Signers:

Sincerely,

Community Environmental Advocates FOUNDATION

Ralph Silberstein
President, CEA Foundation

SIERRA CLUB
FOUNDED 1892

Richard Thomas
Group Chair

WOLF CREEK COMMUNITY ALLIANCE
"Grass Valley - A creek runs through it."

EARTH JUSTICE MINISTRIES

CALIFORNIA NATIVE PLANT SOCIETY

Daniel R. Ketcham
Treasurer/Maintenance Chair
Brunswick Pines Road Association
Ketcham530@gmail.com
(530) 477-8056

Daniel R. Ketcham

Sierra Foothills Audubon

President

Friends of Bear River

Elders Action Network

Louise Taylor, President
Wawona Madrono Homeowners Association

THE SIERRA FUND

Joan Clayburgh (she/her)
Executive Director

The Sierra Fund
Mobile: 530-318-5370
Email: joan.clayburgh@sierrafund.org
Learn More: www.sierrafund.org

Joan M Clayburgh

patagonia

Morgan Greenwood

Friends of Banner Mountain

NFPA FIREWISE USA
Residents reducing wildfire risks

Anne Westling
on behalf of Ed Sylvester

BRUNSWICK MANOR
HOMEOWNERS ASSOCIATION

Secretary

Melinda Booth,
Executive Director
South Yuba River Citizens League

San Juan Ridge Taxpayers Association
P.O. Box 421, North San Juan, CA 95960
info@sjrtaxpayers.org www.sjrtaxpayers.org

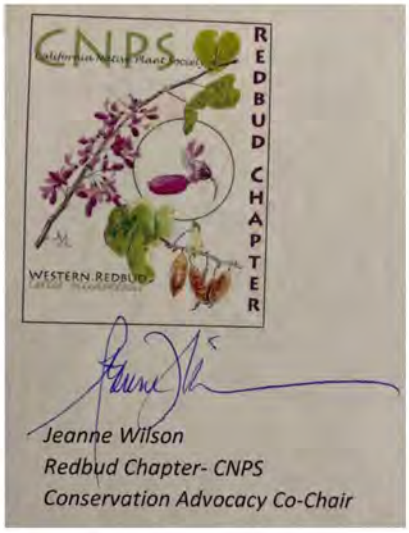
President, San Juan Ridge Taxpayers Association

WELLS COALITION

G Pierazzi

SIERRA Streams INSTITUTE

Jeff Lauder
Executive Director
Office: (530)470-6037
Cell: (714)642-3855
117 New Mohawk Rd. Suite H
Nevada City, CA 95959
www.sierrastreamsinstitute.org





Donald F Rivera

Coordinator

***** References*****

Grp 7-55 Documents attached as a reference to this letter:

- Review of the Idaho-Maryland Mine DEIR Groundwater Model.pdf

Grp 7-56

- MineExhaustMoisture.pdf

Grp 7-57

- FaultingHazards.pdf

Grp 7-58

- ASUR Plan Analysis.pdf

Grp 7-59

- Health Risk Assessment Critique.pdf

Grp 7-60

- Sampling Procedures.pdf

Grp 7-61 Documents cited and submitted under separate cover:

- Baseline Environmental Consultant Report, Feb 15, 2022 (Baseline).

Grp 7-62

- Salter Report, March 9, 2022 (Salter).

Grp 7-63

- Comments on the Idaho-Maryland Draft EIR - 16Mar22, Center for Science in Public Participation (CSP2).

Community Environmental Advocates FOUNDATION
PO Box 972, Cedar Ridge, CA 95924-0972
www.cea-nc.org / email: info@cea-nc.org

Mar 30, 2022

To: Matt Kelley, Senior Planner
950 Maidu Ave, Suite 170
Nevada City, CA
530-265-1423
Matt.Kelley@co.nevada.ca.us

Dear Matt Kelley,

Please include these comments to the Idaho-Maryland Mine DEIR.

Review of the Idaho-Maryland Mine DEIR Groundwater Model

This review of the predictions on the impacts to groundwater and wells for the Idaho-Maryland Mine is based primarily upon two DEIR documents: "Appendix K.2_Groundwater Hydrology and Water Quality Analysis.pdf" by Emko (EMKO) and "Appendix K.3_Groundwater Model Report.pdf" by Itasca (ITASCA).

1. Mine water Outflow Issues

The Hydrology Study uses data on mine water outflow rates that are based on approximations and estimates taken on only a few widely separated instances. These data are contradicted by more reliable historical data.

a) Estimated Mine Drain Flow Rates per DEIR
There are 3 identified discharge points for the mine at Wolf Creek: The Eureka Drain (ED-1), the 24" East Eureka Shaft Drain from the Navo building (IMD-1), and the East Eureka Shaft steel pipe from the Navo building (IMD-2). All drains are at or below 2502 feet elevation. A fourth potential drain is questioned as to source.

Grp 7-64

The ITASCA groundwater model used the following outflow data that was provided in EMKO Section 3.3.4, summarized here:

Flow data, ED-1:
"...in the range of 100 gpm (Condor, 1994)
"...only a few gpm" (EMKO Feb 2018, Dec 2018)
"...in the range of 20 to 25 gpm" (EMKO, April 17, 2019)
Flow data, IMD-1:
"...to be about 60 gpm." (Todd Engineers, 2007)
"...consistent with Todd..." (EMKO Feb 2018, Dec 2018)
"...approximately 100 gpm." (EMKO April 17, 2019)
Flow data, IMD-2:
"...in the range of 1-2 gpm." (EMKO Feb, 2018)
Flow data, D-1:
"...only a few gallons per minute" (EMKO? Feb, Dec 2018, April 2019)

This scant data is the basis of the outflow values of 60-125 gpm reported in the DEIR. [DEIR 4.8-19]

In order to establish a viable model of the hydrology for the mine, these critical questions should be unanswered:

- What is the actual measured outflow?

Grp 7-65
- How does it vary seasonally?

Grp 7-66
- What are the current outflows at the Wolf Creek drains under the current model?

Grp 7-67
- How do the model flows compare with the measured outflows?

b) Measured Mine Drain Flow Rates per Historical Records

More thorough and inherently precise measurements were provided by an earlier study. According to the Technical Assessment by James Askew Associates Inc, which was prepared in 1991 for the 1995 Empire Gold permit application to dewater the mine:

Grp 7-68

"ED-1 is estimated to be discharging 100 gallons per minute [gpm] of water. IMD-1 and IMD-2, which are located about 25 ft upstream of ED-1 **discharge in the range of 500 gpm to 1,200 gpm depending upon the season. Weir measurements are made by NID at IMD-1.** " [Askew, Section 5.3.2 Hydrology - Surface Water, pg 5.3.]

This implies that the total current discharge from the mine into Wolf Creek is likely in the range of 600 to 1300 gpm, depending upon the season, or almost ten times the amount reported in the DEIR.

The reported outflow in the EMKO report appears to be grossly understating the actual outflow. ITASCA did not report any water/mass balance for any of their simulations. Inherent in any numerical simulation, like ITASCA's, is a water balance (so that balance errors can be evaluated):

Grp 7-69
- Year-round accurate outflow measurements taken daily should be collected.
- Data should be collected for several years, including at least a year with normal rainfall and a year with low rainfall, in order to establish a baseline for groundwater modeling and impact assessment.
- Assessment of the fractional contributions of surface runoff and percolation can be better achieved by outflow volume logging.
- Water balances for the mine area should be provided and verified with the model.

2. Mine Water Inflow and Transmissivity Estimation Issues

a) The analysis of seasonal measurements of the level of water in the mine is flawed and does not support the transmissivity assumptions used in the model.

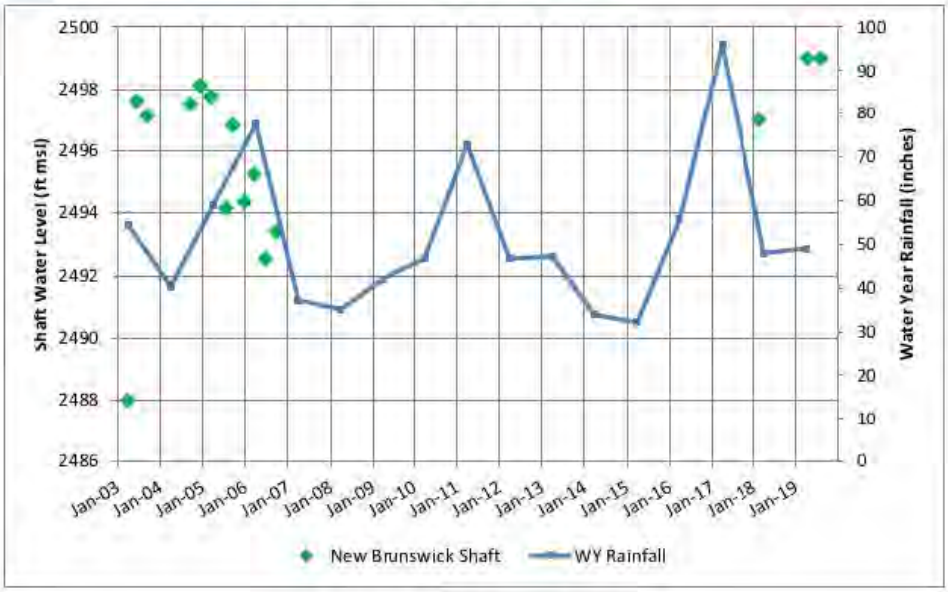
The Hydrologic study concludes that there are no correlations between the elevation of the water surface in the mine and the seasonal precipitation. It uses this point to support the position that there is little volumetric transmission of the water from the upper five hundred feet of fractured rock down into the mine. There are a number of reasons why the mine water level data is not useful as a basis for determining transmissivity.

Grp 7-70

First, note that the mine is flooded, and Measurements were taken in 2003-2007 and 2018-2019 at the New Brunswick (NB) Shaft (EMKO Fig 3-7). The water level in the mine, averages 2497 ft elevation. A few measurements have been lower, with one at 2488, and they have a maximum of around 2499 feet.
Second, note that minewater drains out of the mine at the drains located along the main branch of Wolf Creek, which is over 1.5 miles away from the NB Shaft: the East Eureka drain (IMD-1) is at 2497 ft elevation. A diagram of waterflow through the mine is in Figure 3-20 (EMKO).
Mine water level data - EMKO argues that the levels of water in the NB Shaft are independent of the seasonal rainfall and provides a graph showing both rainfall and NB Shaft water levels. (see Figure 3-7 below) Unfortunately, the NB Shaft data are very limited. Only about 15 measurements are provided. (Additional issues with the interpretation of the data are discussed in 4, below.) Note that of these, nine are at or above 2497', which is the drain level.
Obviously, if the water level exceeds the drain level, the water will flow out. The higher the NB Shaft level, the higher the rate of drain outflow. Thus, water levels in the NB Shaft would not provide a valid assessment of the amount of water flowing into the mine unless the outflow is measured.

Additionally, inflow and outflow is complicated by the fact that the near-surface region around the shafts in the area may be quite fractured and/or weathered and so seepage could occur through those more permeable zones.

Figure 3-7 Comparison of Shaft Water Levels with Rainfall



[3] IMMC used an estimated collar elevation of 2,750 ft msl. Since the collar elevation has been confirmed at 2,756 ft msl, the water elevations reported by IMMC (2007) have been increased by six feet in this report.

[4] One measurement, from June 2004, had a reported elevation of 2,581 ft msl, or about 100 feet higher than the other 12 measurements made by IMMC (2007). Review of the data presented by IMMC (2007) suggests that the anomalous June 2004 elevation may be due to a data recording or reporting error. Thus, it is not considered further in this report.

Grp 7-71

Grp 7-70

b) Invalid interpretations of seasonal precipitations vs mine water levels.

The seasonal interpretation of the New Brunswick Shaft water levels data is flawed. Even without considering the fact that the mine drain outflow rates will create an upper limit to the change in water levels in the NB Shaft, the data does not support the claims made in the EMKO report. EMKO claims that the data "*...demonstrate that the variations in the water level in the shaft do not occur on a seasonal basis, and that there is not a consistent correlation between water levels in the shaft and rainfall.*" [p30, and Figure 3-7]

There are several errors to this reasoning. First, note that data is sparse, with only 12 samples over a four year period in 2003-2006, plus a single sample in 2018, and two samples in 2019. Also note that the data is taken at

various times of the year, making direct year to year correlations limited. Also note that the annual rainfall year is based upon precipitation from October thru September, and a single data point for each year's rainfall is apparently placed on April 1, in the middle of that year's rain season. (Figure 3-7).

The chart lacks sufficient granularity to be useful. For example, a year's rainfall may be above average, but an NB Shaft measurement taken in December of that year may reflect that the first few months of the rainy season and the preceding last 6-9 months of the prior year's seasonal rainfall, which could be below average even though the rainfall year was recorded as above normal due to rains after December for that year.

In order to detect variation seasonally, it is more useful to look at the total rainfall in the months preceding any particular NB Shaft measurement. Thus, for the NB Shaft value at ~2497' elevation on around Feb 2018, the total rainfall from June 2017 through Feb 2018 was only 25.98". This is below normal. This correlates with a lowered level in NB Shaft. But the higher value of the 2017 total rainfall year reflects higher precipitation from more than 9 months earlier, giving the false impression of non-correlation.

Grp 7-73

Note also that the 2019 precipitation data is invalid according to precipitation records. The 2019 precipitation should be graphed at 68.15 inches, the correct precipitation for that period. But it is graphed at an incorrect value of 48 inches. Correcting the graph would show a direct correlation between higher precipitation and NB Shaft levels.

Grp 7-74

In addition, in close examination of the data for 2005, there is a clear drop in levels between the late Winter sample and the mid Summer sample followed by a Fall rebound. Also, again in 2006, there is a clear drop from late Winter to mid Summer followed by a rebound. Thus, data from both of those years **seems to imply that there actually is a seasonal correlation.**

Complicating this, an unknown amount of surface water or near surface percolation from seasonal precipitation may impact mine water inflows. However, the model report assumes that the entire seasonal pumping variations as reported in historical records are from surface leakage and not due to transmission through the bedrock: "*...during the rainy season, total pumping would probably be in excess of 900 gpm, perhaps in the range of 1,400 to 1,600 gpm. This estimate is based on the observation that the rainy season flows would increase by approximately 500 gpm for the historical Idaho-Brunswick Mine. [Itasca, pg 23 (35/93)]* ITASCA goes on to assume that this is not an indication of any bedrock transmissivity: "*...the excess inflows are due to surface-water runoff and percolation.*"

Grp 7-75

It seems surprising that an argument would be made that there is no seasonal correlation between mine water levels as a basis for determining low transmissivity while failing to consider that there are maximum water levels in the mine due to the drain elevation, and then acknowledge that there is a seasonal variation in pumping rates. Why wouldn't seasonal variations in pumping rates show up as seasonal variations in the mine water levels?

However, all of this may be a moot point because water migration downwards to depths may be delayed. Latency in water conductance time from surface percolation through the bedrock to depths may take a year or two and produce a smoothing effect on variations in mine water levels. This should be taken into consideration. Data for the years prior to 2003 would be needed to make that assessment.

Looking at the graph based upon annual precipitation over multiple years, there does appear to be a downward trend in shaft levels from 2004 to mid 2006. And the annual precipitations were notably below normal from 2003 to December of 2005. So the graph seems to show a multiyear downward trend in the NB Shaft levels with a clear seasonal variations signal also showing in the measurements.

Grp 7-76

In conclusion, the given EMKO conclusions from the comparison between NB Shaft water levels and seasonal precipitation using figure 3-7 do not hold water. The following are needed:

- Year-round logging of mine water level and outflow should be collected.

- Data should be collected for several years, including at least a year with normal rainfall and a year each with low and high rainfall, in order to establish a baseline for groundwater modeling and impact assessment.
- The data from the outflow and the data showing changes in mine water level can then be compared with granular rainfall data to legitimately make an assessment of the amount of seasonal variation in mine water inflows.
- The data could then be used to provide an estimate of transmissivity from the surface.

c) Data from monitoring of wells is old, limited to a few years, and with no well owner's usage data.

Grp 7-77

Monitoring of wells was conducted in 1995-2001, 2003-07 ((DEIR Appendix pg 4.8-11))
Well log records show seasonal variability but there is no data provided on how much of the well water level changes are due to dry season water usage and how much is a reflection of the actual lowering of the ground water level overall.

No recent well monitoring was conducted during drought years, and no assessment was made on the long term predicted impacts of climate change. These impacts include: warmer weather, changing rainfall amounts, shifting of rainfall periods, as well as consideration of water usage changes by property owners due to drought.

d) Surface Infiltration - Groundwater Recharge
The study fails to account for a substantial decrease in groundwater recharge from precipitation as a result of planned project development.

The EMKO hydrology report (Appendix K.2) claims that groundwater recharge due to surface infiltration would be essentially unchanged: "Thus, the project would not result in any appreciable new areas of compacted soils or impermeable surfaces that could substantially restrict or otherwise interfere with groundwater recharge." (p 121-122)

The analysis of changes in surface infiltration needs to include changes due to the engineered fill which covers 31 acres on the Brunswick site. In addition, infiltration would be reduced on the Centennial site, where the engineered fill will reduce permeability over 44 acres, bringing the total of near-impermeable engineered fill to 75 acres.

Grp 7-78

Even if Rise Gold abandons the use of the Centennial site for mine waste dumping, as in DEIR Alternative 2, there is a cumulative impact from the planned DTSC cleanup of reduced groundwater recharge in the areas of remediation tailings placement, based upon the draft RAP. (Note, the Final RAP has not been prepared.)
From DTSC Remedial Action Plan draft, p27 (52 of 623):

"The evaluation considers the on-site placement of tailings with elevated metals concentrations at a location that is not subject to surface water erosion or leaching (e.g., engineered fill with appropriate surface and subsurface drainage controls), and assumes that the engineered fill will have a simplified environmental attenuation factor of 100 for protection of surface water and groundwater quality, pursuant to the Designated Level Methodology (DLM; RWQCB, 1989 Jun)." and
"Consolidation and capping of the tailings as engineered fill with appropriate surface and subsurface drainage controls at a location away from Wolf Creek **will significantly reduce the potential for storm water erosion and infiltration.**"

In addition, the impervious surfaces of the Brunswick site will increase by 6 acres. (DEIR Project Description p14):
"The site currently has approximately 9 acres of impervious asphalt paving from previous land uses. Some of the existing asphalt areas will be removed and some will be reused. After completion of construction, the impervious surfaces and buildings will cover a total of approximately 15 acres of the Brunswick Industrial Site"

In total, 81 acres will have a reduced infiltration which should be included in the ground water calculations.

e) Estimated surface areas in the mine works have limited reliability

Estimates of groundwater transmissivity rely in part upon estimates about the subterranean surface area of the mine works as compared to the amount of mine water outflow. In the hydrology report the typical drift dimensions are assumed to be 7.5ft x 8.5ft (WxH) [pg 12]. However, in prior studies (DEIR Appendix F.2, Hydrogeological Overview, Geosolutions, 2008, p 9) 6ft x 6ft is used as the average cross section for stopes, raises, winzes, shafts, and drifts. Further details followed:

"*Because of the type of equipment utilized in mining during early to mid 1900s beneath Grass Valley it is reasonable to assume that drifts now located throughout the Idaho-Maryland mine have a cross sectional dimension of about six feet wide and six feet high.*" (p17)

Grp 7-79

The following must be explored:

- Given this contradiction, what is the justification for using the larger size for the surface area estimates?
- What is the source of the 7.5ft x 8.5ft measurement?
- How would the reduction of surface area per running foot from 24.5 ft (2H +W) to 18ft, or about 25%, affect the assumptions of transmissivity and the overall hydrological model?
- For the same amount of measured water outflow, a decrease in the transmitting surface area indicate a corresponding increase in transmissivity of bedrock.
- The model should use those higher values as a starting point.

3. Groundwater Model Elements

a.) Additional drawdown from the proposed new access shaft

A new access shaft is proposed close to the creek, but a cone of depression of groundwater levels like the one indicated at the New Brunswick Shaft is not shown. This new shaft is particularly worrisome because of its proximity to South Fork Wolf Creek.

The following questions must be answered:

Grp 7-80

- Was the new access shaft included in the Itasca ground water model?
- What is it's precise location? The shaft should be located on all maps.
- How far is it from South Fork Wolf Creek, a perennial stream?
- Is it within 100 ft?
- Was there analysis of the impact of the groundwater caused by the significant 60 ft deep excavation needed to build a permanent access shaft?
- Will this lead to more draw down of near surface groundwater?
- How will the creation of a large excavation and a new access shaft impact the near surface ground waters that feed SFWC?

b.) Does the model include numerous existing near surface features from the historical mining?

There is no indication that the many other near surface features of the Idaho-Maryland Mine were included in the analysis as additional areas of groundwater drawdown and/or conduits for water movement. In addition to the existing NB Shaft, the technical study "near surf.." identifies 14 other shafts, drifts, and drain features which pass through the more transmissive top few hundred feet of fractured bedrock. Each of these features will potentially impact the model by increasing transmission out of the top fractured rock zone. And most of them currently have water levels that are close to the surface. Hence the impacts would be noteworthy.

Grp 7-81

In addition, there are likely additional unidentified legacy mine near surface features which may affect the model. For example, note the unexplained sinkhole area noted in "Geotechnical Assessment of Near Surface Mine Features":

"The property owner indicated that approximately two years ago settlement of the ground surface was observed near the shaft location and was backfilled with boulders and soil. No documentation available. Additional settlement at the shaft location, measuring approximately four feet by five feet wide and 18 inches deep, was observed in February 2020." (DEIR Appendix H.6, p5)

There are numerous other nearby mines, both documented and undocumented. A survey of mines adjacent to and nearby, and a survey of reported sinkholes or other features identifying mining activity should be conducted to determine whether other near surface mine features may impact the groundwater model.

c) Did the mining model include all potential mining areas?

Grp 7-82

The model assumes the areas to be mined will be confined to very limited areas at depths greater than 1000' (DEIR Appendix K.3, pgs 11, 30). However, the mineral rights provide no restriction to mining anywhere within the 2585 acres and to within 200' of the surface. Furthermore, mining activity is indicated for within 500 feet of the surface:

"New underground workings, except for the service shaft and new ventilation raise, would be below 500 feet of the ground surface." (DEIR 3.19)

The groundwater model needs to assume that all areas within the mineral rights zone could be mined.

d) The model simulations were conducted with the assumption that mining would be only for 25 years.

All computer models that attempt to simulate real world conditions are based upon assumptions. Even minor differences between input data and actual real world conditions can result in errors that increase exponentially over time. The longer that the computer model is run, the greater the potential for deviation from actual outcomes.

Grp 7-83

From page 23 of "Appendix K.3_Groundwater Model Report" by Itasca: *"The predictive numerical simulations were conducted to assess the potential inflows to the mine workings, the effect on nearby domestic wells, and the potential effects on the creeks in the Mine area during mine development and production* ***between the assumed years of 2020 and 2045 (Year 1 to Year 25), which is the current mine plan."***

The permit request is for 80 years. Simulations in the model extended the calculations for 40 years to a total of 65 years. This is still short of almost 80 years of mining expansion.

The following must be considered:

- The model should be run for 80 years if possible.
- The model authors should justify the simple extension of the run times, along with an analysis of the reliability of a model over such an extended period of time.
- Examples of actual real life validation of similar numerical simulations over this extraordinary length of time and similar complex geological conditions must be provided.

Grp 7-84

- What is the model predictive success rate?

Grp 7-85

- How does the range of deviation change over longer periods?

Grp 7-86

- In order to assess the relevance and accuracy of the model, a listing of the initial conditions and additional data inputs must be provided.

Grp 7-87

- The complete model data used in the simulation is a key assessment component and must be included in the documentation.

Grp 7-88

g) Assumptions of transmissivity and anisotropy ratios based upon homogeneity of the rock are questionable. Faulting compounds the issue.

The model also relies upon assumptions regarding a K value anisotropic ratio of 10:1 horizontal to vertical conductivity. (Ten times more horizontal groundwater transmission than vertical transmission.) This value for anisotropy is very frequently assumed. It holds up particularly well for sediments and sedimentary rocks that haven't been tilted. It wouldn't necessarily hold for bedrock where most of the permeability is related to fractures.

There are numerous faults in the area. The Brunswick block, which is the primary mass of rock in which the proposed mine will operate, is an immense wedge of rock cleaved by 3 major faults, and numerous lessor subfaults.Within this zone are also numerous lessor faults. The mine project is targeting potential ore bodies that are more or less bounded by the Morehouse fault, the 6-3 fault (Weimar), and the Idaho fault.

The transmissivity through the fault planes may be significantly lower than the surrounding rock, and groundwater movement may be routed by these barriers. In the Hydrogeological Technical Memo prepared by GeoSolutions in 2008 for the Emgold project:

Grp 7-88

"Movement along interfacing rock blocks located within stress fields of this type usually produce grinding and crushing of materials within the interface of those structures. Materials produced by this action are commonly called mylonite and are a fine grained laminated material formed by extreme microbrecciation of the rock along the structural surfaces during movement. Because of the pulverization of these rock materials the mylonite generated by thrusting can behave like clay with very low permeability and hydraulic conductivity. Therefore, it is likely the migration of fluids through these structures will be limited or highly routed along lines or planes adjacent to the faults." (Emgold 2008 DEIR Appendix F.2 pgs 12, 14, 16)

This implies that the 6-3 fault and Morehouse faults, which trend generally in a North-South direction, may form effective walls constraining the horizontal movement of groundwater. The model uses the concept that groundwater movement is predominantly in the East to West direction. *"all of the geologic units were assigned with an anisotropy ratio (i.e., a K x /K z value) of 10."* [note: x is E-W horizontal and z is vertical]

The assumptions that the bedrock can be characterized by assuming homogeneity is a big assumption on its own, but the complexities of numerous faults which may or may not transmit or block groundwater flow raises the uncertainty to new heights. There are likely other faults east of the project which are not mapped. The model sensitivity analysis was run with the consideration that faults may be more transmissive of groundwater. The opposite case should be evaluated.

Grp 7-89

- The groundwater model should be run with faults having significantly lower transmissivity or K values.

Grp 7-90

- The model should be run with different anisotropic ratios having proportionally lower horizontal transmissivity.

Grp 7-91

- There are numerous lessor faults identified within the I-MTech_Report which should be added to the model. (see https://www.risegoldcorp.com/uploads/content/I-M_Tech_Report.pdf)

Grp 7-92

The following must be answered:

- What are the potential impacts when mining activities penetrate or remove portions of an impermeable fault wall?

Grp 7-93

- Are there measurable drop offs in groundwater surface topography that would indicate an impermeable or lessor permeable barrier?

3. Conclusion

Grp 7-94

The ITASCA groundwater model has significant issues with data reliability, initial conditions, and modeling assumptions, calling into question its reliability. The questions raised throughout this report must be answered in the DEIR. In particular, additional model runs should be conducted to verify the reasonableness of the

assumptions of the model in terms of mine water discharge, current well logs, and other more adequately measured data as detailed above. Additional sensitivity analyses should be conducted to look at how changing anisotropic values or applying decreased permeability at the faults would affect the predicted drawdowns. This would increase the likelihood that the model approaches reality.

The unreliability of the groundwater model in this situation cannot be used to conclude that groundwater impacts due to the Mine operations will be less than significant.

Thank you,
Ralph Silberstein, President
CEA Foundation

IM Mine Exhaust Moisture: Potential Hazard, Aesthetics, and Air Quality Impacts Background
CEA Foundation

Key points:

- The headframe is within the airport restricted area.
- The 200,000 cfm volume of air will exit 24/7 at 7.7 ft/sec, possibly causing turbulence for air traffic.
- Under some weather conditions, a persistent cloud plume or fog may form.
- Exit elevation of the headframe is roughly the height of the surrounding residential hills.
- A SW breeze will move this towards the airport, which is less than a mile away.

The Water Supply Assessment states that the Idaho-Maryland Mine will lose about 40,000 gal per day (gpd) of water due to saturated air venting out of the headframe at the Brunswick site.[1] The exhaust fan in the headframe at 165' above ground will emit 200,000 cfm. It will exit from a 23.52 ft diameter stack with a velocity of 7.7ft/sec. The temperature of the exiting air will be 293.15K, or 20C (68 degrees F).[2]

This large volume of saturated 68F degree air exhaust will potentially form a fog or a moisture cloud plume. Depending upon the rate of mixing, this would occur when weather is cool and the relative humidity is high because the temperature of the exiting saturated air will drop and be unable to carry the excess moisture. This will be much worse in cold weather when the humidity is high. For example, when the relative humidity is 80% and the temperature is 41F, the exhaust plume will need to continuously mix with over 12 times its volume to dissipate. If the temperature drops to 35F, the exhaust will need to be continuously mixing with over 40 times its volume.

Grp 7-95

A SW breeze will move this towards the airport, which is less than a mile away. Under some conditions, the cloud may persist. In addition, the exiting air column will also have an upward velocity which may impact air traffic due to turbulence.

*****

[1] *"Ventilation air flow through the mine working would become saturated with water vapor, consuming approximately 40,000 gpd (assuming 200,000 CFM airflow, 100 percent saturation of air at 68 degrees F).", DEIR "Appendix N_Water Supply Assessment.pdf", pg 10.*

[2] DEIR "Appendix E.1_AQ-GHG Report.pdf", (p371 of 1938)

"Base Elevation: 2,741.99 ft"
"Release Height: 50.30 m"
"Emission Rate: 1 g/s"
"Gas Exit Temperature: 293.15 K"
"Stack Inside Diameter: 23.52 ft"
"Gas Exit Velocity: 2.34 m/s"
"Gas Exit Flow Rate: 200,000.00 ft3/min [cfm]"
"Variable Emissions Scenario: None"

[3] DEIR "Project Description.pdf", p3-5. Map showing Brunswick Shaft location.

[conversions: 293.15 K = 68 F = 20 C, 2.34 m/s = 7.7 ft/sec, 200,000cfm = 5660 m3/min, 0.264gal/kg of water]
[Given 100% rel humidity, 20C, 760mm Hg, absolute humidity is 0.0173kg/m3.
Total moisture is 5660 * 0.0173 = 97.9kg/min. 97.9kg/min*0.264gal/kg = 25.85 gal/min
25.85 * 60*24 = 37,224 gal/day exhausted. = ~ 40,000 OK.]

RS, 2/1/22

Community Environmental Advocates FOUNDATION
PO Box 972, Cedar Ridge, CA 95924-0972
www.cea-nc.org / email: info@cea-nc.org

IM Mine Potential Seismic Hazard
March 20 , 2022

Grp 7-96

The mine project is targeting potential ore bodies that are more or less bounded by the Morehouse fault, the 6-3 fault (Weimar), and the Idaho fault. Within this zone are also numerous lessor faults, which are not shown in this image from pg 7-6, I-M Tech Report. For reference, note that Wolf Creek, South Fork Wolf Creek, and the Brunswick Shaft near the corner of Brunswick Rd. and East Bennett Rd. are shown below.

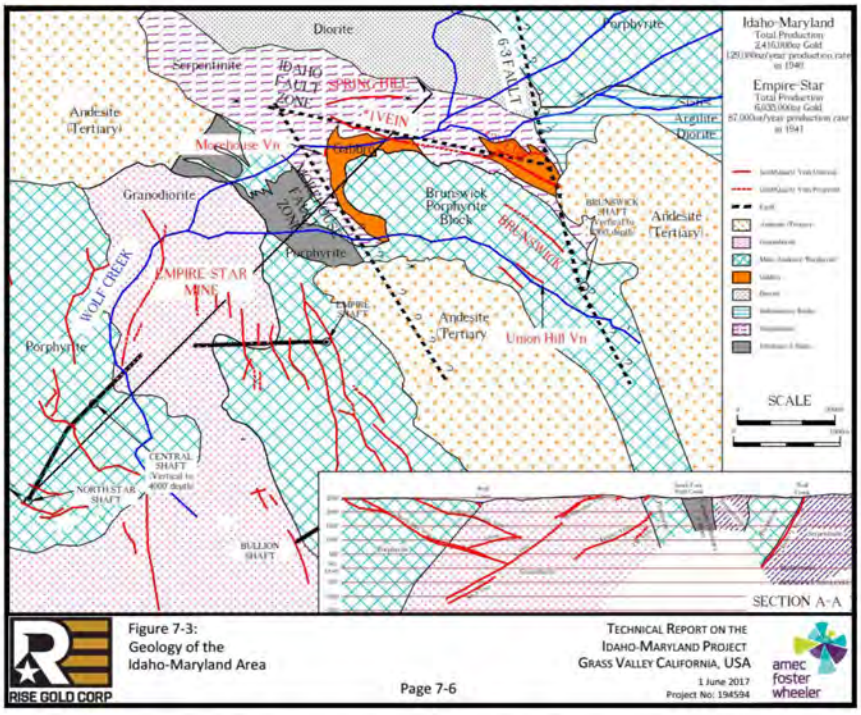


Figure 7-3:
Geology of the
Idaho-Maryland Area

Page 7-6

TECHNICAL REPORT ON THE IDAHO-MARYLAND PROJECT GRASS VALLEY CALIFORNIA, USA
1 June 2017
Project No: 194594

RISE GOLD CORP

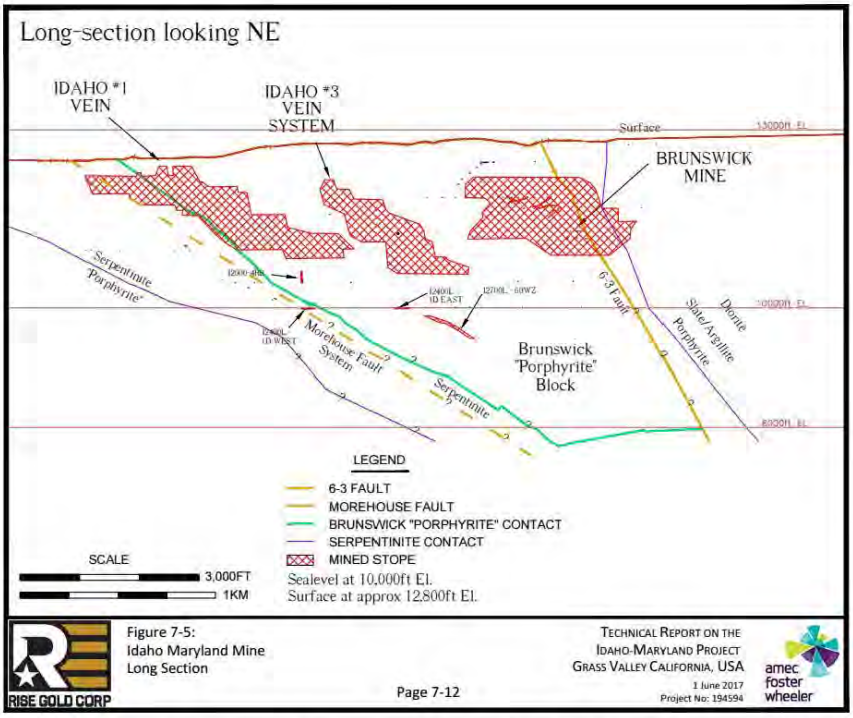
amec foster wheeler

As reported in "DEIR appendix H.2_Brunswick Fault Zone MP.pdf" prepared by NV5 dated Jan 16, 2020, the faults in this area are designated as being in a Type C fault zone, with low seismicity and a low rate of recurrence. The report concludes that: *"Fault rupture through the site, therefore, is not considered likely."* (DEIR H.2, p5)

However, no specific seismic study for the mine project was produced, and no further analysis was provided justifying the determination or assessing the potential of impacts from the proposed mining activities on seismicity or hazard risks.

Of note, mining may cause changes to the geologic fault zone stresses in the area. These changes may include localized significant decreases of total stable rock masses, degradation of load bearing capacity, reduced resistance to shear, and in some cases increased mass loading on or near fault lines.

For example, significant increases of localized bedrock loads will result from the disposal of mine waste. According to the plans, dewatering the flooded mine will initially offload about 3.4 million tons of water. Mining for the first 11 years will offload approximately 4 million tons. The surface at the Centennial site will receive about 1.6 million tons from this process, and the southeast portion of the Brunswick site will receive about 2.2 million tons or surface loading. Then, for about 65 years, another 24 million tons will be removed from the mine to be deposited elsewhere. In all, over 30 million tons will be removed from the subterranean mining area.



Particularly noteworthy is the potential for seismic activity on the 6-3 fault in the region of the proposed Brunswick mine waste surface dumping site. The 2.2 million ton mine waste pile loads up the reverse thrust block side of the fault that is over the nearby planned mining operations.

Grp 7-97

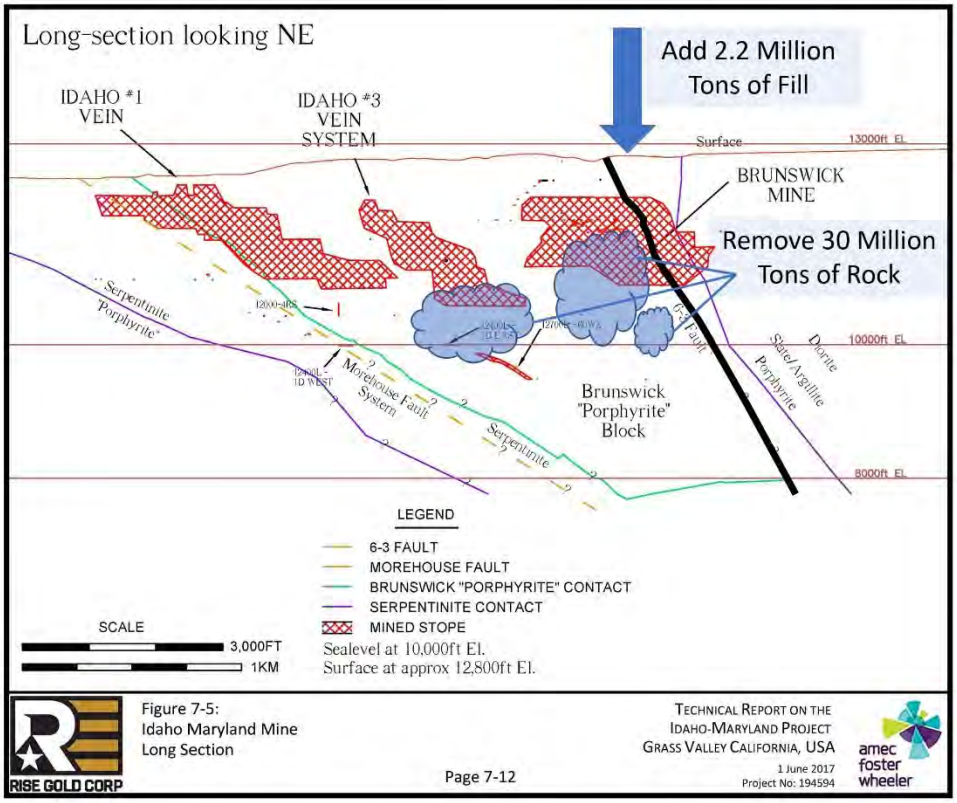
The above cross section diagram (Page 7-12, I-M Tech Report) shows the 6-3 Fault as a steep yellow line running at a 65 degree slope through the historic Brunswick Mine. Rise Gold has indicated that much of the mining will take place in the "Brunswick Block" located almost entirely to the east (left) of the 6-3 Fault. Using the information provided in the DEIR "Fault Zone MP" (Appendix F.2 p7) the 6-3 Fault is indicated by the red line overlaid on Sheet 1 of the DEIR Project Description, shown here. Notice the location of the mine waste pile, the flat-topped area to the right of the fault line and below (south) of the processing facilities, identified by the circled 8 on Sheet 1.



Throughout the 80 years of mining operations, expansion of mine works by tunneling and stoping will reduce the competency of the surrounding rock structure, vibrations from blasting will take place daily, and finally, at the end of mine operations, the mine will reflood, leading to a potential increase in the seismic activity due to the re-introduction of hydrostatic pressures.

This diagram shows the previous figure 7-5 cross section modified to show the approximate location of the 2.2 million tons of added fill on the right (east) side of the fault. The dewatering and removal of waste rock and ore will be mostly on the left (West) side of the fault.

Grp 7-98



Grp 7-99

A geological study of the seismic risks, including the risks from the proposed dewatering, mining, and mine waste dumping should be conducted and included in the DEIR addressing the following:

- How will the mining activities impact the seismicity of the area? **Grp 7-100**
- Will the integrity of near surface historical and proposed mine works be impacted by loading? **Grp 7-101**
- All buildings within the fault zones of the faults should be mapped in relation to the faults.
- An evaluation of the lessor faults as identified in the I-M Tech Report should be conducted. **Grp 7-102**

RS 3/20/22

/// calcs ////
[engineered fill: 1000 tons/day 20tons/truck x 50 trucks/day
5 years at centennial = 365,000tons x 5 = 1,825,000 tons or 1.8 million tons
6 years at brunswick = 365000 x 6 = 2,190,000 or 2.2 million tons
65 more years or 65 x 365,000 tons = 23,725,000, or 24 million tons.
Dewatering 2500 acre feet minewater. 2500Acft x43,560 cf/acft x 62.41 lbs/cf = 6,796,449,000 lbs = 3398224.5tons or 3.4 million tons]

Mar 25, 2022

To: Matt Kelley, Senior Planner

Nevada County Planning Department
950 Maidu Ave, Suite 170
Nevada City, CA
530-265-1423
Matt.Kelley@co.nevada.ca.us
Idaho.MMEIR@co.nevada.ca.us

Attn: Matt Kelley,

Please include these comments to the Idaho-Maryland Mine DEIR.

ASUR PLAN ANALYSIS

PREPARATION OF ASUR PLAN

Grp 7-103

This plan has been developed by Rise Gold, Inc, in response to the comments from the Northern Sierra Air Quality Management District, NSAQMD: "Pursuant to Health and Safety Code section 41511 and the ATCMs (discussed below), the NSAQMD will require that an asbestos sampling plan be developed and approved by the NSAQMD prior to its implementation. It should at least meet the requirements and specifications of ARB Method 435 (see https://ww3.arb.ca.gov/toxics/asbestos/tm435/tm435.htm). This has not been done. No sampling plan has been developed and approved by the NSAQMD." (*Letter between Air Pollution Control Officer of NSAQMD and Matt Kelley, Senior Planner Nevada County, February 10, 2021*)

Rise Gold is listed as the author- no credentialed expert is credited even though they have a PhD Geologist on their team along with several Technical Advisors who are also geologists.

Rise Gold Inc. is incorporated in the state of Nevada. The state of Nevada does not require a license for geologists.

Grp 7-104

The sampling plan seems to be derived from "Air Resources Board Method 435, Determination of Asbestos Content of Serpentinite Aggregate (1991)". CARB also published the "*IMPLEMENTATION GUIDANCE DOCUMENT Air Resources Board Test Method 435 Determination of Asbestos Content of Serpentine Aggregate*" in April 2017 to further elucidate the complexities of asbestos testing in an effort to increase consistency and reliability between laboratories. The document states that: "If all parties involved in the collection, processing, and analysis of potential asbestos containing aggregate follow the guidelines specified in this document, more accurate and repeatable M435 asbestos content measurements will result." (*IMPLEMENTATION GUIDANCE DOCUMENT Air Resources Board Test Method 435 Determination of Asbestos Content of Serpentine Aggregate, April 2017, pp i-ii*)

Determine what, if any of these recommendations were implemented

Grp 7-105

The sampling and testing will be done by Rise. "Sampling and analytical testing will be done on or off-site by trained and qualified persons under the direction of a State Licensed Geologist" (*ASUR Plan, Item #6, document pg 14 or pg 16 of 131*). Laboratories analyzing asbestos are accredited by NLVAP (National Laboratory Voluntary Accreditation Program). A licensed geologist can work with an Air Pollution Control Officer to identify naturally occurring asbestos (NOA) and create a management plan.

Was the author of the ASUR Plan a California licensed geologist?

So, the parties involved in sampling and testing are not well established as written in the ASUR Plan.

Can the geologist perform testing themselves, train analysts to perform testing or supervise testing? Will any of this work be accepted in a court of law? TBD from a regulatory agency

Mossman is not a licensed Professional Geologist or Certified Engineering Geologist in the state of California. None of the following members of the Rise Gold management team could be found in DCA database for licensure: Thomas Vehrs, Bob Gallagher, Mike Andrews, John Carlile or Alan Edwards (all listed as directors or technical advisors: searches performed under EG-Certified Engineering Geologist, GEO-Professional Geologist, GP-Professional Geophysicist, HG- Certified Hydrogeologist, and MT-Metallurgical Engineer categories). They all have extensive experience in mining, especially international work.

Andrew Kopania (author of the *Groundwater Hydrology and Water Analysis for the Idaho-Maryland Mine Project*) along with Vieira and Kull (NV5 authors of the *GeoTechnical Reports for Centennial and Brunswick Industrial Sites*) were located in the DCA database in order to validate search abilities.

The *Asbestos Sampling Memo (June 2020)* was prepared by Richard Lippoth. He collected the samples from Rise, analyzed the laboratory data and prepared the report. No California licensure is found for him under the Board for Professional Engineers, Land Surveyors and Geologists, DCA.ca.gov He is a one man show at Vergence Geo Services, Inc. with his resume listing work with Freeman-McMoRan and Alexco, a shared history with the Rise management team. His qualification described in the *Asbestos Sampling Memo* June 2020 is listed as geologist, Mr. Richard Lippoth, Reg. SME. SME is a professional organization: the Society for Mining, Metallurgy and Exploration.

COMPARISON OF PCM TO PLM TO TEM MICROSCOPY TECHNIQUES

Multiple types of microscopy techniques will be used to analyze asbestos content depending on the application of the results. For instance, airborne asbestos monitoring for miners' exposure will use air filtration capture followed by phase contrast microscopy analysis.

Grp 7-106

Bulk materials will be screened for asbestos using polarized light microscopy followed by transmission electron microscopy analysis for rolling inventory maintenance.

"TEM is the preferred analytical method for outdoor asbestos samples because of its ability to detect small fibers (greater than or equal to 0.0002 microns in diameter) and to distinguish between asbestos fibers and non-asbestos fibers. The term "TEM structures" is often used to describe asbestos fibers detected by this method. TEM is the method recommended by the California Office of Environmental Health Hazard Assessment (OEHHA). However, TEM measurements cannot be directly related to the cancer potency factors because the studies upon which OEHHA's risk assessment was based used PCM analysis. Thus, the TEM measurements must be converted to PCM-equivalent units (OEHHA 2015.)" (*ASUR Plan, document pp 7 or pp 9 of 131*)

"Asbestos content by TEM structures will be converted into equivalent Phase Contrast Microscopy (PCM) units in accordance with the California Office of Environmental Health Hazard (OEHHA) 2015 Air Toxic Hot Spot Guidance Manual." (*ASUR Plan, Item #3, document pp 8 or pp 10 of 131*)

These different analyses each require unique sampling methods, sample preparation, sample sizes, and microscopy techniques. The results are not directly comparable between the methodologies.

PHASE CONTRAST MICROSCOPY (PCM)

Grp 7-107

"The most common methodology used for asbestos air testing is Phase Contrast Microscopy (PCM). This testing method involves using a PCM microscope to count the fibers present on the cassette filter in order to determine if the total fiber concentration is less than the EPA clearance level of 0.01 fibers/cc (fibers per cubic centimeter) "Asbestos sampling protocol cannot be used for objective data – OSHA." https://www.osha.gov/laws-regs/regulations/standardnumber/1915/1915.1001. Phase contrast microscopy enhances the contrast of transparent materials, while also filtering out background light. The air cassettes used for PCM contain a cellulose ester filter with a pore size of 0.8 um. Once the air sampling is complete, the sample is sent to an accredited laboratory. Alternatively, the samples can be analyzed on-site with a microscope for expediency, but these results will not be accredited. Whether in a lab or on-site, the filter is cut into a pie shape and prepped using a mix of vaporized acetone and triacetin. The sample is then placed on a PCM microscope where the fibers are counted up to 100 fields of view." (www.indoorscience.com, PCM vs TEM Asbestos Air Testing - Indoor Science, March 27, 2018)

Advantages:

2

- Technique is specific for fibers. It is a fiber counting technique which excludes non-fibrous particles from the analysis
- Technique is inexpensive and does not require specialized knowledge to carry out counts
- Analysis is quick and can be performed on-site for rapid determination of air concentrations of asbestos fibers
- Technique has continuity with historical epidemiological studies so that estimates of expected disease can be inferred from long-term determinations of asbestos exposure

Disadvantages:

- Test does not positively identify asbestos fibers. Other fibers may be included unless differential counting is used
- The smallest visible fibers are about 0.2µm in diameter while the finest asbestos fibers may be as small as 0.02 µm in diameter. For some exposures, substantially more fibers may be present than are actually counted.
- Cannot distinguish fibers less than 5 microns in length and 0.25 microns in width

This method is used for airborne fiber determination, not bulk material. It will probably be used for workers' exposure testing. Since OEHHA asbestos risk assessment has used studies involving PCM analysis, TEM results from bulk testing will be converted to PCM equivalent units.

POLARIZED LIGHT MICROSCOPY (PLM)

The following method description is excerpted from the Asbestos TEM Laboratories, Inc. cover letter dated Sep/17/2019 found in the *Asbestos Sampling Memo June 2020, pp 26 of 32*: "Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CALARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting technique is used with 50 points counted on each of eight sample mounts for a total of 400 points."

Grp 7-108

This is a generalized description of the PLM analysis method, actual processes are not documented in the Asbestos Sampling Report June 2020 for the individual samples.

Advantages:

- Basic identifications were first performed by light microscopy so there is a large base of published information against which to check analysis and technique
- Analysis is specific to fibers
- Analysis is quick, requires little prep time and can be performed on-site if equipment is available

Disadvantages:

- Not all fibers present may be seen. This is a problem for very low asbestos concentrations where agglomeration or large bundle of fibers may not be present to allow identification by inference.
- Method requires a great degree of sophistication on the part of microscopist. An analyst is only as useful as his mental catalog of images. Therefore, a microscopist's accuracy is enhanced by experience. The mineralogical training of the analyst is very important. It is the basis on which subjective decisions are made.
- The method uses only a tiny amount of material for analysis. This may lead to sampling bias and false results (high or low). This is especially true if the sample is severely inhomogeneous. (heterogeneity)
- Fibers may be bound in a matrix and not distinguishable as fibers so identification cannot be made

TRANSMISSION ELECTRON MICROSCOPY (TEM)

The following method description is excerpted from the Asbestos TEM Laboratories, Inc. cover letter dated Aug/15/2019 found in the *Asbestos Sampling Memo June 2020, pp 21 of 32:* "Sample preparation followed a standard CARB 435 prep method. The entire sample was dried at 135-150 C and then crushed to ~3/8" gravel size. If the submitted sample was >~1 quart, the sample may have been split using a 1/2" splitter following ASTM Method C-702-98 to reduce the sample volume for pulverization. The remaining aliquot, or entire original sample, was then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. A representative ~60 mg aliquot of material was weighed out, and then placed into solution in a 500 ml beaker filled with distilled water. A known volume of the liquid suspension was filtered onto a 0.2 micron pore size Millipore mixed cellulose ester filter. The filter was then dried in HEPA filtered, Class 100 air on a clean bench. The filter was placed onto a glass microscope slide, sectioned, and collapsed in acetone. The collapsed filter was plasma-etched to remove10% of the filter surface and then carbon coated. The carbon coated filter was sectioned

Grp 7-109

3

and the sections placed onto 200-mesh copper TEM sample grids in dimethyl sulfoxide and acetone wick washers. After sufficient time to dissolve the filter material, the TEM sample grids were removed from the baths and placed into labeled sample containers.

TEM analysis was performed on a Philips CM-12 or JEOL 1200 transmission electron microscope operating at 80 or 100 kV. The sample was placed into the microscope where it was first scanned at low magnification to confirm that the distribution of material was reasonably homogeneous. High magnification analysis was performed using a two tier approach: 1) A relatively large area of several TEM grid openings for large asbestos fibers or fiber bundles, and 2) a relatively small area of a number of fields of view for individual asbestos fibers (fibrous particles exhibiting an aspect ratio greater than or equal to 3 to 1, and a length greater than or equal to .5 um). Detected asbestiform structures were subjected to detailed morphological and/or selected area diffraction analysis. If necessary, energy dispersive X-ray analysis was also performed. The length and width of each asbestos fiber was measured. From this data, a total volume and mass of asbestos observed in the scanned area is calculated, and extrapolated to a total weight percent asbestos for each sample."

At the top of the same letter is the statement: "Please find below the results for the TEM analysis of one or more bulk material samples. The analytical procedures were performed according to the EPA Test Method For the Determination of Asbestos in Bulk Building Materials - TEM method (EPA 600/R-93/116) modified for quantitative bulk soil sample analysis."

How was this method for bulk building materials modified for bulk soil sample analysis? These are rock cores.

In these analyses, an ~60 mg sample was suspended in 500 ml distilled water. Then a 0.5 ml aliquot was filtered for analysis. While TEM can identify fibers too small to be seen with PLM, the sample size is reduced by order of magnitude, 10^{-6}.

"Samples are first analyzed using PLM because a much larger (and likely more representative) mass of sample powder is analyzed using PLM than when using TEM. The mass of a M435 sample analyzed by PLM is approximately one million times greater than the mass of a TEM sample, but TEM has a resolving power of 500 to 20,000X magnification (compared to 50 to 1000X magnification by PLM). This higher resolving power enables TEM microscopists to distinguish and identify finer particles and fibers not seen with the use of PLM. For example, the California Department of Toxic Substances Control has used PLM, followed by TEM, as part of a tiered analytical approach to verify the absence of asbestos fibers determined by M435 PLM analyses in its Schools Program." (*IMPLEMENTATION GUIDANCE DOCUMENT Air Resources Board Test Method 435 Determination of Asbestos Content of Serpentine Aggregate, April 2017 pp 23-24*)

Grp 7-110

This is a "potential" quantity of mass available for analysis by PLM vs TEM, not the actual mass analyzed.

Advantages:

- Fibers can be accurately identified-ability to distinguish between asbestos and non-asbestos fibers
- Small fibers can be detected

Disadvantages:

- High resolution may be selective for a specific size fiber and exclude others
- Actual amount of material examined is magnitudes less than quantity examined by PLM
- Sample heterogeneity impacts overall representativeness

Bottom line is that these methods are not comparable due to differences in sample preparation and microscopy techniques. These analyses contain inherent bias due to sample variability (lack of homogeneity), differences in sample quantities tested, magnification levels and individual microscopists' expertise.

COMPARISON OF RESULTS FROM ASBESTOS SAMPLING MEMO (June 2020) TO ASUR PLAN TEM RE-TEST (Nov 2021).

Grp 7-111

For the 42 samples analyzed during August and September 2019, asbestos was detected in 4 samples, 9.5% of total samples. This included two blanks, two Centennial site tailings and 38 rock core samples. Two samples were analyzed by TEM and the remaining 40 samples by PLM. Asbestos was found in the two TEM samples and two of the PLM samples.

"In 2021, Rise requested the 40 samples previously submitted to be reanalyzed using the TEM method." (*ASUR Plan, document pp 7 or pp 9 of 131*).

Actually, the TEM reanalyses were performed at the urging of the air district: ["As the NSAQMD wrote in its July 10, 2020 comments "The NSAQMD recommends additional TEM analyses of the above rock types (serpentinite, weakly ankeritized diabase/serpentinite, weakly ankeritized serpentinite and ankeritized serpentinite) in order to facilitate refinement of the preliminary risk assessment". The NSAQMD still sticks to this recommendation"]. (Letter between Air Pollution Control Officer of NSAQMD and Matt Kelley, Senior Planner Nevada County, February 10, 2021)

In retesting of the 40 samples (two tailings and 38 pulp samples) analyzed by TEM, asbestos was detected in 14 samples. Unfortunately, the August 2019 samples tested by TEM were not retested by TEM in 2021. Thus, there is no quality control data regarding variability and reproducibility of results regarding TEM analysis between those two samples. The following chart is a comparison of asbestos found by TEM vs PLM. Detection limit for PLM is 0.25 weight% and the detection limit for TEM is 0.001 weight %. Non-detect samples from TEM re-testing have been excluded.

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Sample Number	Date Reported	PLM Result weight % Detection Limit 0.25	TEM Result weight % Detection Limit 0.001	% Difference PLM vs TEM	Location and sample drill core length (inch)	PCM equivalent units weight %
Y962827	Sept 17, 2019	<0.25		139	I-19-14 4.8	
	Nov 10, 2021		1.4			0.021
Y962828	Sept 17, 2019	<0.25		120	I-19-14	
	Nov 10, 2021		0.062		3.6	0.0
Y962833	Sept 17, 2019	<0.25		92	I-19-14-A	
	Nov 10, 2021		0.092		3.6	0.0
Y962835	Sept 17, 2019	<0.25		112	I-19-14A	
	Nov 10, 2021		0.071		3.6	0.0
Y962836	Sept 17, 2019	<0.25		15	I-19-14A	
	Nov 10, 2021		0.29		3.6	0.0
Y962837	Sept 17, 2019	<0.25		134	I-18-11 4.8	
	Nov 10, 2021		1.27			0.018
Y962840	Sept 17, 2019	<0.25		50	I-19-14 4.8	
	Nov 10, 2021		0.15			0.001
Y962843	Sept 17, 2019	<0.25		193	Centennial	
	Nov 10, 2021		0.004		tailings	0.0
Y962847	Sept 17, 2019	<0.25		55	I-19-13 13.2	
Duplicate	Nov 10, 2021		0.44			0.028
Y962980	Aug 15, 2019	N/A	3.1	N/A	I-18-11	0.035
	N/A				10.8	
Y962981	Aug 15, 2019	N/A	2.0	N/A	I-19-13 13.2	0.028
	N/A					
Y962991	Sept 17, 2019	<0.25		142	I-18-11	
	Nov 10, 2021		0.042		6.0	0.042
Y962992	Sept 17, 2019	0.75		5	I-18-11 3.6	
	Nov 10, 2021		0.79			0.069
Y962993	Sept 17, 2019	<0.25		198	I-19-13A 4.8	
	Nov 10, 2021		0.0009 (0.001 at 3 sf)			0.003
Y962994	Sept 17, 2019	<0.25		63	I-19-13A 4.8	
	Nov 10, 2021		0.13			0.0
Y962999	Sept 17, 2019	2.5		164	I-19-13A	
	Nov 10, 2021		0.01		4.8	0.038

Overall, 16 samples, 40%, had asbestos greater than the TEM detection limit of 0.001 weight %.

Eight of the 40 samples, 20%, had asbestos >0.01 PCM equivalent units Weight %.

NOTE: sample Y962994 had a TEM result of 0.13 weight % yet zero result for PCM equivalent units. Data was notated: "Actinolite asbestos detected. Concentration per Millions of Fibers per gram: 29 for fibers >5µm in length. Possible contamination." This same situation occurs for samples Y962828, Y962833, Y962835, Y962836 and Y962843.

Two samples for TEM analysis originally sent to the laboratory on Aug 8, 2019 were described as rock cores with date analyzed as Aug 15, 2019. The 40 samples for PLM analysis were described as rock cores and were originally sent to the laboratory on Sept 3, 2019 with date analyzed as Sept 17, 2019. For retesting, 40 samples described as pulverized rock were submitted to the laboratory on Sept 14, 2021 with date analyzed as Nov 10, 2021. The two samples originally tested by TEM, Y962980 and Y962981, were not retested in November 2021. All of these samples were stored somewhere for two years before being retested. The actual age of the samples is unknown since drill core logs are not available. Rise performed exploratory drilling between 2017-2019.

SAMPLE POPULATIONS

Grp 7-112

Not counting the two grab tailings samples from the Centennial Site and the two blanks (carbonate landscape rock), the average overall length of the sample cores tested was 5.34 inches. Samples were from 6 of 19 (32%) of total cores drilled by Rise: 9 samples from I-18-11, 1 sample from I-18-12, 9 samples from I-19-13, 7 samples from I-19-13A, 8 samples from I-19-14 and 4 samples from I-19-14A. Drilling was stopped when asbestos was detected. Drill logs are not available; therefore, it is impossible to determine the depth or width of serpentinite deposits encountered. Asbestos sampling was extremely limited. Centennial tailings were only identified by a grid number-no information as to quantity, location, depth, etc. There are labeling errors: 1) *Asbestos Sampling Memo June 2020, Appendix A*- First photo is mislabeled Y962880 instead of the correct label Y962980 and 2) sample Y962838 is located on drill hole I-19-12 on Sheet 2

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Mine Geology and Asbestos Samples (*Asbestos Sampling Memo June 2020*) but is listed as being from drill hole I-18-12 in the *ASUR Plan, Appendix C, pp 55 of 131.*

DUPLICATE ANALYSIS

Y962847 and Y962981 are duplicate samples. How does a result of 0.44 TEM weight % and 2.0 TEM weight % calculate out to the same PCM equivalent unit result of 0.028 weight%? (*ASUR Plan, Appendix C, document pp 57 of 131*)

These two separate samples Y962981 and Y962847 were quality control duplicates. These were two different samples, Y962981 was initially received as a rock core sample and was only analyzed by TEM on 8.15.19. The results yielded 22 chrysotile structures <5µm and 17 structures ≥ 5µm with a calculated asbestos concentration (weight %) of 2.0 (*Asbestos Sampling Memo, June 2020, Appendix B, pp 23 of 32*).

The duplicate sample, Y962847 was initially received as a pulps sample and was tested by PLM on 9.3.19 with <0.25% result. This sample was retested by TEM on 11.10.2021 and yielded 233 chrysotile structures <5µm and 10 structures ≥ 5µm with a calculated asbestos concentration (weight %) of 0.44 (*ASUR Plan, Appendix B for Asbestos TEM Laboratories Report, pp 110 of 131*).

Grp 7-113

Yet, the ASUR Plan lists these results as identical with the same Structures/nanogram at 3.0 and the same PCM Weight % at 0.028% (*ASUR Plan, Appendix C, pp 57 of 131*)

The weights used for sample preparation are 62.5 mg for Y962981 and 58.9 mg for 962847, a difference of 5.9%. But the difference in calculated asbestos weight concentration is 128%. Sample Y962847 has more than 10 times the number of chrysotile structures.

A 6% lower weight yields a 10 times higher structure count but the same PCM equivalent units????

Only one of these samples was included in the four total samples used to calculate the content in serpentinite samples. Which one? Who picks which one? Can the quality control sample, as a separate sample, be excluded from the analyses? (*ASUR Plan, Appendix C, pp 57 of 131*)

Comparing the results for the duplicate sample, Y962847, by TEM analysis yields 0.44% by weight compared to sample, Y962981 at 2.0% by weight, again yielding a 128% difference. Even using the same analytical test procedure (TEM analysis) yields unsatisfactory QC results.

NOTE: The only definitive conclusion from all of the asbestos testing is that:
asbestos was found in all of the serpentinite samples in addition to being found in samples of weakly ankeritized diabase/serpentinite, weakly ankeritized serpentinite, diabase and porphyrite at levels >0.01% PCM equivalent units (*ASUR Plan, Appendix C, pp 55-57 of 131*).

Grouping the samples by lithology in an effort to dilute the overall asbestos content of the group does not negate the asbestos content of the individual sample and its potential for harm. (*ASUR Plan, Appendix C, pp 54 of 131*)

QUALITY CONTROL ISSUES

The laboratory report for retesting of 40 sample by Asbestos TEM Laboratories, Inc. is labelled Report NO. 375516 rev.1

Why was the report revised? Where is the original for comparison?

Grp 7-114

Per documentation provided, no blind blanks or blind duplicates were performed. No documented cross check verifications from second analyst or second microscope were performed on individual samples. Two analysts performed the 40 sample TEM re-tests. The first analyst tested the first 18 samples, followed by the second analyst for next 13 samples, first analyst again for one sample, second analyst for remaining 8 samples. No time stamp for each sample, thus unable to determine if samples were analyzed in the order listed according to laboratory sample ID.

Two of the TEM samples had grid opening damage, Y962984 and Y962988.

Eight of the 40 samples were notated as having "possible contamination" with two types of contamination listed, chrysotile for two samples and actinolite for 6 samples. Twenty percent of the samples had "possible contamination", 5% by chrysotile and 15% by actinolite.

TOXICITY

Grp 7-115

CHRYSOTILE VS AMPHIBOLE ASBESTOS

What if these samples did not have "possible contamination" but contained actual naturally occurring actinolite (amphibole) asbestos?

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Upon retesting by TEM, ten samples (25%) indicated amphibole asbestos which has a much higher cancer potency than chrysotile asbestos.

Particularly controversial is the question of whether chrysotile asbestos is less potent for the induction of lung cancer than the amphibole forms of asbestos (e.g. crocidolite, amosite and tremolite), which has sometimes been referred to as the "amphibole hypothesis" (Cullen, 1996; Stayner et al., 1996; McDonald, 1998). This argument is based on the observation from experimental studies that chrysotile asbestos is less biopersistent (i.e. has a shorter half life) in the lung than the amphiboles... [The Working Group noted that the lower biopersistence of chrysotile in the lung does not necessarily imply that it would be less potent than amphiboles for lung cancer.] https://www.ncbi.nlm.nih.gov/books/NBK304374/

"The amphiboles are more likely to be associated with mesothelioma than is chrysotile, or white asbestos, which has a two to four times less potent risk of mesothelioma: however, the risk for development of lung cancer is equipotent for all types of asbestos. Chrysotile accounts for more than 99% of the world production of asbestos and commonly is contaminated with tremolite and other asbestos fibers." (Walker MD, Christopher, Pleural Neoplasms, Muller's Imaging of the Chest, 2019 Retrieved from ScienceDirect.com 02.22.2022)

POTENTIALLY TOXIC ELEMENTS

Potentially toxic elements (PTEs) hosted in asbestos elongate mineral particles is one of the factors that determines their toxic/pathogenic effects. Metals such as Fe, Mn, Cr, and Be are known to induce toxicity and contribute to asbestos related diseases. "...it is essential to quantify the toxic elements present in asbestos elongate mineral particles in order to prevent asbestos-related diseases." https://doi.org/10.1016/j.chemgeo.2020.119896

Grp 7-116

"Iron ions on amphibole types of asbestos react with epithelial lining fluid in the lung and generate reactive oxygen species that induce toxicity, and oxidant stress may lead to DNA damage. There is a direct relationship between biopersistence, which is determined by fiber length and chemical composition, and toxicity. Longer, thinner fibers are more toxic because they are not cleared by the AMs and therefore persist in the lung. Fibers longer than 15μm are particularly toxic and bioactive. They are not completely engulfed by the macrophages, leading to release of lysosomal contents, cytotoxicity, oxidant stress, and stimulation of inflammatory and growth factor pathways." (Harkema...Haschek, Fundamentals of Toxicologic Pathology, Chapter 14-Respiratory System (Third Edition), 2018 pp 351-393. Retrieved from ScienceDirect 02.22.2022 https://doi.org/10.1016/B978-012-809841-7.00014-9)

Many of these samples have high metals content, especially iron. Chart this

The data used for heavy metal toxic air contaminants in the Health Risk Assessment are all notated by the laboratory as being received and tested beyond the EPA recommended hold times of 28 days for mercury and 6 months for all remaining metals. Exploratory drilling began in 2017. Since the drill logs are unavailable, the exact sample dates for each core are unknown, but all samples were submitted and received by the gold assay laboratory on February 20, 2019. (Inorganic Extended Qualifier Reports pp. 389-407 and 458-484, Appendix D, Groundwater, Hydrology and Water Quality Analysis Report-Appendices)

Grp 7-117

After assays were performed, samples were then submitted to ACZ Laboratories for metal analyses. These analyses were performed in November 2019. This means that all samples were tested at least 9 months beyond their expiration date, probably more.

Shouldn't valid data be used when evaluating the health risks to the community from these TACs, especially when these metals have to ability to potentiate the effects of asbestos?

MATERIAL SAMPLING LOGISTICS

"The sampling will be done from the transfer point between the skip and silo and may be taken either manually or with an automated sampler." Illustrated by Figure 2 (*ASUR Plan, document pp 14 or pp 16 of 131*)

Grp 7-118

According to correspondence between the Air Pollution Control Officer of NSAQMD and Matt Kelley, Senior Planner of Nevada County on February 10, 2021, the APCO states: "A key component of method 435 is the protocol for collecting representative samples. It is improper to simply pull out the laboratory portion of Method 435 and say that Method 435 is being used. Method 435 states, "1.2 Applicability. This method is applicable to determining asbestos content of serpentine aggregate in storage piles, on conveyor belts, and on surfaces such as roads, shoulders and parking lots." Then it specifies even more clearly, "3 APPLICABLE SOURCES. This method can be used to obtain bulk material sources from three types of sources: 1. Serpentine aggregate storage piles. 2. Serpentine aggregate conveyor belts 3. Serpentine aggregate covered surfaces...In aggregate, a large degree of homogeneity has already been achieved during the aggregate's production."

Does pulling samples at the skip drop point into the silo meet the above stipulated criteria for Method 435 sampling, does this method qualify as a conveyor belt?

Grp 7-119

Who would be in the silo at point 3 in diagram as shown on document pp 14. (*ASUR Plan*) to obtain a sample manually?

Grp 7-120

"It is recommended that sampling be done at point closest to end of processing." (*IMPLEMENTATION GUIDANCE DOCUMENT Air Resources Board Test Method 435 Determination of Asbestos Content of Serpentine Aggregate, pg ii*).

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This point in the silo may be adequate for barren rock samples but not tailings samples comprised of ore rock regarding the "point closest to end of processing," as stated above.

What will be the timing/spacing of the individual 3 samples taken for each composite per 1000 tons? Beginning, middle, end or every 333 tons? Beginning and end sampling method would mean that samples would overlap (beginning, end) and (end, beginning) samples per 1000 tons. Weighting sampling at these points would not be representative of the entire batches.

Will barren rock and ore rock be analyzed separately or combined in a composite (3 samples will be composited per 1000 tons of rock each day (*ASUR Plan, document pp 13 or 15 of 131*)? If barren rock and ore rock are to be placed in different compartments of the concrete silo, how will you be able to determine which material is contaminated, if asbestos content >0.01% PCM equivalent units is later found in the rolling inventory?

Grp 7-121

The concrete silo is divided into three compartments, one 1000 tons area and two 400 tons containment areas. The ore rock would flow through the larger compartment and then be conveyed to the ore processing plant for pulverization into tailings, while the barren rock would be loaded into haul trucks for transport.

How would you determine if the contaminated material was from the ore rock or the barren rock if the composited sample contains both materials? Rise would have to assume that all material from last non-detect test (per 1000 tons batch) to the next non-detect test (per 1000 tons batch) is contaminated.

Using a weighted average taken over three months of 1000 tons per day ore rock (90,000 tons) and 500 tons per day barren rock (45,000 tons) allows for significant dilution of asbestos per batch. Will an individual batch that fails TEM analysis be allowed to remain among the passing TEM analyses batches?

ROLLING INVENTORY MAINTENANCE LOGISTICS

Pg 13 (pp 15 of 131), ASUR Plan item 4: "Analytical determination of a materials status as Asbestos Containing Material would be done using Polarized Light Microscopy (PLM) in accordance with ARB Method 435 pursuant to 17 CCR 93106 (h)(2) with a detection limit of 0.25% asbestos"

Pg 13 (pp 15 of 131), ASUR Plan item 5: "Analytical determination of asbestos content, for the purposes of maintaining an Asbestos Inventory, would be done using Transmission Electron Microscopy (TEM) method in accordance with the EPA/600/R-93/116 method. Sampling for the Asbestos Inventory would be done by compositing at least 3 random grab samples from the barren rock or sand tailings for every 1000 tons of material."

Grp 7-122

But on page 8 (pp 10 of 131) of the ASUR Plan are the statements:

4) An Asbestos Inventory of all mined materials will be maintained and include a 3-month rolling average of asbestos content in equivalent PCM units.

5) An Engineered Fill Placement Plan will be maintained to ensure that adequate non-Asbestos Containing Material, as determined by PLM testing, is available for Surfacing Applications.

If all mined material is tested by TEM and converted to PCM equivalent units, then how can Rise maintain an Engineered Fill Placement Plan based just on PLM testing? There is no comparison or conversion factors of PLM measurements to TEM measurements. (Only TEM measurements are used to convert to PCM equivalent units)

"A rolling three-month weighted average of asbestos content of mined materials brought to surface and materials used as Engineered Fill will be maintained in the Asbestos Inventory. (*ASUR Plan, document pp 15 or 17 of 131*)."

"Arrangements will be made to ensure that analytical data is received and entered into the inventory within 2 weeks of sampling" (*ASUR Plan, pp 15 or 17 of 131*)

Grp 7-123

Will a new weighted average be calculated with each 1000 tons of material added to the inventory? WHERE WILL THIS MATERIAL BE STORED? WILL 1000 TON INDIVIDUAL BATCHES OF ORE ROCK ALONG WITH 500 TONS INDIVIDUAL BATCHES OF BARREN ROCK BE MAINTAINED? HOW MUCH MINING WILL BE PERFORMED DURING THAT TWO WEEKS OF TURN AROUND TIME? HOW WILL THE AMOUNT OF "POSSIBLY CONTAMINATED" MATERIAL BE DETERMINED?

For example, Y962847, would have initially passed the screening PLM method of testing. However, the material would have failed when tested by TEM during rolling inventory. Material surrounding this sample in the 90-day rolling inventory would be unfit for engineered fill or aggregate transport.

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WILL THE SAME SAMPLE ANALYZED BY PLM BE RE-TESTED USING TEM OR WILL RANDOM SAMPLES FOR EACH TEST (PLM and TEM) BE UTILIZED?

FUGITIVE DUST EMISSIONS ABOVEGROUND

Grp 7-124

The 3-month rolling inventory will consist of 1000 tons of tailings for engineered fill per day multiplied by 90 days equals 90,000 tons plus 500 tons of barren rock for engineered fill per day multiplied by 90 days equals another 45,000 tons. 500 tons of tailings will be deposited underground in CPB.

How will the 500 tons designated for CPB be determined? How will this material be culled from the rolling inventory? (Assuming that any tailings containing asbestos would be the most suitable for underground CPB placement)

Grp 7-125

Where will this 135,000 tons of materials be stored and how will it be loaded for transport to Centennial, Brunswick or outside vendors? Have the fugitive dust emissions for the storage and loading been calculated and included in PM emissions analysis and incorporated into Health Risk Assessment model?

Grp 7-126

The Air Quality Report calculates emissions based on loading from an enclosed area: "Barren rock will be transported from the concrete silo using a series of chutes and conveyors to a fully enclosed truck loading building." (*Air Quality and Greenhouse Gas Emissions Analysis, Appendix B, Health Risk Assessment, Earthwork and Material Handling Nov 2021, document pp 24*) This statement does not account for rolling inventory procedures.

Grp 7-127

On document page 35, *Noise and Vibration Report, Rock Bin Conveyors and Barren Rock Loading* is the statement:
"The existing concrete rock silo will be reused. A chute and conveyor system will transfer barren rock from the silo into trucks for transport as engineered fill. The conveyor system and truck loading area will be inside a building adjacent to the headframe. A chute and covered conveyor system, approximately 335 feet long, will transfer gold mineralization from the silo to the process plant."

On document page 11, *Centennial GeoTechnical Report*: "The conveyor system and truck loading area will be inside a small building adjacent to the headframe."

On document page 14, *Centennial GeoTechnical Report, Table 4, Buildings* lists the Rock Truck Loading building as 1700 square feet with a maximum height of 20 feet.

Is the building large enough to accommodate the 45,000 tons of barren rock rolling inventory and room for front-end loading into haul trucks from that inventory? What is the ventilation system for this building?

Grp 7-128

On document page 36 *Noise and Vibration Report, Process Plant* is the statement:
"Gold mineralization hoisted from the Brunswick shaft will be placed in the existing concrete silo located on the Brunswick property before processing begins. Gold material will be transported from the concrete silo using chutes and conveyors to a fully enclosed process plant....Sand tailings (waste) from the gold recovery process will be dewatered and used for either backfill for the underground mine or stockpiled for transport and use as engineered fill. Sand tailing during backfilling will be transferred to the paste backfill plant, where particles will be dewatered and mixed with cement into a paste....Sand tailings not used for backfill will be either directly loaded into trucks in the process plant or stockpiled inside the building. Stockpiled sand tailings will be loaded into transport trucks with a front-end loader during daytime hours. Sand tailings not used as underground backfill will be transported for use as engineered fill."

(Document pp 39, *Noise and Vibration Report, Table 9 Hours of Operation*):
"Outside Truck Loading by Loader 7:00 AM-7:00 PM, 7 Days a Week, 80 years"

(Document pp 17, *Applicants Project Description, Table 7, Hours of Operation*):
"Outside Truck Loading by Loader 7:00 AM-7:00 PM, 7 Days a Week, 80 years"
This is confirmation of "outside loading" across documents.

Will this loading occur inside or outside? Will it be stockpiled inside or outside? If these procedures change due to maintenance of rolling inventory storage: will noise levels increase, will amounts of fugitive dust increase? What is the potential for all equipment and storage areas to be contaminated with asbestos? What level of asbestos found by TEM testing in the 90 day rolling inventory will trigger decontamination of all equipment: conveyor belts, processing plant, cement plant, etc.?

Grp 7-129

Will these two components of the engineered fill be kept separate? Otherwise, how will the engineering firm determine correct ratios for mixing to ensure stability upon engineered fill placement?

Recommendations from NV5:
"2. Crushed blast rock with a maximum dimension of 6 inches may be blended into the sand tailings to produce engineered fill material at a ratio of up to 2 parts blast rock to 1 part sand tailings. A rock and sand ration greater than 2:1 may be feasible but would not likely be testable using nuclear methods.
4. Onsite blending of blast rock and sand tailings may be performed by earthwork equipment (e.g., windrowing and spreading the rock and sand together in thin lifts). Specific procedures for onsite blending should be developed in conjunction with an NV5 representative during initial fill placement." *Centennial GeoTechnical Report*, document pp 13

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Document pp 16. *Centennial GeoTechnical Report*: "Engineered fill may be mixed on site using mobile equipment to ensure uniformity and meet specifications for compaction."

FUGITIVE DUST EMISSIONS UNDERGROUND

Grp 7-130 "The walls and roof of tunnels composed of rock containing significant asbestos will be covered with shotcrete and the floor with be covered with either concrete or 3 inches of non-Asbestos Containing Material. Shotcreting would be done as part of the tunneling cycle or after completion of tunneling. Floor covering would be done after completion of tunneling (*ASUR Plan, document pg 10 or pp 12 of 131*)."

How much cement does this add to mine operations and subsequent GHGs? Hexavalent chromium deposition? What level of asbestos is considered significant to warrant shotcrete?

Grp 7-131 DEIR pg 3-38 Lists a "Shotcrete Machine" that will "Spray concrete into the walls of the galleries to prevent rockfall." Is shotcrete to be used on all tunnels and not just significant asbestos areas?

"Water generated from drilling and dust suppression during tunneling in Asbestos Containing Material shall be collected in sumps or tanks and shall not be used for Surfacing." (*ASUR Plan, document pp 11 or pp 13 of 131*)

Grp 7-132 (*ASUR Plan, document pp 12 or pp 14 of 131*): "#6. Rock loads will be wetted for transit between the tunnelling and dumping area and equipment will be washed regularly to prevent dust from being tracked out into other areas of the mine."

How will this water be treated to remove asbestos? What will be the volume of asbestos contaminated water?

MERV 16 filters will remove 95% of fibers...that still leaves 5 % ... Rise claims that only 1% of material mined will be serpentinite.

Will MERV 16 filters be limited to serpentinite mining only? What type of filters will be utilized in main ventilation system? What is the quantity of asbestos in the 5% of what total mined quantity of serpentine/serpentinite?

Grp 7-133 The *Air Quality and Greenhouse Gas Emissions Analysis Technical Report: Earthwork and Material Handling Fugitive Dust: Construction Activity Fugitive Dust Nov 2021 pp 300* of 1938 states that the Serpentinite Content of Mine Fill will be 14.3% with an Asbestos content of serpentinite at 0.20%.

The final total is 0.03% (14.3% x 0.20% = 2.86% ÷ 100 = 0.03%) ???????

HOW CAN THE MINE FILL BE 14.3% SERPENTINITE IF ONLY 1% OF MINED MATERIAL IS SERPENTINITE?

ENFORCEMENT OF ROLLING INVENTORY ASBESTOS CONTENT

"If the three-month rolling Asbestos Inventory for materials hoisted to the surface exceeds 0.01% asbestos by mass of PCM equivalent units the geology department will immediately investigate the source of the asbestos containing material and halt mining in the area of concern until a revised mine plan is prepared in compliance with the ASUR Plan (*ASUR Plan, document pp 20 or pp 22 of 131*)."

Grp 7-134 Document page 9, ASUR Plan needs further interpretation/clarification:

"If planned mining is projected to result in the Asbestos Inventory 3-month rolling average to exceed 0.01% by mass equivalent PCM units (1.07 TEM structures per nanogram)

i. Gold mineralization (intended for processing) will <u>not</u> be mined
ii. Barren rock from tunneling will either not be mined or mined using an auxiliary ventilation and dust collection system, as described in Section 6.1, designed to capture dust generated during the mining of these materials and prevent this dust from entering the main ventilation system and exhausting from the underground mine and a location for the underground disposal of this material will be specified and annotated on mine development plans."

SO, IF YOU ARE NOT GOING TO REMOVE THE GOLD MINERALIZATION, WHY WOULD YOU REMOVE THE BARREN ROCK SURROUNDING IT?

(*ASUR Plan, document pp 14 or pp 16 of 131*): "Records of all analytical testwork conducted will be retained for the life of the operation or a minimum of 7 years."

Grp 7-135 Once in the environment, asbestos does not degrade and will continuously be released into ambient air by wind or any soil disturbance.

Worker exposure occurs only during employment hours; however, community exposure occurs 24 hours per day. Workers choose to work in this environment with financial compensation. Workers are also provided training, respiratory protection, monitoring and health benefits while the community has none of these advantages.

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The life of the operation or 7 years of record retention is not an adequate retention period since disease caused by exposure may not manifest for 20 years-these are human lives at stake NOT TAXES!

DUE TO IMPLICATIONS FROM LONG TERM EXPOSURE TO ASBESTOS, RECORDS OF ALL ANALYTICAL TESTWORK MUST BE RETAINED INDEFINITELY.

(*ASUR Plan, document pp 19 or 21 of 131*): #10; If required by the NSAQMD, the plan must include an air monitoring component."

(*ASUR Plan, document pp 20 or pp 22 of 131*): "A geological report will be prepared annually with a summary of all materials mined. The report will include a summary of quantities of rock mined by lithology. The report will include analytical asbestos sampling data and all receipts issued for Engineered Fill. The report will include any dust sampling taken during operations. The report will include the results of any air monitoring or asbestos bulk sampling conducted at the request of NSAQMD."

Grp 7-136

A team of third-party licensed geologists should be monitoring and recording the above data every day to be utilized for reporting. The majority of this work is being performed underground...who will know the difference after the material is extracted, crushed and placed as engineered fill or hauled away?

BESIDES A REPORT, WHAT ACTIONS WILL BE TAKEN? ARE THERE ANY PENALTIES FOR EXCEEDENCES?

Is this plan legally enforceable? What if Rise obtains all the necessary permits to begin mining and decides to sell those permits to a third party or what if Rise sells the mine itself to a third party in the future...will the plan be required for the new operator?

Rise has stated that they will leave the infrastructure at the Brunswick site.

What assurances does the county have that the infrastructure will be clean and free from asbestos, heavy metals and silica contamination?

CONCLUSIONS:

The addition of the 3-month rolling inventory complicates downstream processes tremendously. It has the potential to affect air quality through increased fugitive dust emissions which increase the quantities of the TACs (asbestos, silica and heavy metals) being released directly impacting the Health Risk Assessment results. The health of the community is at stake.

Grp 7-137

Asbestos emissions are now being calculated on the assumption that rock material will contain 0.01% asbestos as described by the ASUR Plan. However, the ASUR Plan cannot control the actual asbestos content in the material being mined, the plan can only try to control the distribution of material being used for engineered fill to a 0.01% asbestos content. The actual asbestos content of rock being mined is unknown and highly variable.

CAN YOU ASSUME THAT ALL MATERIAL (BARREN ROCK AND ORE ROCK) WILL BE ONLY 0.01% ASBESTOS WHEN CALCULATING EMISSIONS?

CLASSIFICATION AND QUANTIFICATION IS NOT POSSIBLE UNTIL AFTER TESTING BY TEM OCCURS, AND THAT INFORMATION MAY NOT BE KNOWN UNTIL TWO WEEKS AFTER EXTRACTION AND TRANSPORT TO THE SURFACE.

"The average asbestos content of the total mined material is of primary concern since asbestos does not have established acute noncancer effects (OEHHA 2020). Therefore, only the average asbestos emissions that could be generated over the long-term (per year), and associated long-term health risk, has been evaluated herein." (*Air Quality and Greenhouse Gas Emissions Analysis Nov 2021, document pp 36*) Rise now estimates these emissions at 0.01%.

This is the same logic regarding acute vs long term exposure for the community. "Asbestos is classified as a known human carcinogen by the US state, federal, and international agencies, as well as by the World Health Organization" (Walker). There is no safe level of asbestos exposure (*WHO*).

ANY asbestos released to the ambient environment regardless of an immediate quantity released has the potential for long term implications because asbestos does not readily degrade once in the environment. "It is one of the most pervasive environmental hazards in the world. (Walker) "We know very little about the rates of weathering and leaching of asbestos in soil environments, but the available information suggests that substantial reductions in the amount of chrysotile may take hundreds or thousands of years, depending on the soil environment, and somewhat longer for amphibole asbestos." (*GUIDELINES FOR GEOLOGIC INVESTIGATIONS OF NATURALLY OCCURRING ASBESTOS IN CALIFORNIA, Special Publication 124, 2002 pp 24*)

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Thank you,

Pam Heard RRT

Pam Heard RRT

Registered Respiratory Therapist (RRT)
11500 Brunswick Pines Road
Grass Valley CA 95945
pspheard@yahoo.com

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Mar 25, 2022

To: Matt Kelley, Senior Planner

Nevada County Planning Department
950 Maidu Ave, Suite 170
Nevada City, CA
530-265-1423
Matt.Kelley@co.nevada.ca.us
Idaho.MMEIR@co.nevada.ca.us

Attn: Matt Kelley,

Please include these comments to the Idaho-Maryland Mine DEIR.

HEALTH RISK ASSESSMENT CRITIQUE:

Community Health Risks from Exposure to Toxic Air Contaminants

Grp 7-138

"As explained in Section 2.1.2.2, Non-Criteria Air Pollutants, of the AQ-GHG Technical Report, a TAC is an air pollutant, identified in regulation by CARB, which may cause or contribute to an increase in deaths or serious illness, or which may pose a present or potential hazard to human health...Health effects to TACs may occur at extremely low levels and it is typically difficult to identify levels of exposure which do not produce adverse health effects. "(*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B Memorandum, Subject: Idaho-Maryland Mine-Health Effects from Criteria Air Pollutants, pg 10, 2021*)

"A dispersion modeling analysis was conducted for DPM emitted from diesel vehicles and off-road equipment, blasting emissions, as well as for TACs from fugitive dust sources on the proposed project site for the HRA to assess the health risk impacts of the project's construction and operation on proximate off-site sensitive receptors." (*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 8, 2021*) "The cancer risk calculations were performed by multiplying the predicted dispersion modeled output data by the TAC emissions and the appropriate risk values...The noncancer health impact of an inhaled TAC is measured by the hazard quotient, which is the ratio of the ambient concentration of a TAC in units of µg/m3 divided by the reference exposure level (REL), also in units of µg/m3." (*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 4, 2021*)

"For evaluating health risk, the HRA was based on the assumption that exposure from construction and operational TAC emissions would generally occur up to 20 hours per day, 7 days per week for construction and up to 24 hours per day, 7 days per week, for 30 years for operation. This is consistent with OEHHA's guidance for performing operational HRAs.1" *(Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 1, 2021)*

The Idaho-Maryland Mine Project permit is for 80 years, almost three times the 30 years of exposure used in the health risk assessment.

WHAT WILL BE THE IMPACT ON HEALTH AFTER THOSE 30 YEARS OF EXPOSURE AND BEYOND?

1

This critique will examine input data points used in the AERMOD dispersion model whose output data then predicts the health risk impacts to the community from exposure to toxic air contaminants.

AERMOD MODEL

Regarding the selected dispersion model and its inputs is the statement -"Principal parameters of AERMOD for the project operations included the following:

- Dispersion Model
- Meteorological Data
- Urban and Rural Options
- Terrain Characteristics
- Sensitive Receptors
- Source Release Scenario
- Buildings" (*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pp 8-12, 2021*)

Several of these principal parameters require additional scrutiny with regards to the actual inputs used in the model and their applicability to the Grass Valley community in terms of future health risks.

Grp 7-139

Air pollutant dispersal is dependent on several factors: wind speed, wind direction, atmospheric stability and topography. (Transport and Dispersion of Air Pollution, Chapter 3, www.3epa.gov)

Atmospheric stability is dependent on the forces that relate to the vertical movement of air such as air density, air pressure, temperature and relative humidity. These forces dynamically interact on a constant basis to affect turbulence and the subsequent dispersal patterns of pollutants. It becomes critical to obtain the most accurate meteorological data available for input into these models which then estimate the health risks for cancer along with acute and long-term illness from exposures.

METEOROLOGICAL DATA

From the EPA Support Center for Regulatory Atmospheric Modeling (SCRAM) Air Modeling-Observational Meteorological Data: "Observed meteorological data for use in air quality modeling consist of physical parameters that are measured directly by instrumentation and include temperature, dew point, wind direction, wind speed, cloud cover, cloud layer(s), ceiling height, visibility, current weather, and precipitation amounts. These data are used in air quality models to capture the atmospheric conditions occurring at a source and/or receptor location, and therefore, play an important role as they effect the concentration of pollutants at receptors of interest." (www.epa.gov/scram/air-modeling-observational-meteorological-data, retrieved 1.27.2022)

The HRA states: "The nearest stations with processed meteorological data for use in AERMOD are Blue Canyon (17 miles away), Auburn (18 miles away) and Beale (22 miles away). The predominant wind direction at the project site is from the North-East and South-West direction (Meteoblue 2020). The Blue Canyon met station has a predominant wind direction from the North-East and South; the Auburn met station from the East; and the Beale station from the South-East and North-West (CARB 2020)." (*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 12*)

"Blue Canyon was selected since it is the closest station and is the most representative of the project site. "(*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk*

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Assessment, Appendix B, pg 12, 2021) There are multiple reasons why Blue Canyon is NOT representative of the project site in terms of meteorological conditions.

Blue Canyon is in the Sierra Nevada Mountains at an elevation of 4695 ft. This elevation creates a very different climate and weather patterns than what Grass Valley experiences in the foothills at an elevation of 2411 ft. Simply changing the terrain elevation data input does NOT correct for the differences in air density, air pressure, solar heating and dry/wet adiabetic lapse rates that result from the significant disparities between Grass Valley and Blue Canyon meteorological conditions.

The website, MeteoBlue states: "Climate Grass Valley 39.22°N 121.06°W The meteoblue climate diagrams are based on 30 years of hourly weather model simulations and available for every place on Earth. They give good indications of typical climate patterns and expected conditions (temperature, precipitation, sunshine and wind). The simulated weather data have a spatial resolution of approximately 30 km and may not reproduce all local weather effects, such as thunderstorms, local winds, or tornados."(Meteoblue. 2020. Climate Grass Valley. (Accessed September 2020. https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/grass-valley_united-states-of-america_5353775.)

NOTE: 30 km=18.641 miles The MeteoBlue site is not specific to Grass Valley with a spatial resolution of 30 km. A comparison of downloads in Meteoblue from both locations, Blue Canyon and Grass Valley, shows identical graphic measurements for ALL parameters:

- Average temperatures and precipitation
- Cloudy, sunny and precipitation days
- Maximum temperatures
- Precipitation amounts
- Wind speed
- Wind rose

Because of the 30 km resolution, Meteoblue makes zero distinction between Grass Valley and Blue Canyon weather patterns.

In the Air Quality Report, the consultant utilizes multiple quotes from various county documents, agencies and websites to substantiate his climate and weather claims. For the sake of argument, this critique uses data downloaded from WeatherSpark.com to compare Grass Valley to Blue Canyon meteorology. This website uses the same databases to compare the two locations.

The data for Grass Valley CA is based on a statistical analysis of historical hourly weather reports and model reconstructions from January 1, 1980 to December 31, 2016 (36 years total). The stations contributing to this reconstruction are: Nevada County Air Park (/y/149703/Average-Weather-at-Nevada-County-Air-Park-California-United-States-Year-Round) (67%, 5.0 kilometers, east); Auburn Municipal Airport (/y/145263/Average-Weather-at-Auburn-Municipal-Airport-California-United-States-Year-Round) (24%, 29 kilometers, south); and Beale Air Force Base (/y/145271/Average-Weather-at-Beale-Air-Force-Base-California-United-States-Year-Round) (9%, 33 kilometers, west).

The WeatherSpark data source for Blue Canyon illustrates the typical weather at Blue Canyon-Nyack Airport, based on a statistical analysis of historical hourly weather reports and model reconstructions from January 1, 1980 to December 31, 2016.

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OTHER DATABASE COMMONALITIES FOR WEATHERSPARK

All data relating to the Sun's position (e.g., sunrise and sunset) are computed using astronomical formulas from the book, Astronomical Algorithms 2nd Edition (https://www.amazon.com/Astronomical-Algorithms-Jean-Meeus/dp/0943396611), by Jean Meeus.

All other weather data, including cloud cover, precipitation, wind speed and direction, and solar flux, come from NASA's MERRA-2 Modern-Era Retrospective Analysis. This reanalysis combines a variety of wide-area measurements in a state of-the-art global meteorological model to reconstruct the hourly history of weather throughout the world on a 50-kilometer grid.

Land Use data comes from the Global Land Cover SHARE database, published by the Food and Agriculture Organization of the United Nations.

Elevation data comes from the Shuttle Radar Topography Mission (SRTM), published by NASA's Jet Propulsion Laboratory.

Names, locations, and time zones of places and some airports come from the GeoNames Geographical Database.

Time zones for airports and weather stations are provided by AskGeo.com.

Maps are © Esri, with data from National Geographic, Esri, DeLorme, NAVTEQ, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, and iPC

THE NEVADA COUNTY AIR PARK REFERENCED AS THE WEATHERSPARK SOURCE IS 4000 FEET NE OF THE BRUNSWICK SITE AS THE CROW FLIES.

GRASS VALLEY

There is an average 10°F higher temperature differential every month of the year in Grass Valley. This conclusion has been verified on WeatherSpark and the Western Regional Climate Center databases. For example, the hot season lasts for 3.1 months in Grass Valley, from June 15 to September 18, with an average daily high temperature above 81° F. In Blue Canyon there is no hot season. The warm season there lasts for 2.9 months, from June 20 to September 18, with an average daily high temperature above 72°F. Average hourly temperatures also vary dramatically between the two locations.

Regarding precipitation: annually Grass Valley receives 53.2 inches rainfall vs 67.5 in Blue Canyon; and annually Grass Valley receives 8.4 inches snowfall vs 240.40 inches snowfall in Blue Canyon.

Wind directions also display wide variances between the two locations. This section discusses the wide-area hourly average wind vector (speed and direction) at 10 meters above the ground. The wind experienced at any given location is highly dependent on local topography and other factors, and instantaneous wind speed and direction vary more widely than hourly averages.

The average hourly wind speed in Grass Valley does not vary significantly over the course of the year, remaining within 0.5 miles per hour of 5.7 miles per hour throughout.

The predominant average hourly wind direction in Grass Valley varies throughout the year. The wind is most often from the south for 7.4 months, from February 10 to September 21, with a peak percentage of 55% on August 11. The wind is most often from the east for 4.6 months, from September 21 to February 10, with a peak percentage

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of 49% on January 1. (https://weatherspark.com/y/1178/Average-Weather-in-Grass-Valley-California-United-States-Year-Round)

BLUE CANYON

In Blue Canyon, the average hourly wind speed at Blue Canyon-Nyack Airport experiences *mild* seasonal variation over the course of the year.

The *windier* part of the year lasts for *4.3 months*, from *November 19* to *March 30*, with average wind speeds of more than *5.2 miles per hour*. The *windiest* month of the year at Blue Canyon-Nyack Airport is *December*, with an average hourly wind speed of *5.7 miles per hour*.

The *calmer* time of year lasts for *7.7 months*, from *March 30* to *November 19*. The *calmest* month of the year at Blue Canyon-Nyack Airport is *May*, with an average hourly wind speed of *4.8 miles per hour*.

The wind is most often from the **south** for **3.7 months**, from **January 31** to **May 21**; for **3.4 weeks**, from **August 18** to **September 11**; and for **1.1 months**, from **November 3** to **December 7**, with a peak percentage of **48%** on **March 2**. The wind is most often from the **west** for **2.9 months**, from **May 21** to **August 18**, with a peak percentage of **41%** on **July 18**. The wind is most often from the **east** for **1.7 months**, from **September 11** to **November 3** and for **1.8 months**, from **December 7** to **January 31**, with a peak percentage of **41%** on **October 20**. (weatherspark.com/y/145297/Average-Weather-at-Blue-Canyon-Nyack-Airport-California-United-States-Year-Round#)

The Brunswick Industrial site is located just southeast of Grass Valley. This means that the winds will transport all pollutants to the north and west toward the Brunswick Basin and downtown.

It is interesting to note that in Blue Canyon, the wind is blowing east during the hottest part of the year, May 21 to August 18. This input into AERMOD would not correlate with Grass Valley wind data under any circumstances.

These differences in weather variables must be taken into account during HRA modeling since the project will be located in Grass Valley not in Blue Canyon. Using Blue Canyon meteorological data is NOT representative of Grass Valley.

The meteorological input data, AERMET, is designed to accept data from any of the following sources: 1) standard hourly National Weather Service (NWS) data from the most representative site; 2) morning soundings of winds, temperature, and dew point from the nearest upper air station; and 3) on-site wind, temperature, turbulence, pressure and radiation measurements. AERMET can process commercially available or custom on-site meteorological data. (www.weblakes.com/guides/aermod/section8/8_1

SHOULDN'T METEOROLOGICAL DATA MORE REPRESENTATIVE OF GRASS VALLEY BE USED FOR THE HEALTH RISK ASSESSMENT?

Grp 7-140

WINDBORNE PARTICULATE MATTER

The following tables are based on Stoke's Law for Fluid Particle Forces and EPA Inhalable Dust definitions and calculations:

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Table 1: 10-micron particle

Wind Speed (mph)	Distance Traveled (miles)
3.1	0.55
6.2	1.1
12.4	2.3
24.8	4.6
37.3	6.9
49.7	9.2

Table 2: 5-micron particle

Wind Speed (mph)	Distance Traveled (miles)
3.1	2.2
6.2	4.5
12.4	9
24.8	18
37.3	27
49.7	36.1

(http://toxsci.oxfordjournals.org/content/65/1/7.full (including impacts/effects of airborne sulfur (SO2) and silica particulates/particles)

The average wind speed in Grass Valley is 5.7 mph. The Brunswick Site is located 2 miles from downtown Grass Valley. As evidenced above, the smaller the particle, the greater the distance travelled. Grass Valley currently monitors PM 2.5 at the Litton Building. Nevada County is currently classified as nonattainment status for PM10.

The International Agency for Research on Cancer of the World Health Organization has classified PM2.5 as a human carcinogen (*IARC: Outdoor Air Pollution a Leading Environmental Cause of Cancer Deaths; Technical Report; International Agency for Research on Cancer (IARC): Lyon, French,27 2013)*

On September 22, 2021 the World Health Organization revised air quality guidelines decreasing criteria air pollutants, especially the recommended exposure levels for PM10 and PM2.5. (https://www.iqair.com/us/blog/air-quality/2021-WHO-air-quality-guidelines

Has a baseline scenario for Grass Valley PM2.5 emissions or PM10 emissions been created since Nevada County is in nonattainment status for PM10? Were background PM2.5 concentrations from long range sources added to the HRA model?

A baseline concentration must be established in order to measure the TRUE impact from the addition of this project to existing air quality and the cumulative impacts on community health.

Grp 7-141

DPM, silica and asbestos fugitive dust will be emitted under two different categories: criteria air pollutants and as Toxic Air Contaminants. Yet in each situation, their health impacts to the community will be minimized.

As a criteria air pollutant, emission levels are not related to the immediate geographical area: "Notably, as detailed in Appendix C, there are numerous scientific and technological complexities associated with correlating criteria air pollutant emissions from an individual project to specific health effects or potential additional nonattainment days, such as the disconnect between mass emissions and concentrations due to secondary pollutant (such as O3) generation and pollutant transport, as well as the inaccuracy of applying regional and population-wide models to a local level in order to estimate health effects, and there are currently no modeling tools endorsed by an expert agency (i.e. NSAMQD) that could provide reliable and meaningful additional information regarding health effects from criteria air pollutant generated by individual projects." ***(Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project, pg 46, 2021)***

As a toxic air contaminant, asbestos and respirable crystalline silica will fall under the non-criteria air pollutant category. There are no established limits for monitoring emissions of non-criteria pollutants into the ambient

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environment. The HRA is based on 30 years of exposure, thus the cumulative effects of the 80-year permit are not addressed.

Grp 7-142

Grp 7-143

HOW WILL THE RELEASE OF THESE TOXIC MICROSCOPIC PARTICULATES TO THE AMBIENT ENVIROMENT BE MONITORED?

SENSITIVE RECEPTORS

Grp 7-144

When listing *Receptors Used for Evaluating Modeled Impacts* are the following statements: "There are existing residences in all directions of the project site, with the nearest located north of East Bennett Road at approximately 100 feet from the project boundary. The nearest hospitals and schools to the project sites are the Sierra Nevada Memorial Hospital on Glasson Way (approximately 1800 feet north of the Centennial Industrial Site) and the Montessori House of Children on The Burma Road (approximately 2,500 feet south of the Brunswick Industrial Site boundary). However, residential receptors are the most conservative to evaluate as discussed further in Section 4.3." (*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 7, 2021*)

What about the impacts to the following receptors?

The Durham School Bus Depot is located 1.74 Miles west of the Brunswick Industrial Site on Bennett Road. These buses transport our children throughout the county. Will we be delivering asbestos and silica dust along with the children?

Within a 2-mile arc north of the Brunswick Industrial Site are 5 Skilled Nursing Facilities (Golden Empire, Wolf Creek, Atria Memory Care, Spring Hill Manor, and Crystal Ridge), at least 6 Assisted Living Facilities, 10 low-income housing apartment complexes, Hospitality House and Brunswick Commons housing for the homeless. All supportive services are located here as well: Pride Industries, FREED, Alta Regional Center, DaVita Dialysis, Nevada County Public Health offices and Connecting Point. Chapa-De Indian Health and multiple physicians' offices serving Medi-Cal patients are located here too.

Grp 7-145

According to the 2020 US census, 28.6% of Nevada County is 65 years or older as compared to the statewide rate of 14.3% for that population. Under age 65, the disability rate is 14.4% and 32.4% of the population have Medicaid coverage. The mortality rate from Chronic Lung Disease is double the state wide rates (69.26 deaths/100,000 people vs 34.92/100,000). There are also elevated rates for Heart Disease Mortality, Hypertension Mortality, Stroke Mortality and All-Cause Cancer Mortality vs state wide rates.

The demographics of our community must be considered in the context of this project. We already have elevated baselines for high levels of the criteria air pollutants ozone and particulate matter, radon, aging population, chronic disease, and poverty.

WILL THE COUNTY'S EXISTING BASELINES BE TAKEN INTO ACCOUNT?

SOURCE RELEASE SCENARIO

Grp 7-146

Table 2. Emission Source Parameters

DIESEL FUEL

These parameters are used to input data into the AERMOD dispersion model. On Page 10 of the HRA, the generators are listed at a Base Elevation of 2,748.39 m. This calculates to a height of 9017 feet. The Brunswick

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Diesel Storage Tank is listed at a Base Elevation of 2,757.74 m which equals a height of 9048 feet and the Centennial Diesel Storage Tank is listed with a Base Elevation of 2,491.44 m which equals 8174 feet. These measurements are used to estimate carcinogenic volatile organic compound emissions from breathing and working losses from storage tanks which include benzene, hexane, toluene and 2,2,4-trimethylpentane. *Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, Pg 23, 2021)*

All data entry inputs should be verified in AERMOD model due to these errors, especially units of measure, which may be affected for other source parameters (i.e. plume height/plume width of 25/25 meters for line sources).

Diesel fuel combustion from generator use will exhaust gases and DPM. These estimated emissions have been included for only 100 hours per year during testing/maintenance. Any emissions from actual use have been categorized as speculative. During a Public Safety Power Shutoff (PSPS), it is anticipated that 15,000 gallons of diesel fuel combustion per day will be required to maintain mining operations.

Grp 7-147

Will diesel fuel consumption be monitored? Will there be any provisions to mitigate the impacts from PSPS generator use contributing to increased criteria air pollutants, GHGs and DPM emissions affecting the community and environment?

Will there be any penalties if Tier 4 Final engines are not used exclusively due to "commercially available" status exemptions?

FUGITIVE DUST

SILICA

Silica will be released from on-road vehicles, underground blasting and crushing, ore processing along with earthwork and material handling.

All of the consultants have stated in their reports that they are using information provided by Rise to generate their conclusions. A prime example is the silica emissions. The following table shows the anticipated rock types and amounts expected to be mined:

Grp 7-148

Rock Type	Percent of Total
Meta-Andesite	96%
Altered Meta-Andesite	2%
Diabase	1%
Serpentinite	1%

This chart represents the anticipated barren rock ratios to be mined, approximately 500 tons per day. It does not account for the 1000 tons of mineralized ore rock to be mined each day. (*Groundwater Hydrology and Water Quality Analysis, EMKO, pg 93)*

"The applicant estimates that the ore processed would be quartz veins hosted primarily within andesite rock and an assumed 60% silica content."(*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 35, 2021)*

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Regarding rock composition, this is meta-andesite rock not just andesite…it has undergone metamorphosis becoming altered in composition. Johnston (1940) stated: "The degree of metamorphism may vary in this unit, such that parts of it have been referred to as amphibolite schist, porphyrite, diabase, and quartz porphyrite." (*The Gold Quartz Veins of Grass Valley, referenced in Groundwater Hydrology and Water Quality Analysis EMKO pg 9)*

The laboratory that Rise used for all metals analyses, ACZ Laboratories, is certified to perform both silica and silicon dioxide tests yet not a single sample was analyzed for this parameter. *(ACZ Analytical Capabilities 2017).*

The engineering firm, NV5, stated in the *Centennial Geotechnical Report* (pg 12) that: "We understand that the sand tailings will likely have a gradation similar to the historical gradation presented in the table below, and will typically have a large proportion of quartz."

Mesh Size	Particle Size (mm)	Particle Size (micron)	Percent Passing	Description
48	0.300	300	97.7	Medium Sand
65	0.212	212	87.5	Fine Sand
100	0.150	150	63.9	Fine Sand
200	0.075	75	32.3	Silt
325	0.044	44	12.1	Silt

Quartz is 100% silicon dioxide AND "1000 tons of ore" rock will be processed into tailings each and every day, *Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix, B pg 21, 2021).*

These tailings will contain respirable crystalline silica, a toxic air contaminant. Rise has assumed that the ore rock is 98% andesite with a silica content of 60%. There is no data to substantiate this assumption. Minimizing the levels of this TAC to be generated from the excavation of material and milling of quartz greatly diminishes its' impact in the HRA considering the vast amounts, 1500 tons of barren and ore rock, to be mined each day.

HOW WILL THE COMMUNITY PROTECT ITSELF FROM UNKNOWN QUANTITIES OF SILICA?

ASBESTOS

Asbestos will be released from on-road vehicles, during underground blasting and crushing, ore processing and along with earthwork and material handling.

Grp 7-149

The rock composition chart above lists total serpentinite mined at 1% yet the *Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Earthwork and Material Handling Fugitive Dust: Construction Activity Fugitive Dust* assumes *Serpentinite Content of Mine Fill* at 14.3%. Based on the given information, daily mine fill content is composed of 500 tons of tailings and 500 tons of barren rock at 1% serpentinite.

With these ratios, how can engineered fill contain 14.3% serpentinite?

Grp 7-150

Rise has developed an Asbestos, Serpentinite and Ultramafic Rock management plan with the goal of minimizing asbestos release. A 90-day rolling inventory will be maintained in an effort to prevent asbestos contaminated material from being used as aggregate and engineered fill. A three-grab composite sample will be obtained for every 1000 tons mined. The sampling point is located mid drop in the silo. Inventory material will then be screened using Polarized Light Microscopy (PLM), followed by Transmission Electron Microscopy (TEM) testing with results to be mathematically converted to Phase Contrast Microscopy (PCM) equivalent units. These tests are not comparable since they utilize different preparatory methods, sample amounts and microscopy techniques. The detection limit for PLM testing is 0.25% and the detection limit for TEM testing is 0.001%. Conversion of TEM to PCM equivalent units yields a detection limit of 0.01%.

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Under this plan, Rise is using the PCM equivalent units limit of 0.01% to calculate emissions levels for fugitive dust. "A conservative approach for the modelling of TAC emissions is used, with the asbestos content in mined materials assumed at the maximum of 0.01% by mass of PCM equivalent units. The average asbestos content of the mined material is of primary concern since asbestos does not have established acute noncancer effects (OEHHA)"(*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, pg 22, 2021*).

Initial asbestos sampling of 42 samples (*Asbestos Sampling Memo June 2020*) resulted in two samples at 0.075% and 2.5% by PLM analysis along with two samples at 2.0% and 3.1% by TEM analysis. The remaining 38 samples were non-detect (<0.25%) by PLM. Re-testing of these PLM samples by TEM yielded 6 samples with results greater than the PCM equivalent units detection limit of 0.01% in addition to the original 2 TEM samples that were not re-tested. Thus, **twenty percent** of the samples had asbestos levels greater than 0.01% PCM equivalent units.

Excluding the two grab tailings samples from Centennial and the two blanks, the average overall length of a sample core tested for asbestos was 5.34 inches. Samples were from 6 of 19 (32%) of total cores drilled by Rise: 9 samples from I-18-11, 1 sample from I-18-12, 9 samples from I-19-13, 7 samples from I-19-13A, 8 samples from I-19-14 and 4 samples from I-19-14A. Drilling was stopped when asbestos was detected. Drill logs are not available, no information available as to quantity, location, depth, etc. These cores appear to be in close proximity to each other as viewed on geological maps (*Asbestos Sampling Memo June 2020 pp 11-13*).

DEIR pg 3-20: "The ASUR plan incorporates routine asbestos testing by Transmission Electron Microscopy (TEM) and an Asbestos Inventory to ensure that average mined material and engineered fill contains less than 0.01% asbestos by mass of Phase Contrast Microscopy (PCM) equivalent units."

Just because Rise believes that they will be able to control the distribution of material to 0.01% asbestos content does NOT mean that they can control the amount of asbestos in the actual mined material. The content of asbestos in the serpentinite is unknown until tested-this requires blasting, excavation, crushing, skipping, conveyance to the surface, deposition and storage to then be followed by testing. Ventilation from the mine during these underground processes will emit asbestos to the ambient environment. This quantity of asbestos emissions is unknown and CANNOT be assumed to be only 0.01%.

Grp 7-151

The ASUR Plan dictates the use of water curtains and an auxiliary fan system when mining serpentinite material. According to Rise, this system uses MERV 16 filters that will trap particles to 0.03 microns reducing asbestos fibers by 95% before the fibers enter the main ventilation system. How much asbestos will be in the remaining 5% if the initial asbestos content of the rock is unknown along with the unknown quantities of rock mined?

Maintenance of the 0.01% inventory will not be attemptable until AFTER the material is mined, brought to the surface and tested twice- requiring up to two weeks before the results are known.

These asbestos emissions are not accounted for in fugitive dust estimations.

Grp 7-152

In 1986, asbestos was identified by the Board (CARB) as a toxic air contaminant: the Board also determined that there is not enough scientific evidence to identify an asbestos threshold level below which no significant adverse health effects are anticipated (17 CCR 93000). (*Implementation Guidance Document 2017, CARB pg 1*)

The World Health Organization (WHO) concurs that there is no safe level of asbestos exposure. Any asbestos released to the ambient environment will create chronic exposure risk for the community since asbestos does not readily degrade. Protecting mine workers from acute exposure when mining material "rich in asbestos" does not equate to the same level of community protection. Under these circumstances, miners will work a short-shift, wear respirators, be monitored for exposure, and decontaminate themselves before going home. They have the freedom of choice to work in that environment, financial compensation, training in exposure control and health care benefits. The community has none of these protections.

By using the detection level of 0.01% mass by PCM equivalent units to calculate emissions used in the HRA, the levels of this TAC have been grossly underestimated.

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HOW WILL THE COMMUNITY PROTECT ITSELF FROM UNKNOWN QUANTITIES OF ASBESTOS?

HEAVY METALS

"Blasting and crushing would also result in emissions of dust with trace heavy metals TACs including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium. Concentrations of each heavy metal within the barren rock and mineralized rock was taken from Table 4-7 of the *Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project* (EMKO Environmental, Inc. 2020)"

Heavy metals will be released: from off-road equipment, on-road vehicles, during underground blasting and crushing, ore processing along with earthwork and material handling-all phases of operations.

The data used for heavy metal toxic air contaminants in the Health Risk Assessment are all notated by the laboratory as being received and tested beyond the EPA recommended hold times of 28 days for mercury and 6 months for all remaining metals. Exploratory drilling began in 2017. Since the drill logs are unavailable, the exact sample dates for each core are unknown, but all samples were submitted and received by the gold assay laboratory on February 20, 2019. (*Appendices: Groundwater Hydrology and Water Quality Analysis EMKO, pp 515-516*) and (Appendices: *Groundwater, Hydrology and Water Quality Analysis Report: Inorganic Extended Qualifier Reports pp. 389-407 and 458-484)*

Grp 7-153

After assays were performed, samples were then submitted to ACZ Laboratories for metal analyses. It is not clear where the samples were located between the assay lab, ALS Laboratories in Reno, Nevada and submission to ACZ Laboratories in Steamboat Springs, Colorado. The Chain of Custodies describe these 47 samples as Tailings (assay pulp). All list a sample date of 3/5/19:12:00 pm. Under the Sampler's Name were the initials, BM (Ben Mosssman?) Ben Mossman and Andrew Kopania of EMKO both received copies of the laboratory reports as listed on the CoCs. The laboratory received by date for all samples is 11.11.2019. Twenty samples were digested on 11.22.2019 and the remaining twenty-seven samples were digested on 11.26.2019. (The digestion dates would be used for endpoint hold time calculations).

These samples may have been collected at that time but they were NOT sampled at that time. These metals analyses were performed in November 2019 in two batches. This means that all samples were tested at least 9 months beyond their hold time expiration date, probably more.

Potentially toxic elements (PTEs) hosted in asbestos elongate mineral particles is one of the factors that determines their toxic/pathogenic effects. Metals such as Fe, Mn, Cr, and Be are known to induce toxicity and contribute to asbestos related diseases. "...it is essential to quantify the toxic elements present in asbestos elongate mineral particles in order to prevent asbestos-related diseases." (https://doi.org/10.1016/j.chemgeo.2020.119896Get rights and content)

SHOULDN'T VALID DATA BE USED WHEN EVAUATING THE HEALTH RISKS TO THE COMMUNITY FROM THESE TOXIC AIR CONTAMINANTS, ESPECAILLY WHEN THESE METALS HAVE THE ABILITY TO POTENTIATE THE EFFECTS OF ASBESTOS?

CONCLUSION

Grp 7-154

"Based on the PM10 emissions estimated, emissions of asbestos, silica, and heavy metals were estimated for the purposes of this HRA." (*Air Quality and Greenhouse Gas Emissions Analysis Report for the Idaho-Maryland Mine Project: Health Risk Assessment, Appendix B, Pg 22)*

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Estimations of estimates...estimates of estimations

IS THERE ANY VALIDITY IN ANY OF THESE ASSUMPTIONS, ESTIMATIONS OR DATA REGARDING THE EMISSIONS OF SILICA, ASBESTOS, HEAVY METALS OR DPM?

IS THERE ANY VALIDITY TO THIS HEALTH RISK ASSESSMENT OF OUR COMMUNITY?

Thank you,

Pam Heard RRT

Pam Heard RRT

Registered Respiratory Therapist (RRT)
11500 Brunswick Pines Road
Grass Valley CA 95945
pspheard@yahoo.com

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Mar 25, 2022

To: Matt Kelley, Senior Planner

Nevada County Planning Department
950 Maidu Ave, Suite 170
Nevada City, CA
530-265-1423
Matt.Kelley@co.nevada.ca.us
Idaho.MMEIR@co.nevada.ca.us

Attn: Matt Kelley,

Please include these comments to the Idaho-Maryland Mine DEIR.

SAMPLING PROCEDURES

Grp 7-155

Page 93 of the *Groundwater Hydrology and Water Quality Analysis Report*, EMKO states that Rise completed 19 drill core holes, totaling 67,500 linear feet, from 2017-2019. The sampling pattern was to drill 90 feet, pull a 10-foot sample segment, drill another 90 feet, etc. The drill logs are not available for review; the actual dates, precise locations, drift angles, widths, final depths, etc. are unknown.

"The cores were sawed in half in zones of interest and sent to ALS in Reno, Nevada to be assayed. ALS Laboratories crushed and homogenized the sample to ~2 mm size, split a 1 kg sample, pulverized the split sample, and assayed a split of the pulverized sample." (*Groundwater Hydrology and Water Quality Analysis Report* pg 93) Samples were received on 02.20.2019 with a finalized date of 03.05.2019. (*Appendices: Groundwater Hydrology and Water Quality Analysis Report pp 515-516*)

After assay for gold, the samples were subjected to additional testing at different laboratories.

Grp 7-156

METALS ANALYSES, DI-WET, ABA, WET CHEMISTRY PARAMETERS

FLOTATION COMPOSITE- McClelland Labs

"A composite sample was prepared from 76 samples of the ~2 mm material remaining from assaying. A portion of the material was weighted to represent the interval length and merged to make the metallurgical sample. Sufficient material was available for most samples, except for five samples where no material was available from the assay lab. The 76 samples created a composite metallurgical sample of approximately 46 kilograms (kg) (100 pounds)". (*Groundwater Hydrology and Water Quality Analysis Report pp 95-96*). This composite was sent to McClelland Labs in July 2019 which then homogenized the sample and split it into 4 sub-samples, F1-F4 flotation tailings samples. Page 537 of *Appendices: Groundwater Hydrology and Water Quality Analysis Report* states: "A total of 7 buckets containing 6 separate samples were received from the Maryland mine on July 10, 2019. The

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samples weighed 4 to 47 kg, and appeared to be approximately -6 mm in size. The largest sample ("flotation composite") was intended for analysis..."

Is the material 2 mm or 6 mm in size? What is the exact provenance of the 76 samples that comprise the composite as it relates to the 47 cores submitted for assay?

After flotation testing, these samples were shipped from McClelland Labs to a geologist at Benchmark Resources in Folsom, CA during November 2019 who then submitted the samples to ACZ Laboratories in Steamboat CO. These samples, F1-F4, were then analyzed by ACZ for total metals, DI-Wet metals, Static Acid-Based Accounting and wet chemistry parameters.

BARREN ROCK-ACZ Laboratories

Grp 7-157

On October 29, 2019 a geologist with Benchmark Resources selected barren rock samples: MA-1, MS-1, MA-2, MAA-1, S-1 and MA-3 from Rise Grass Valley. These samples were from 3 different cores [1 sample from I-18-10, 1 sample from I-18-11 and 4 samples from I-19-13 (*Groundwater Hydrology and Water Quality Analysis Report, EMKO pg 93)*], with combined segments equaling 34.1 linear feet. This represents only 0.05% of 67,500 total linear feet.

They were submitted to ACZ Laboratories in November 2019 to be tested for total metals, DI-WET metals, Static ABA and wet chemistry parameters.

METALS ANALYSES-BARREN ROCK CRUSHED CORES-ACZ Laboratories

Samples submitted for metals testing with identifiers can be found in Table 4-9 Barren Rock Crushed Core Samples: Total Metals Results in *Groundwater Hydrology and Water Quality Analysis Report, EMKO pp 101-102*.

Grp 7-158

Regarding the barren rock crushed core metals analyses, only 5 cores were tested which means that only 26% of the 19 total cores were sampled [1 sample from B-18-02, 3 samples from I-18-10, 1 sample from I-18-11, 2 samples from I-18-12 and 40 samples from I-19-13 (*Groundwater Hydrology and Water Quality Analysis Report, EMKO pp 101-102*)]. All five core segments combined length equal a total of 456.5 linear ft. These combined 10 ft segments represent only 0.68% submitted for testing compared to total of 67,500 ft. In general, each sample represents 10 linear feet. The diameter of the cores is not given. It is not stated how much material, weight wise or volume, is contained in each segment or specifically how that material is "homogenized" to obtain a representative sample for testing.

After assay at ALS Laboratories, the samples were labelled as "Pulp-2, Tailings= (assay pulp)". These 47 samples were then analyzed by ACZ Laboratories for total metals. The final weight used in metals analysis is 1-2 grams of material per sample.

Grp 7-159

The reference for this "Crush and Pulverize" step is EPA 600/2-78-054 3.1.3 (Field and Laboratory Methods Applicable to Overburdens and Minesoils, March 1978 pp. 43-45). The Foreword states "This report provides chemical, physical, mineralogical, and microbiological procedures for the analysis of coal overburdens and the resultant minesoils. These step-by-step methods identify and measure rock and soil properties that influence advance planning, mining efficiency, post-mining land and water quality and long-range land use."

2

Procedure (3.1.3):

1. Pour field sample onto a large square of brown paper. Spread material evenly and allow to air dry. NOTE: Sample may have to be mixed periodically to speed drying.
2. After drying, the field sample is split into two representative subsamples. One subsample is placed in a container, labeled, and stored for physical analyses or individual preference tests.
3. The other subsample is placed between two sheets of brown paper and crushed by moderately rolling over the top sheet with a rolling pin. This process is continued until the entire field sample has been processed. NOTE: Do not allow paper fragments to become incorporated with the soil sample. Do not crush rock fragments.
4. Pass the crushed material through a sieve with 19 mm openings and discard material retained on the sieve.
5. All material passing the 19 mm sieve is crushed to pass through a sieve with 6.35 mm openings.
6. Place sieved sample in a 1 liter container and cover. NOTE: Container should not be more than two-thirds full or mixing (step 7) will be impaired.
7. Tumble container end-over-end until material is thoroughly mixed.
8. Place three heaping teaspoons of the mixed material in the pulverizer. Material is pulverized until it passes a 0.25 mm (60 mesh) sieve. NOTE: A cast iron mortar and pestle can be substituted for the pulverizer.
9. Place pulverized material in a plastic vial for laboratory use.
10. Label vial with the sample identification shown on the field container.
11. Mix sample thoroughly by tumbling the vial end-over-end before subsampling for laboratory procedures (primarily chemical analyses).

After a sample is obtained, according to test method, M3050B (SW-846) Acid Digestion of Sediments, Sludges and Soils, a 1 gram (dry weight) of sample is digested for ICP-MS metals analyses testing. The digestate is then diluted to a final 100 ml volume. Flow injection volumes generally range from 20µl-200µl (microlilter) from the 100 ml prepared volume. A µl (microliter) is equal to 0.001 milliliter(ml) or 1/1000th of ml. Analyses dilution factors range from 1 to 500. For reference: There are 1 million grams in a metric tonne.

All metals were digested using EPA Method 3050B. The results should be defined as the "Total acid soluble/recoverable metals" fraction since this method does not use hydrofluoric acid, thus it is unable to break down silicates. (EPA SW-846 Revision VI December 2018, Chapter 3, pg 4)

ACZ Laboratories did receive "pulp" samples, residual material after ALS gold assay analyses. "In addition to the barren rock samples, Rise provided 48 crushed core samples, taken from ~2 mm assay rejects, for trace element test work." (*Groundwater Hydrology and Water Quality Analysis Report, EMKO, pg 95*) The actual number of samples was 47.

The barren rock samples must be pulverized prior to acid digestion just as the 47 "pulp" samples were pulverized prior to analysis for metal analyses. Any conclusions comparing metals content, leachate capacity, ABA, etc. between pulp results and barren rock results is moot since the sample preparation (pulverization) is identical.

Grp 7-160

TESTING TIMELINES

3

After exploratory drilling, cores were sent to ALS Laboratories which were received on 02.20.2019. Date finalized 03.05.2019. "The cores were sawed in half in zones of interest and sent to ALS in Reno, Nevada to be assayed. ALS Laboratories crushed and homogenized the sample to ~2 mm size, split a 1 kg sample, pulverized the split sample, and assayed a split of the pulverized sample." (*Groundwater Hydrology and Water Quality Analysis Report* pg 93)

Then the composite sample was prepared and sent to McClelland Labs for flotation testing from July 2019- November 2019. Samples F1-F4 were then sent to ACZ Laboratories for metals testing, DI Wet testing, ABA and wet chemistry parameters. The Flotation Results Report from McClelland Labs was not submitted to Rise until January 29, 2020.

Also in November, 2019, the 47 crushed core samples were sent to ACZ for metals testing along with the six barren rock samples to be tested for metals, DI WET metals, ABA and wet chemistry parameters.

It is difficult to understand how the composite sample was prepared and analyzed months before the individual samples (barren rock and barren rock crushed core) were submitted to ACZ in November 2019. The chains of custodies do not reflect the written account. Other than the out-going COC from McClelland to Benchmark Resources regarding F1-F4 samples, all sample shipments originate from Rise Grass Valley. The transitions between the various laboratories are not documented regarding dates, amounts, sample containers, etc.

SAMPLE POPULATIONS

FLOTATION COMPOSITE

"A total of seven buckets containing six separate samples were received from the Maryland Mine on July 10th, 2019. The samples weighed 4 to 47 kg, and appeared to be approximately 6 mm in size. The largest (flotation composite") was intended for analysis and metallurgical testing as well as environmental characterization of the testing products... The five remaining samples were indicated to be waste rock samples of various types for environmental characterization. Preparation and analysis of the waste rock samples will be discussed in a separate report." (*Appendices*: *Groundwater Hydrology and Water Quality Analysis Report: Appendix H, pg 2)*

Grp 7-161

"The rougher tailings from two selected tests were also subjected to environmental characterization (discussed in a separate report)." (*Appendices*: *Groundwater Hydrology and Water Quality Analysis Report: Appendix H, pg 4)*

The flotation composite arriving in a bucket is not a very specific provenance considering that these tailings will be used to determine heavy metal leachates. What material was in this bucket?

What is environmental characterization of the testing products? What is the environmental characterization of the waste rocks? Where is the separate report that describes the preparation and analysis of the waste rock and rougher tailings for "environmental characterization"? Is the environmental characterization part of the Cement Paste Backfill study?

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BARREN ROCK SAMPLES

The three cores represent a 15.8% sample population when compared to 19 total cores. Samples MA-1(I-19-13), MS-1(I-19-13), MA-2 (I-19-13), MAA-1(I-19-13), S-1(I-18-11) and MA-3 (I-18-10) were each tested for barren rock total metals, barren rock leachate DI-WET, barren rock Static Acid-Based Accounting, and Wet Chemistry parameters. In addition, samples MA-1, MS-1 and MA-1 were assayed for gold determination.

BARREN ROCK CRUSHED CORE SAMPLES

Grp 7-162 Metals analyses for forty out of forty-seven representing 85% of the total rock core samples were from a single drill core, I-19-13, at various depths (167 ft bgs to 4774.6 ft bgs = 4607.6 total feet). These samples represent 6.8% sample population when compared to 67500 total linear feet. In addition, 25% of this core is missing between depths 3227.0-3583.0 = 356 ft, 3969.7-4313 = 343.3 ft and 4323.0-4767.9 = 444.9 ft. These missing sections total 1144.2 ft out of 4607.6 feet. The remaining 3463.4 feet represent a 5.1% sample population compared to the 67500 total linear feet.

CONCLUSION

Grp 7-163 It is obvious that very limited sampling and testing has been done. Only one sample, B-18-02, was analyzed from the "Brunswick" area- metals analyses were performed on the barren rock crushed core sample. Rise plans to mine in this area immediately along with the installation of major infrastructure.

Grp 7-164 There are egregious issues with the Chains of Custody regarding sample dates, locations and quantities. Samples from only 5 cores are represented out of 19 total cores. Eight five percent of total metals analyses (barren rock crushed cores) were performed on one core, I-19-13, while 67 % of barren rock total metals, leachate Di-WET testing, wet chemistry along with ABA testing were performed on this same core.

Grp 7-165 There are inconsistencies and omissions within this limited sampling as well. For example, S-1 is taken from core I-18-11 at a depth of 4725.6'-4725.7'. This is a total of 0.1 feet or 1.2 inches. The diabase sample above it (Y973586) is taken at 4107.8-4117.55'. What is between these two samples with 608.05 feet missing? Where did the serpentinite layer begin? How deep is the serpentinite layer beneath since sampling stopped after 1.2 inches?

Grp 7-166 Sample (Y973596) from core I-19-13 at 4767.9'-4772.7' is listed as MA in the Hydrology report but as Meta volcanic serpentinite on ALS COC. Sample (Y973597) from core I-19-13 taken from 4772.7'-4774.6' is serpentinite also. What is below this level where sampling stopped after 1.9 feet? This is known serpentinite containing asbestos.

QUALITY CONTROL ISSUES

Grp 7-167 Regarding static acid-base-accounting, page 510 of the *Appendices: Groundwater Hydrology and Water Quality* states that the following parameters are not offered for certification or are not covered by NELAC certificate #ACZ:

Neutralization Potential as CaCO3	M600/2-78-054 NV Modified Sobek Procedure
pH, Saturated Paste	EPA 600/2-78-054 section 3.2.2
Sulfur HCl Extractable	M600/2-78-054 3.2.4 & 3.2.6 Modified Sobek Procedure

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Sulfur HNO3 Extractable Procedure	M600/2-78-054 3.2.4 & 3.2.6 Modified Sobek
Sulfur Hot H2o Extractable Procedure	M600/2-78-054 3.2.4 & 3.2.6 Modified Sobek
Sulfur Residual Procedure	M600/2-78-054 3.2.4 & 3.2.6 Modified Sobek
Sulfur Total Procedure	M600/2-78-054 3.2.4 & 3.2.6 Modified Sobek

Lack of certification impacts validity of acid-base-accounting results for all samples: MA-1, MA-2, MA-3, MAA-1, MS-1, S-1, F-1, F-2, F-3 and F-4 (pp 495-504, Appendices: *Groundwater Hydrology and Water Quality Analysis Report*).

SILICA

Toxic air contaminants, silica and asbestos, will be produced daily in massive quantities. Silica content is assumed as 60% quoting a textbook definition of andesite rock composition. But 98% of the total rock mined is assumed to be meta-andesite. Regarding rock composition, meta-andesite rock is not just andesite....it has undergone metamorphosis becoming altered in composition. Johnston (1940) stated: "The degree of metamorphism may vary in this unit, such that parts of it have been referred to as amphibolite schist, porphyrite, diabase, and quartz porphyrite." (*The Gold Quartz Veins of Grass Valley, referenced in Groundwater Hydrology and Water Quality Analysis EMKO pg 9)*

Grp 7-168

500 tons of barren rock will be mined each day.

Mineralized ore rock, gold in quartz (100% silicon dioxide) veins, has not been accounted for in silica calculations.

1000 tons of ore rock will be mined each day.

Silica content was not tested on any samples even though the methods utilized, ICP-MS, can analyze for both Silicon (Si) and Silica (SiO_2) and more specifically can be performed by their contracted laboratory-ACZ Laboratories (*ACZ Analytical Capabilities 2017*).

What is the actual silica content of the barren rock and ore rock?

ASBESTOS

Grp 7-169

Forty-two samples were analyzed for asbestos: two blanks, 2 Centennial tailings and 38 drill core samples. The core samples were from 6 of 19 (32%) of total cores drilled by Rise: 9 samples from I-18-11, 1 sample from I-18-12, 9 samples from I-19-13, 7 samples from I-19-13A, 8 samples from I-19-14 and 4 samples from I-19-14A. The average overall length of the sample cores tested was 5.34 inches. Drilling was stopped when asbestos was detected. Drill logs are not available, therefore unable to determine depth or width of serpentinite deposit encountered. Asbestos sampling was limited. Centennial tailings were only identified by grid number-no information as to quantity, location, depth, etc.

Rise states that 1% of material mined each day will be serpentinite (*Groundwater Hydrology and Water Quality Analysis Report*, pg 93). Yet all of the geological maps located in the *Technical Report for the Idaho-Maryland Mine Project* show the quartz veins running with the

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contact points of the faults along the serpentinite deposit (AMEC 2017 pp 7-17, 7-23, 9-9, 9-11, 9-26).

The *Air Quality and Greenhouse Gas Emissions Analysis Technical Report: Earthwork and Material Handling Fugitive Dust: Construction Activity Fugitive Dust* Nov 2021 pg 300 states that the serpentinite concentration of Mine Fill will be 14.3%. How can the mine fill concentration be seven parts serpentinite when it comprises only 1 % of material mined?

"Exploration drilling was designed to test a variety of mineralization throughout the deposit in areas where mining is expected to occur." (pg 93, Hydrology Report) "Rise selected mineralized samples for metallurgical testwork by reviewing drill logs and maps. Samples were selected to represented (sic) materials representative of future mining. Factors considered in selection were gold grades, minimum mining widths, mineralization style, and locations throughout the potential mining areas." (pg. 95 Hydrology Report)

CONCLUSIONS

Grp 7-170 How can the actual ratios of rock mined be known based on this work? This information is necessary to determine emissions of toxic air contaminants such as heavy metals, silica and asbestos.

Grp 7-171 Why wasn't more testing done on the Brunswick area since mining is anticipated to begin there immediately along with the installation of major infrastructure?

Grp 7-172 How can the data from this limited sampling be extrapolated to 2585 acres being mined to unknown depths for the next 80 years?

Thank you,

Pam Heard RRT

Pam Heard RRT
Registered Respiratory Therapist (RRT)
11500 Brunswick Pines Road
Grass Valley CA 95945
pspheard@yahoo.com

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CENTER for SCIENCE in PUBLIC PARTICIPATION
a 501(c)(3) non-profit corporation
224 North Church Avenue, Bozeman, MT 59715
Phone (406) 585-9854 / Fax (406) 585-2260 /web: www.csp2.org / e-mail: csp2@csp2.org
"Technical Support for Grassroots Public Interest Groups"

March 16, 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue
Nevada City, CA 95959-8617
Idaho.MMEIR@co.nevada.ca.us
(530) 265-1423

Re: Comments on the Draft EIR for the Idaho-Maryland Mine Project

From: David M. Chambers, Ph.D., P. Geop.

Background

David Chambers has 40 years of experience in mineral exploration and development – 15 years of technical and management experience in the mineral exploration industry, and for the past 30+ years he has served as an advisor on the environmental effects of mining projects both nationally and internationally. He has Professional Engineering Degree in physics from the Colorado School of Mines, a Master of Science Degree in geophysics from the University of California at Berkeley, and is a registered professional geophysicist in California (# GP 972). Dr. Chambers received his Ph.D. in environmental planning from Berkeley. His recent research focuses on tailings dam failures, and the intersection of science and technology with public policy and natural resource management.

Grp 7-173

OVERALL COMMENT

This is a rather unusual mine project proposal, a request for an 80-year operating permit, in that most regulatory agencies would consider the level of information presented for this environmental review of the project sufficient only to consider this as a proposal for advanced exploration, not for mine development. This mine development proposal lacks the economic and environmental data necessary to evaluate a full mine development proposal.

Grp 7-174

Unlike a typical mine that is being proposed for production, the Idaho-Maryland mine; (1) does not have an identified mineral reserve, or even a mineral resource; (2) the drilling core is not sufficient to provide the necessary information on the geochemistry of the waste rock and tailings; and, (3) there is no surface water-quality modeling. These are all elements that are critical in evaluating the potential impacts of a proposed mine.

As a result, it is not known whether the mine waste could leach contaminants into ground and/or surface waters. The design details of the "engineered fill" facility have yet to be done, so it not known if the proposed design is geotechnically sound. In addition, the long-term closure costs for the mine have not been analyzed.

Page #2

SECTION-SPECIFIC COMMENTS

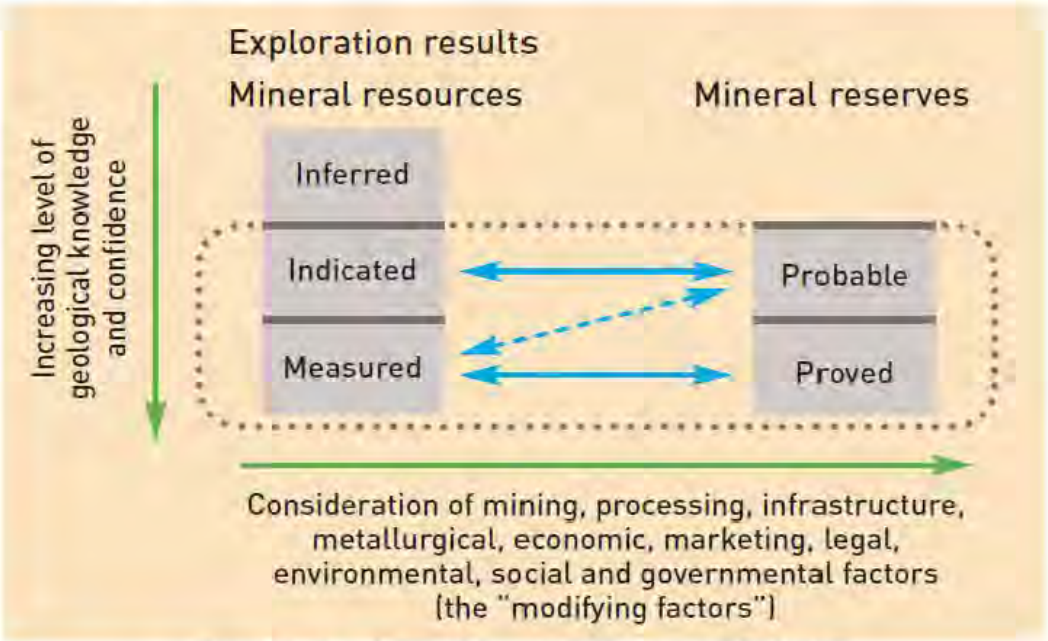
3.6 Project Objectives

In order to have a credible mine proposal, a minimum amount of ore must be identified to warrant the economic investment to open a mine. It is possible that a mining company has enough capital to self-fund the hundreds of millions of dollars necessary to bring a mine property like Idaho-Maryland to the point where it is ready to produce its first ounce of gold, but this is seldom the case. And even if this were the case, a responsible board of directors would require a thorough economic analysis before committing this level of funding for a project.

A mineral property with no current mineral resources or mineral reserves has been described by the Canadian National Instrument 43-101 policy as an "early stage exploration property" (OCS 2011). This is the case with the Idaho-Maryland property's latest 43-101 compliant technical report (Rise Gold 2017).

A mineral resource is a concentration or occurrence of solid material of economic interest. A mineral reserve is the economically mineable part of a measured and/or indicated mineral resource (ICMM 2013). The figure below has presented in approximately this same format for quite some time as a way to illustrate how the concepts of mineral resource and mineral reserve are related – technically, economically, and legally.

Grp 7-175



Classification of Mineral Resources & Reserves (ICMM 2013)

Grp 7-176

Rise Gold does not have enough drill samples to satisfy the requirements to meet any of the mineral resource or reserve definitions described in the Classification of Mineral Resources & Reserves. This same lack of an adequate number of drill samples also results in the lack of data required to adequately characterize the geochemistry of the waste rock and tailings that will be produced, or to supply test data on the leachate from this waste that would allow modeling of potential impacts to surface water.

Page #3

Geochemistry of the waste rock

The projected waste rock geochemistry analysis is summarized in the EIR Appendix K.2: Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project Nevada County, California, EMKO Environmental, February 2021.

In Table 4-5 (below) from Appendix K.2, it is predicted that the 96% of the waste rock will produced will be Meta-Andesite.

Table 4-5 Estimated Daily Barren Rock Production

Material Type	Tons per Day	Percent of Material Produced
Meta-Andesite	481	96
Altered Meta-Andesite	12	2
Diabase	5	1
Serpentinite	2	1
TOTAL	**500**	**100**

Rise completed 19 drill exploration drill core holes, totaling 67,500 linear feet, from 2017-2019. From this drill core, Benchmark Resources collected six drill core samples that it used to characterize the geochemistry of the waste rock. These samples are listed in Table 4-6.

Meta Andesite, which constitutes 96% of the waste rock to be mined, was taken from three intervals of drill core – samples MA-1, MA-2, and MA-3. Sample MA-1 was from the near surface rock 167' - 177' below the drill level, so it not representative of most of the Meta Andesite that will be produced from mining, which will occur at much greater depth. As a result, the geochemical predictions for approximately 96% of the waste rock to be produced comes from one 10-foot interval of drill core (Sample MA-2 from 3959.7 ' to 3969.7'), and one 1-foot sample (MA-3 from 3265' to 3266').

Table 4-6 Core Samples Collected by Benchmark Resources

Sample Name	Description	Date	Time	Bag #	Hole #	Elevation Interval
MA-1	Meta Andesite/Porphyrite	29/10/2019	10:45 AM	Y973551	I-19-13	167'-177'
MS-1	Meta Sediment/Porphyrite	29/10/2019	11:00 AM	Y973560	I-19-13	1,067'-1,077'
MA-2	Meta Andesite/Porphyrite	29/10/2019	11:05 AM	Y973594	I-19-13	3,959.7-3,969.7
MAA-1	Meta Andesite Altered/Porphyrite	29/10/2019	11:20 AM	core box	I-19-13	3,357'-3,360'
S-1	Serpentinite	29/10/2019	11:25 AM	core box	I-18-11	4,725.6'-4,725.7'
MA-3	Meta Andesite Altered/Porphyrite	29/10/2019	11:45 AM	core box	I-18-10	3,265'-3,266'

Another way to describe this is that the geochemical characterization of the 2 million tons of waste rock produced during the first 11-years of mining, and nominally the waste rock production from the entire 80-life of the proposed permit, is represented by these two samples, which come from a total of 11 feet of drill core.

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Australian Guidance on Sample Numbers (adapted from Australian Government Department of Industry, Tourism and Resources, 2007 (GARD Guide Table 4-5)

Mine Phase	Number of Samples	Description
Exploration	(1) Prospect Testing – Include sulphur in list of elements being analyzed for all samples tested; include the full range of pathfinder elements as defined by ore deposit/exploration model; collect and record mineralogical data as per exploration/ore deposit model; where the geology of the deposit is known include static testing of at least 3 to 5 representative samples of each key material type (i.e., lithology, alteration type); analysis of ground water and surface water for acidity and representative pathfinder elements. (2) Resource Definition – All samples tested for sulphur and representative samples tested for mineralogy as per ore deposit model. **Static testing of at least 5 to 10 representative samples of each key material type. *(emphasis added)*** Collect groundwater and surface water data. Surface water and groundwater analysis to include acidity as well representative metal ions. All testing to include QA/QC samples.	By the end of the resource definition phase, there should be adequate information to accurately characterize the ARD potential of the ore body (high and low grade), although further test work will normally be required to characterize the ARD potential of waste rock and ore and hence tailings.
Pre-Feasibility	**Static testing of several hundred representative samples of high and low grade ore, waste rock and tailings**, the number dependent on the complexity of the deposit geology and its host rocks. ***(emphasis added)*** All drillhole samples analyzed must include sulphur analysis and identified representative metal ions. Sampling density is dependent on complexity of ore deposit and host rock geology interval of representative drill holes but should be restricted to single rock units or lithologies - include minimums. **Kinetic testing of at least 1 to 2 representative samples of each material type. *(emphasis added)*** Surface water and groundwater analysis to include acidity as well as pH, EC and representative metal ions, including Al, Fe, Mn. All testing to include QA/QC samples.	Where required, the number of samples must be sufficient to populate a "resource" block model of the ore and host rocks that will be affected by mining with a reliable distribution of NAPP[1] data (e.g., acid producing potential (APP), sulphur and acid neutralizing capacity (ANC) (or NPR data) on ore, waste rock and wall rock.
Mine Planning, Feasibility and Design	Where required, additional static testing as required for block waste resource model refinement – **increase density of NAPP (or NPR) characterization. *(emphasis added)*** Inclusion of confirmatory testing (e.g., NAG testing for comparison to NAPP (i.e. APP, or sulphur, and ANC) for metalliferous deposits; and mineralogy or NPR values). Continuation of kinetic testing. Upgrade drillhole database and waste resource model for new ore positions. All testing to include QA/QC sample(s). Apply QA/QC to all analyses, not only ore. Include wall rock.	Data set must be sufficient to assess ARD potential to support a management plan. If data are insufficient, additional testing will be required.

Page #5

The widely accepted source of guidance for determining the number of samples for acid-drainage/metals-leaching prediction is the Global Acid Rock Drainage Guide (GARD 2018), published by the International Network for Acid Prevention. The GARD Guide has adopted the Australian Guidance on Sample Numbers for determining the number of samples needed to determine acid-drainage/metals-leaching potential (GARD Guide Table 4-5).

The number of samples used to predict the leaching potential of the tailings and waste rock for the proposed Idaho-Maryland Project does not meet even the lowest level of these criteria. The number of samples analyzed for this proposal would not even meet the requirements for the Exploration stage of sampling, let alone the Mine Planning, Feasibility and Design phase, which is the level of development being proposed for the Idaho-Maryland Project.

3.7 Project Components– Water Treatment

Grp 7-177

There is no discussion, or disclosure, of the operational water quality treatment needs or processes. The EIR merely requires that the applicant apply to the Regional water Quality Control Board for a discharge permit. The water quality discharge that will be required by the discharge permit should be disclosed in the EIR so that the public is able to assess and comment on the potential impacts. To simply assert that water quality standards will be met is not sufficient for reviewers to assess either the adequacy of the water treatment methods proposed, or the adequacy of the standards proposed for the discharge permit.

This completely circumvents any discussion or analysis of what the contaminants of potential concern might be, what contaminants would be monitored, what treatment methods are available, and where monitoring would take place. This information should all be disclosed in the EIR.

Grp 7-178

In addition, a Monitoring Plan should be included. The Monitoring Plan should incorporate all elements of monitoring, including surface water, ground water, air, and noise sampling. Sampling locations, frequencies, and constituents should be disclosed/discussed in the Monitoring Plan, and summarized in the EIR.

3.7 Project Components – Backfill

Grp 7-179

It is noted that approximately 500 tons/day of tailings will be backfilled into the mine as cemented paste. The technical details of the process are contained in "Desktop Study of Cemented Paste Backfill, ITASCA Denver, Inc. February 24, 2020." In this report it is noted that no tests on the leaching characteristics of tailings have been performed, but that testing would be done when a cement had been selected. Even though the backfill is unlikely to turn acidic, the potential for neutral leaching of contaminants like arsenic need to be investigated.

The answers to several critical questions that should be addressed in Chapter 3 of the EIR are: (1) the grind size of the tailings used for backfill; (2) the type and amount of cement to be used; and, (3) the results of leach tests on the backfill.

This information should have been available for the EIR, and is another data gap in the EIR.

3.7 Project Components – Engineered Fill Transport

Even though this is nominally the section about the transport of the waste material, most of the technical information on the Engineered Fill is presented here.

Grp 7-180

The mine waste that is not backfilled into the mine will consist of 50% tailings (rougher tailings from flotation separation in the mill), and 50% waste rock from the mine. Approximately 4 million tons of waste would be placed at two sites near the mine during the first 11-years of mining. The number of samples utilized in the leach tests of this waste is not sufficient to properly characterize the contaminants

Page #6

that may be leached from the waste. Comparing the number of samples cited in the EIR to the sampling guidelines of the GARD Guide demonstrate the insufficiency of the existing tests.

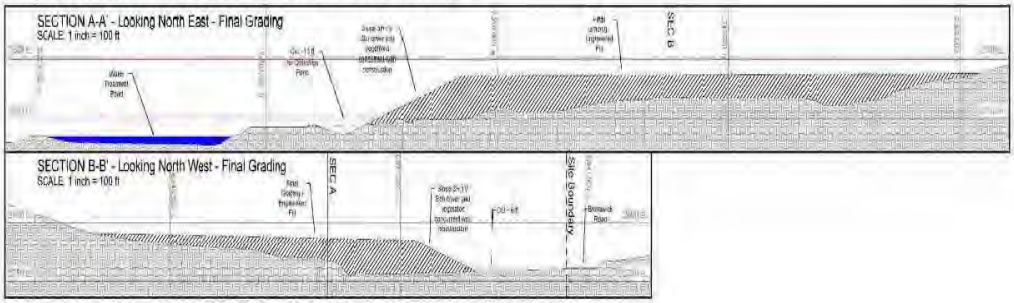
In addition to testing for the contaminants that may come from the waste, as the term "engineered fill" implies, this will be an engineered mine waste facility. The EIR, and its supporting documents, imply that the required engineering analysis will be done at some future time, but provide virtually no engineering analysis or design specifications for these waste facilities as a part of the EIR.

It is stated in the EIR that, "*Engineered fill would continue to be placed, graded, and compacted in a series of lifts …*" The only drawings of the cross sections of the waste facilities in the EIR are from Rise Grass Valley, not an engineering company, and seems to show the mine waste being deposited as end-dump layers that cannot be compacted to generate further stability, not horizontally-deposited layers that could be compacted.

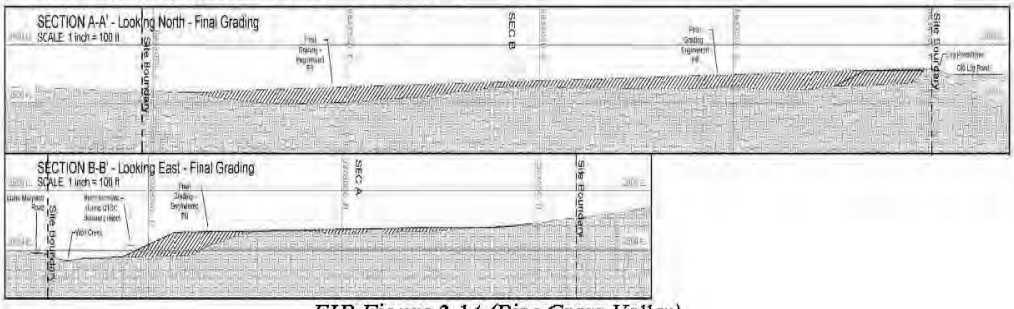
The new mine waste will be placed on top of portions of existing mine waste, which could provide a plane of weakness that could provide an additional failure plane for the significant weight of rock that will placed on top of it. The Brunswick facility is projected to be up to 90 feet in height, and the Centennial facility up to 70 feet high.

Grp 7-181

BRUNSWICK INDUSTRIAL SITE - SECTIONS



CENTENNIAL INDUSTRIAL SITE - SECTIONS



EIR Figure 3-14 (Rise Grass Valley)

Page #7

There is no technical report to provide the detail needed to evaluate the geotechnical viability and safety of these facilities. The potential for this waste to fail under static or seismic loading needs to be professionally evaluated by a qualified engineering contractor. It would be inappropriate to issue a permit for the construction of these waste facilities without proper engineering analyses. To illustrate what could happen, the picture in Photo 1 comes from a waste rock pile at a Nevada mine that failed due to inadequate engineering. While not catastrophic, such failures can cause significant environmental and economic damage.



Photo 1: Waste Rock Dump Failure at the Gold Quarry mine (2005)

The seismic reports discussed in the Geology section of the EIR are not up to date, and even if updated would not meet the requirements for a probabilistic seismic site analysis. Mine waste facilities must be designed to withstand much larger seismic events than required by typical seismic building codes because of the long expected life of the water facilities. According to information provided in the Brunswick and Centennial Industrial Site Geotechnical reports (EIR Appendices H.1 and H.4), a probabilistic and/or deterministic seismic assessment has not been done for the Idaho-Maryland site.

Grp 7-182

In the geotechnical report for the Centennial Industrial Site the mine waste to be used as engineered fill is described as; "*We understand that proposed foundation structures will be constructed on import fill material that will primarily consists of medium dense granular soil composed of silty or clayey sand/gravel, with possible rock fill at depths.*" The term "medium dense granular soil composed of silty or clayey sand/gravel" is not an adequate description of the tailings. Tailings, at a 75 um grind size, the most likely choice for grind size based on the flotation recovery testing done by McClelland Labs, are termed "silt" (see EIR Appendix H.4, Table 5.1-1, Particle Size Gradation, Historical Sand Tailings).

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Grp 7-183

With an equal ratio of tailings to waste rock in the engineered fill, not only is a careful analysis of the geotechnical properties of the tailings important, and currently lacking, but how these two fill sources are mixed is also critical, since the tailings and waste rock have very different geotechnical properties. These analyses are lacking in the EIR and its supporting technical reports.

Grp 7-184

In the EIR, it is also proposed that an alternative for placing the mine waste in the proposed facilities is selling the waste in the local marketplace as fill material. There are several issues that make this proposal unlikely. First, there is liability associated with mine waste. Even if the waste is purported to be contaminant-free, and this waste is associated with mining sulfide mineralization that can release metal contaminants, it is seldom possible to guarantee that all of the waste will be contaminant-free. According the laboratory analysis for the six waste rock samples analyzed for Acid-Base Accounting, the sulfide sulfur content of the waste rock varies from 0.04 - 1.78 % Sulfide Sulfur (EIR Appendix K.2, EMKO 2021, Table 4-8 Tailings & Barren Rock Samples - ABA Results). There is significant variability in the amount of sulfide sulfur, and significant amount of sulfide sulfur (1.78%), recorded in the very limited number of waste rock samples tested. If any of the waste sold as clean fill should cause a problem, the sellers of that material, and the company that produced that material, would likely be legally liable. Just the possibility of legal entanglement keeps virtually all mining companies from selling its waste rock or tailings, and is very likely to make it very difficult to find an independent distributer that is willing to assume this risk.

Grp 7-185

A second issue is one of logistics. The mine waste is produced at a constant rate – 1,000 tons per day, 365 days/year, for the life of the mine. Markets for fill material are typical episodic. For example, there is much more fill material placed during the summer than during the winter. In order to handle surges in the demand for fill material, temporary storage for a significant amount of material would be required by a vendor of this material. If the mining company is going to provide this service itself, then the storage facility should be evaluated as a part of the mine proposal. If the material is to be sold to an independent user, then the viability of that operation should be demonstrated with at least a contract that someone is willing to accept 1,000 tons/day of mine waste.

3.7 Project Components – Reclamation Plan

Most reclamation plans submitted as a part of a mine proposal are largely conceptual in nature, including the reclamation plan accompanying this EIR. However, for those tasks that can be clearly identified as being necessary for mine closure, these tasks should be described with enough detail that the engineering feasibility and cost can be analyzed.

In order to protect the public from incurring the costs associated with an unplanned mine closure, or bankruptcy, the funds should be available to public agencies that are sufficient for those agencies to take over and complete reclamation of the mine, and to perform any water treatment that may be required.

Grp 7-186

At the Idaho-Maryland Mine, it is known that mine openings must be closed, drains must be prepared to collect the seepage that has been coming from the mine, and that will presumably resume after mine closure, and that the mine waste facilities can be closed and safe configuration. However, there are no reclamation engineering specifications, work plans, or cost estimates made for the EIR.

The potential costs for post-closure water treatment, if required, should also be included. However, there is insufficient information on seepage water quality to conduct this analysis.

Financial Assurances for mine closure runs tens to hundreds of millions of dollars, so ignoring these costs puts taxpayers at significant risk of miscalculation at a later date. Because these sums are so substantial, the public should be informed about these costs, and how the costs were estimated.

This is a significant omission in the EIR.

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4.8.2 Existing Environmental Setting – Groundwater Occurrence in Mine Workings

Mine Flooding and Worker Safety

In the discussion of the Union Hill Mine, it is noted, "*The Union Hill Mine workings are within 95 feet to 180 feet of workings of the Brunswick Mine at three to four different levels. During the post WWII period, the combined Idaho-Maryland Mine workings were completely dewatered. In 1956, the water level at the Union Hill Mine was reported to be within 20 feet of the top of the shaft, suggesting that the complete dewatering of the adjacent mine workings resulted in no more than 10 to 20 feet of water level decline in the Union Hill Mine.*"

Grp 7-187

There are two important points to note in this discussion, (1) the Union Hill Mine is very close to the Idaho-Maryland at several levels; and, (2) there has been a possible weak hydraulic connection between the two mines, which is only logical.

The EIR notes that the Union Hills Mine will not be dewatered. The EIR suggests there is no significant hydraulic connection between the mines, but the discussion from the EIR quoted above suggests there could be some connection, and what is not known is whether this hydraulic connectivity could increase in the future.

There is no discussion in the EIR of the potential impacts for the Idaho-Maryland Mine if flooding were to occur during mining. From ITASCA Figure 2-3 (attached as the last page of this document), it can be seen there are extensive abandoned mine working above and adjacent to the Idaho-Maryland mine that will remain flooded after the Idaho-Maryland is dewatered.

If a conduit between these two mine were to open, for instance due to the widening of a fracture related to blasting vibrations or a seismic event, the flood of water into the Idaho-Maryland could be rapid and catastrophic for anyone working in the mine.

This issue must be thoroughly addressed before anyone is permitted to enter the dewatered mine.

4.8.4 Impacts and Mitigation Measures – Water Within Underground Mine Workings

Geochemistry of the tailings

Even though this is nominally the section about the underground mine water, most of the technical information on the geochemistry of the tailings samples is presented here.

Approximately 50% of the mine waste, also referred to as "engineered fill", disposed on the surface will be tailings. The geochemistry of these tailings is important because meteoric waters will infiltrate through the waste, and any leachate products will end up in groundwater, and potentially surface water.

Grp 7-188

Tailings produced in the milling process are generally homogeneous because the physical and chemical processing of the ore remains relatively constant, and the ore is typically blended to maintain a consistent ore grade to facilitate gold recovery. Because of this, fewer tailings samples than waste rock samples are required for leach testing, but those testing samples must be representative of the tailings that will be produced during mine operation.

While Appendix K.2 states that the tailings samples were generated from a "46 kg metallurgical sample". The ore sample used to create the four tailings samples contained 1.6% Sulfur (EIR 2021, p. 4.8-46). The four tailings samples had a sulfur content of 0.06 – 0.12% Sulfur (EIR 2021, p. 4.8-46), with Net Neutralization Potential greater than 100 for all samples (EIR Appendix K.2, EMKO 2021, Table 4-8 Tailings & Barren Rock Samples - ABA Results).

The drill hole intervals this material came from is not stated in the EIR, nor is the time when the metallurgical sample was generated. Again, if an NI 43-101 compliant report that reported a mineral

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resource and/or reserve were available, this basic information would have required and would have been available for the EIR.

In Appendix K.2, EMKO notes that the four samples are of different grind sizes. The size of the tailings particles could have an effect on the rate of leaching. Smaller grain size leads to more rapid leaching of contaminants. Based on the results of the metallurgical testing, a final grind size is generally selected before geochemical testing is done, but a final grind size has not been selected for this project. The different grind sizes of the tailings could have an unquantified effect on the leach testing of the tailings samples.

Grp 7-189

Because the size specification has geotechnical and geochemical implications for both the tailings disposed on the surface, and cemented backfill in the mine, the size specification needs to be disclosed in the EIR. The limited test results available from preliminary tailings tests are not sufficient to make long-term predictions for the geotechnical stability or water quality implications of the tailings.

The method selected for leach testing the tailings and waste rock used distilled water, which is the least aggressive of the leach testing methods. For mining waste, waste rock and tailings, short-term tests typically use a weak acid solution for leach testing in order to simulate the generation of some acid in the waste due to sulfide decomposition. Long-term leach testing, which runs for months rather than hours or days, typically uses distilled water, because natural sulfide decomposition and the accumulation of oxidation products has sufficient time to stabilize.

From Table 4-7 Tailings & Barren Rock Samples - Total Metals and DI-WET Results

Constituent	Test Type	Units	Tailings Samples				Rock Samples					
			F-1	F-2	F-3	F-4	MA-1	MA-2	MA-3	MAA-1	MS-1	S-1
METALS												
Aluminum	Total	mg/Kg	16100	16300	16300	16300	23000	24400	31100	421	22900	41300
	DI-WET	mg/L	0.17	0.18	0.26	0.28	0.94	1.08	0.6	0.49	0.99	0.32
Antimony	Total	mg/Kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.1	<0.2	0.6
	DI-WET	mg/L	0.0018	0.0015	0.0031	0.0020	0.0006	0.0041	0.0016	0.0104	0.0021	0.1050
Arsenic	Total	mg/Kg	1.7	1.4	2.000	1.2	0.2	6.1	0.5	34.8	0.7	36.8
	DI-WET	mg/L	0.0018	0.0013	0.0019	0.0014	<0.0002	0.0051	0.0014	0.0148	0.0005	0.1690
Copper	Total	mg/Kg	86	86	87	84	141	43	87	27	89	30
	DI-WET	mg/L	<0.01	0.01	0.02	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	Total	mg/Kg	35500	36000	35200	35200	45600	42100	54900	15500	33700	36800
	DI-WET	mg/L	<0.03	<0.03	<0.03	<0.03	0.05	0.08	0.20	<0.03	<0.03	0.33
Manganese	Total	mg/Kg	1000	1010	990	994	604	747	1230	311	696	176
	DI-WET	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
GENERAL CHEMISTRY PARAMETERS												
Nitrate	DI-WET	mg/L	0.06	0.08	0.28	0.24	<0.02	<0.02	0.05	<0.02	<0.02	<0.02
Sulphate	DI-WET	mg/L	8.40	6.30	8.50	8.70	3.3	1.4	6.60	1.9	1.1	2.8

Grp 7-190

In reviewing the leach test results from Appendix K.2, Table 4-7: Tailings & Barren Rock Samples - Total Metals and DI-WET Results, the following observations are noted:

- Aluminum levels in the leachate are high. Even though the measurement was probably done as Total aluminum, these levels suggest that aluminum leaching could be an issue, and that Dissolved aluminum should be monitored.

Grp 7-191

- There is antimony present, and the water quality standard for antimony is low. Waste rock sample S-1 shows a level of antimony that is well above the water quality standard. Even though there is only a relatively small amount of S-1 rock in the waste, antimony should be monitored.

Grp 7-192

- Arsenic is measured at about 20% of the water quality standard, and is known to be an issue with the existing mine waste. Arsenic could become an issue if localized acidic conditions, or longer exposure time, drive the oxidation reactions.

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Grp 7-193
- Copper being detected at levels that could exceed water quality standards, but the measurement level for the sampling was too high, so we don't know enough about what is going on with copper.

Grp 7-194
- Iron and Manganese are both know to be present in existing mine water and the mine waste at levels that exceed water quality standards, but they are not showing elevated levels in the test data. This strongly suggests that the oxidation taking place in the mine itself, and in the mine waste on the surface, is more aggressive than that being simulated in the leach tests using distilled water.

Grp 7-195
- Nitrate, a residual from blasting, will almost certainly be present at levels significantly higher than projected in these tests.

Grp 7-196
- Similarly, sulfate will be higher than projected once the waste has time to oxidize.

Grp 7-197
- An important constituent, sulfide-sulfur, is not reported on a per-sample basis

Grp 7-198
In the summary of the report (Appendix K.2), EMKO notes that Potential Contaminants of Concern include ammonia, arsenic, hexavalent chromium, iron, manganese, pH, total suspended solids, TDS, and cis-1,2-DCE. To this list, I recommend adding antimony, copper, and nitrate.

Grp 7-199
Leach tests for the paste backfill also need to be completed. It is not appropriate to grant a mining permit that allows the use of this backfill without evaluating the potential long-term effects on water quality.

6.3 Selection of Alternatives – Alternatives Considered in this EIR

The mining project as proposed in this EIR has a fundamental lack of information on the economic viability of the mine, and potential environmental impacts related to geochemistry and water quality.

Grp 7-200
The data submitted in support of this EIR is only sufficient to support an application for dewatering the mine, and for underground exploration drilling. This would provide not only the information that will be required to perform a preliminary economic analysis of the orebody, but would also supply the samples needed for geotechnical and geochemical testing, and for water quality modeling.

The EIR should analyze an Alternative that provides for dewatering and underground exploration. That is the only Alternative that the information provided in this EIR will support.

Thank you for the opportunity to comment on this Draft EIR.

Sincerely;

David M. Chambers, Ph.D., P.Geop.

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References:

EIR 2021. Idaho-Maryland Mine Project Draft Environmental Impact Report, Raney Planning & Management, December 2021

EMKO 2021. Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project Nevada County, California, EMKO Environmental, February 2021

GARD 2018. Global Acid Rock Drainage (GARD) Guide, published by the International Network for Acid Prevention, Chapter 4.0 Defining the Problem – Characterization, (http://www.gardguide.com/index.php/Chapter_4)

ICMM 2013. Responsible reporting of mineral assets, International Council on Mining & Metals, Committee for Mineral Reserves International Reporting Standards, April 2013

ITASCA 2020. Desktop Study of Cemented Paste Backfill, ITASCA Denver, Inc. February 24, 2020

OCS 2011. NI 43-101 Standards of Disclosure for Mineral Projects, Form 43-101F1 Technical Report and Related Consequential Amendments, Chapter 5, Rules and Policies, Ontario Securities Commission, 34 OSCB, June 24, 2011, https://www.osc.ca/en/securities-law/instruments-rules-policies/4/43-101

Rise Gold 2017. Technical Report on the Idaho-Maryland Project, Grass Valley California, USA, prepared for Rise Gold Corp, Amec Foster Wheeler Americas Limited, June 1, 2017

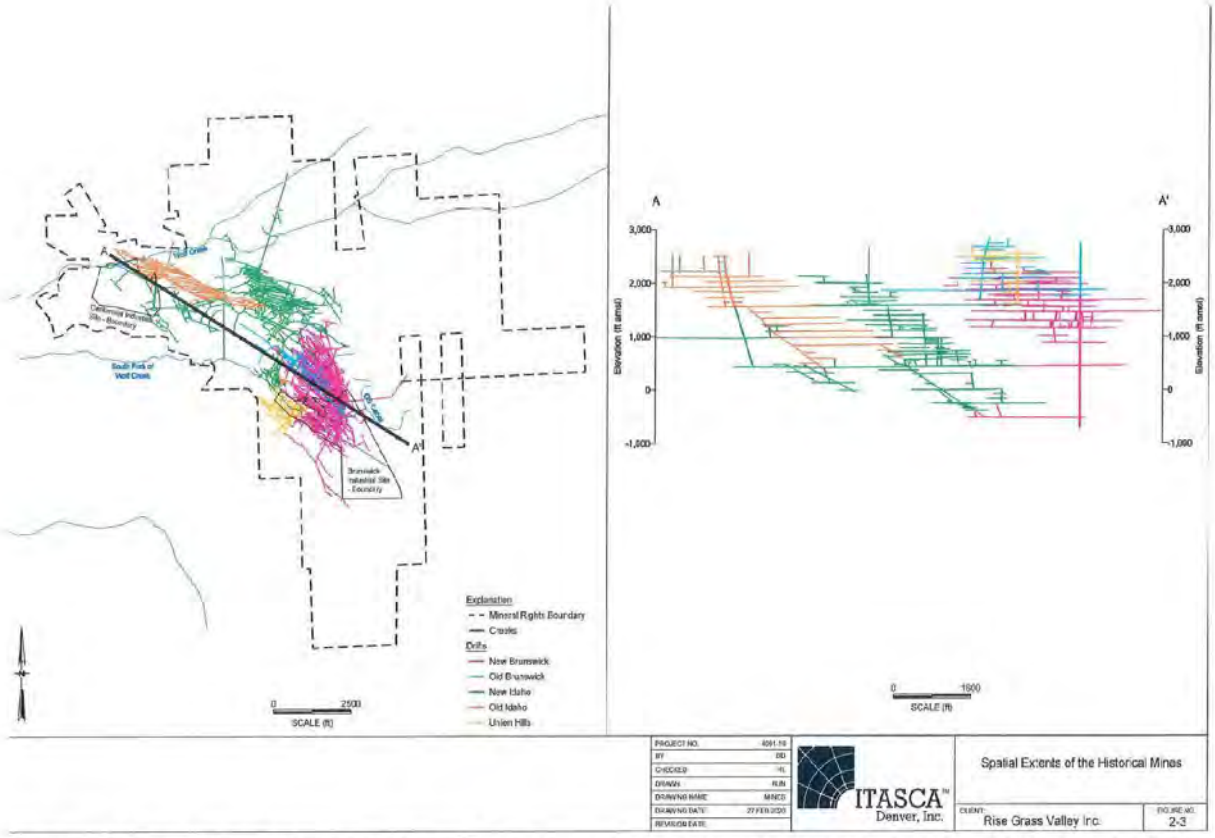


Figure 2-3, from Predictions of Groundwater Inflows to the Underground Mine Workings at the Idaho-Maryland Mine, ITASCA, November 2020

GROUP LETTER 7: RALPH SILBERSTEIN, COMMUNITY ENVIRONMENTAL ADVOCATES FOUNDATION

Response to Comment Grp 7-1
This comment is introductory in nature. The comment alleges that the project would cause long-lasting environmental impacts and that the EIR is inadequate. The commenter's specific comments are discussed in the following responses to comments.

Response to Comment Grp 7-2
Please see Master Response 4 relating to the Separate Centennial Project.

Response to Comment Grp 7-3
Please see Master Response 24 – Project Construction Schedule. As discussed in Master Response 24, the project assumes a compressed construction schedule where many activities overlap to provide the most conservative estimate of air quality, traffic, noise and other impacts. An increase in the duration of construction activities and/or the completion of activities sequentially would serve to reduce environmental impacts in many areas. As such, the approach taken by the EIR overestimates impacts as compared to a longer construction schedule with less overlapping activities.

Response to Comment Grp 7-4
Please see Master Response 24 – Project Construction Schedule, and Response to Comment Grp 7-3 above.

Response to Comment Grp 7-5
Please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets.

Response to Comment Grp 7-6
For responses to the commenter's referenced ASUR Plan Analysis, please see Responses to Comments Grp 7-103 through Grp 7-137.

The comment states that the DEIR does not include any evidence that asbestos levels will not exceed applicable thresholds set forth in the asbestos management plan. However, prior to underground gold mining, intensive planning efforts will be conducted as required under the ASUR plan and as required to meet state and federal regulations and achieve safety, environmental, and economic goals. Please see Section 6.0 of the ASUR Plan (Appendix E.2 of the EIR). Underground mine planning, as required in the ASUR plan, includes exploratory drilling, geologic mapping, material logging, and testing. These same processes also ensure future mining operations avoid and manage rock types that may contain naturally occurring asbestos to ensure that applicable thresholds are not exceeded. (Id.) In other words, the mandatory mine planning that is required by the DEIR in the ASUR Plan will provide information to the mine operator on asbestos content of rock prior to mining that area. That information can then be used to avoid areas, if any exist, with asbestos content that would make it infeasible to comply with the 0.01% asbestos content limit required by the ASUR Plan.

Additionally, the Health Risk Assessment is based on conservative assumptions, such that the analysis overestimates health impacts rather than underestimates those impacts. Please see Master Response 22 – Conservatism used for Asbestos Assumptions

Based on these conservative assumptions, the DEIR concludes that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP.

Response to Comment Grp 7-7

The commenter asserts that asbestos testing could take up to two weeks before results are known, which could result in impacts to workers prior to obtaining results, as a result of contact with stockpiles and mined material with higher asbestos content. The commenter also states that material will be stockpiled before testing resulting in undisclosed dust and asbestos impacts; however, the commenter's presumption is incorrect as the mined material will be stored in enclosed silos or bins, not in stockpiles. Testing of material will be done in advance by underground drilling rigs, such that the asbestos content of the material to be mined will already be known prior to mining. This is a standard component of modern underground mine planning, and was made an explicit requirement of the ASUR Plan, which will be required under a Condition of Approval. As such the mine operator will know the asbestos content in any rock that is intended to be mined, well before that rock is actually removed, and the workers should not be exposed to rock with unexpected high values of asbestos.

As discussed on page 4.3-61 of the EIR, the average asbestos content of the total mined material is of primary concern given that asbestos does not have established acute noncancer effects. The purpose of TEM testing in the ASUR Plan, including testing of aboveground rock in the silos, is not to control the fate of the rock and tailings after it reaches surface (that is the purpose of the PLM testing). Rather, the TEM testing, including testing of aboveground rock in the silos, is done to verify that mine planning is effectively minimizing the potential for public exposure to airborne asbestos from the project. Therefore, the two-week time to receive results from TEM testing of materials at surface allows the achievement of the goals of the ASUR Plan.

In addition to the testing procedures that will be implemented as part of the ASUR Plan, the protection of workers in underground mines from asbestos exposure is also governed by MSHA regulations as discussed on page 4.3-61 and 4.3-20 of the EIR. Accordingly, mine works have redundant layers of protection from asbestos exposure.

Finally, Mitigation Measure 4.3-2 of the EIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP.

Response to Comment Grp 7-8

Please see response to referenced Baseline comment in Response to Comment Grp 21-109. In addition, please see Master Response 9 – Historical Mine Waste at Centennial Site.

Response to Comment Grp 7-9

Please see Master Response 8 – Mine Waste Characterization. The commenter implies that the amount of testing performed on rock cores obtained from the project site is inadequate but does not explain why the number of samples analyzed is not sufficient for CEQA analysis other than a general assertion that more sampling could be done. Additional samples may be required to achieve "engineering level detail" on specific aspects of the rock types expected underground; however, the volume of samples provided is expected to be representative of the overall rock types, and further, engineering level detail is not required in an EIR. (Dry Creek Citizens Coalition v. County of Tulare (1999) 70 Cal.App.4th 20, 26.) Additionally, the DEIR imposes mitigation measures that require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Quality Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). The CVRWQCB requires additional waste characterization as part of approving WDRs and also requires ongoing water quality monitoring during the implementation of WDRs to ensure that no water quality impacts will occur. The commenter also asserts that the chain of custody processes are not sufficient, but does not identify any particular issue. Note that the applicant will be required to adhere to any chain of custody requirements applicable for submittal of a RoWD and obtaining WDRs from the CVRWQCB prior to operations.

Response to Comment Grp 7-10

Please see Response to Comment Grp 7-9 above and Master Response 8 – Mine Waste Characterization. The DEIR concluded that the project may have a potentially significant impact on water quality and has identified Mitigation Measures 4.8-1(d) and 4.8-1(e) to address these potential impacts. Additional core samples and additional leachate tests would not alter the significance of the impact identified in the DEIR, as it is already considered potentially significant, and would not alter the requirements for mitigation which require additional testing as part of the RoWD and WDR process.

Response to Comment Grp 7-11

Please see Response to Comment Grp 7-9 above and Master Response 8 – Mine Waste Characterization. The locations and descriptions of samples and other geological data are provided in Appendix K.2 of the DEIR. Exploration drill logs are not necessary for the analysis.

Response to Comment Grp 7-12

The commenter states that water samples from the existing mine drains should be considered to define water treatment criteria rather than water sampled from the New Brunswick shaft. However, once mine dewatering commences the flow of water through the mine workings would be altered from its current condition with water pumped up the New Brunswick shaft rather than flowing through the historic mine workings to the current mine drains. As such, the water from the mine drains is not likely representative of water that would be encountered during dewatering prior to treatment and discharge during mine dewatering. However, the elevated arsenic levels in the drain versus the New Brunswick shaft have been noted in the EIR (page 4.8-21) and the water treatment plant is designed to treat arsenic in mine water if present during mine dewatering. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 7-13

The commenter alleges that the water quality in the nearby Empire Mine is evidence that the project will create acid rock drainage, and that the commenter prefers a different method for

testing the rock found within the mine. However, the geology in the project area is different from that in the Empire mine due to carbonate minerals in the project host rock (see page 13 of Appendix K.2), which results in the lower potential for acid rock drainage; thus, the method used for testing rock is appropriate for this mine. Further, mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRWQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). The CVRWQCB will determine the appropriate method of rock testing for the purposes of developing WDRs. See Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 7-14

See Master Response 8 – Mine Waste Characterization. Based on the geology of the rock encountered in the core drilling at the project site, and testing of those samples, acid rock drainage is not expected. (DEIR p. 4.8-50.) Nonetheless, the EIR has concluded that the project may have a potentially significant impact on water quality and has identified Mitigation Measures 4.8-1(d) and 4.8-1(e) to address these potential impacts and reduce the impact to less than significant. The purpose of the Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board is to ensure the effluent from mine waste does not impact water quality. Further testing will be required as part of the RoWD and WDR process as required by Mitigation Measures 4.8-1(d) and 4.8-1(e) such that any impacts will be mitigated. WDRs for the project will require monitoring and reporting to ensure compliance.

Response to Comment Grp 7-15

The commenter asserts that impacts to water quality must be considered significant and unavoidable. However, testing of rock from the project site and required mitigation measures provide substantial evidence that water quality impacts will be reduced below a level of significance. See Master Response 8 – Mine Waste Characterization and Responses 19-9 to 19-14 above. Contrary to the commenter's assertion, page 4.8-50 of the DEIR does not discuss "an expedited General Order". It discusses the RoWD and WDR requirements for mine waste which are required under Mitigation Measures 4.8-1(d) and 4.8-1(e).

Based on the testing of rock material from the project site, the proposed project would likely produce mine waste with lower sulfide and metal content than those produced historically, and the historic mine waste has been determined to be Group C mining waste from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity. Please see Master Response 9 - Historical Mine Waste at Centennial Site.

As discussed on page 4.8-50, California Waste Extraction (WET) testing was performed on samples of mine materials and the results of these tests suggest the engineered fill (barren rock and sand tailings) will be a Group C mining waste. However, the determination of waste classification is conducted through the RoWD and WDR process required by Mitigation Measures 4.8-1(d) and 4.8-1(e). Extensive testing and sampling would be conducted for the RoWD and before approval of the WDR. See Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 7-16

Please see response to referenced Baseline comment. Please see Response to Comment Grp 21-124.

Response to Comment Grp 7-17

For responses to the commenter's referenced HRA Critique, please see Responses to Comments Grp 7-138 through Grp 7-154.

The dispersion model in the Health Risk Assessment used the most appropriate data for the HRA. Please see Master Response 17 - Meteorological Data Used in HRA.

Response to Comment Grp 7-18

For responses to the commenter's referenced Sampling Procedures, please see Responses to Comments Grp 7-155 through Grp 7-172.

Please see Master Response 21 – Conservatism of Silica Assumptions and Master Response 22 – Conservatism used for Asbestos Assumptions. The assumed crystalline silica content and modeling of respirable silica is conservative and overestimates the relevant exposure in any situation. Therefore, sampling of materials for crystalline silica content is not required.

Response to Comment Grp 7-19

The commenter states that the DEIR should include asbestos mitigation as well as mitigation for impacts associated with TACs, and silica. The DEIR analyzes impacts associated with asbestos, TACs and silica and includes mitigation measures to reduce impacts to less than significant. (See DEIR, Chapter 4.3.) Please see Master Response 22 – Conservatism used for Asbestos Assessment. Mitigation Measure 4.3-2 of the EIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP.

The assumed crystalline silica content and modeling of respirable silica is conservative and overestimates the relevant exposure in any situation. Please see Master Response 21 – Conservatism of Silica Assumptions.

The commenter also questions the 30-year exposure duration assumption included in the Health Risk Assessment (HRA) prepared for the project. Notably, the 30-year exposure assumption is based on the Office of Environmental Health Hazard Assessment's (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (2015) (OEHHA Guidelines), which states that:

> OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk to the maximally exposed individual resident (MEIR)… OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Based on data from the U.S. EPA, the 30-year residency is considered a high-end estimate of residency time. As standard practice, the duration of exposure is based on 30-year sensitive receptor residency rather than the life of the project. Further, additional conservatism is layered into OEHHA's recommendations that were incorporated into the HRA prepared for the project, including the assumption that exposure at all sensitive residential receptors would begin in the 3rd trimester of gestation and that the baby would be born and would grow through childhood and adulthood at the same home for the next 30 years. This scenario is unlikely to happen, yet it captures a conservative situation for health risk assessment purposes.

Response to Comment Grp 7-20

The commenter disagrees with the methods and conclusions of the groundwater model. The groundwater model used for the DEIR was calibrated on historic groundwater inflows into the mine, the current and historical water level in the Union Hill Mine, the current water level in the New Brunswick Shaft, ground measured water levels in domestic water wells in the area and base flow rates of Wolf Creek and South Fork Wolf Creek.

The commenter asserts that the water level measurements used to calibrate the groundwater model are insufficient. However, the groundwater model is calibrated to measured water levels in domestic wells and not just the water level in the Union Hill Mine. Itasca simulated pre-historical mining conditions (before any mining had taken place). Itasca calibrated the model against water levels measured in wells outside of the mine area. (Section 4.5). Using the simulated groundwater from the pre-historical mining condition, Itasca calibrated the model using the known inflow rates and underground mine workings from two periods of mining. The Idaho mine in 1918 and the entire connected Idaho-Maryland-Brunswick mine in 1956. The model was also calibrated against the known level of water in the Union Hill mine in 1956. (Section 4.6 pages 21-22). The drain nodes for the mine workings were turned off and mine voids were simulated with a zone of high K and the drains along Wolf Creek (which currently drain the mine) were added at their known elevation. Please see Memorandum Itasca Groundwater Model attached to the Final EIR as Appendix O. The model was then compared against water levels measured in wells in the mine area. The model was found to be correctly calibrated to the measured water levels. (Section 4.5 page 22).

As stated on page 4.8-41 of the DEIR, the county's independent expert West Yost found that the groundwater model was acceptably calibrated pursuant to industry practices. Accordingly, the DEIR contains concurrence of multiple experts on the suitability of the groundwater model and as such, constitutes substantial evidence of the significance conclusions.

Response to Comment Grp 7-21

Please see Response to Comment Grp 7-20 which describes the calibration of the groundwater model. The current flow rate of mine water from the drains was not used for the calibration of the groundwater model because the preferential pipe flow in the mine workings is not simulated in the model and the purpose of the model is to calibrate to "current" 2019 groundwater levels, based on measurements taken from 1994 through 2007, and the current water level in the mine which is controlled by the drain outlet elevations. Additionally, there could be additional preferential recharge from surface runoff through mine workings reporting to the drains. This extra recharge, not related to groundwater flow, is not quantifiable and could result in inaccurate calibration of the groundwater model

The outflow data of the drains from previous studies is similar to current measurements. Please see Response to Comment Grp 7-68.

The commenter suggests that more measurements of water level in the New Brunswick shaft are needed. However, historic and recent observation show that additional measurements are not necessary, as the water level in the Brunswick shaft does not vary significantly over time because groundwater in the Brunswick mine, as observed in the New Brunswick shaft, has a pathway to flow to the drains along Wolf Creek through tunnels in the B2300 and B3280 levels. (See page 4.8-44 and Figure 4.8-7 of the DEIR.)

Response to Comment Grp 7-22

The current flow rate of mine water from the drains was not used for the construction of the groundwater model and is not necessary for the groundwater modelling method used in the DEIR. Accordingly, the commenter's request for inflow/outflow data is not relevant to the groundwater model and the assessment of groundwater impacts. Please see Response to Comment Grp 19-20 and Grp 19-21.

Response to Comment Grp 7-23

The commenter states that data from private wells is old and is limited to a few years without usage data provided. Contrary to the commenter's assertion, water level data has been collected for many years over a period spanning two decades. As stated on page 26 of Appendix K.2, monitoring of water level in wells for up to 79 wells was undertaken from 1995-2001 and 2003-2007. As noted in the report, no long-term increasing or decreasing trends are observed in the data. Therefore, the age of the sample data does not limit the usefulness of this data. Consumptive water uses from individual wells are not considered because of the lack of consumptive-use data and the fact that consumptive groundwater well water use is small relative to regional groundwater flow. In addition, much of the water pumped for domestic use would be recharged to groundwater by septic tanks/leach fields and landscape irrigation. Please see Itasca Clarification Memo attached to the Final EIR as Appendix O.

However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies. A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining, is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess how drawdowns in the water-bearing zones. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(a) requires that a projected water-level impact assessment for individual domestic wells shall be performed once dewatering of the underground mine workings commences, based on responses of the measured groundwater levels of the project monitoring wells. The projected groundwater drawdown shall be estimated for each domestic well in the project area. This impact assessment shall be performed by tabulating the variation of the measured water levels from the project monitoring wells over the monitoring period and during the dewatering of the underground mine workings and mining operations. For each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings. If the water level impact assessment showed a potential impact to wells outside of the E. Bennett area, assuming the 100% safety factor, the applicant would be required to mitigate this impact before it occurs in accordance with Mitigation Measure 4.8-2(b). The mitigation would be for properties which may be potentially impacted as determined in the projected water-level impact assessment. As discussed in the Well Mitigation Plan, if a dewatering impact to an area outside of the E. Bennett

area were projected during operations, pre-emptive action would be taken as necessary to ensure immediate water supply and compensation. The 10% drawdown threshold of significance is extremely conservative and, in most cases, would not lower the water level below the casing of the domestic well. Therefore, well mitigation may not be required after inspection. If reduction of the water column was great enough to reduce the well's yield, a simple adjustment to the pumping system may only be required. For example, by pumping at a lessor rate over a longer duration and if necessary, installing or increasing the size of a pressure or holding tank. In the unlikely case where these measures were not sufficient, appropriate mitigation could be the deepening of a single well, drilling of a new well, or the provision of potable water service to a group of wells. The Well Mitigation Plan has been modified to clarify the actions that would be taken as described above.

Response to Comment Grp 7-24

The commenter asserts that the groundwater model is incorrect because it does not account for the low-permeability engineered fill to be placed on the Centennial and Brunswick sites. Decreasing the recharge rate over the small area where the engineered fill will be placed would be trivial in comparison to the sensitivity scenarios already performed for the analysis. Please see Response to Comment Grp 7-78.

Response to Comment Grp 7-25

The commenter asserts that the groundwater model fails to account for the impacts of the proposed new shaft and other existing mine features within a few hundred feet of the surface. However, the service shaft was included in the ground water model. Please see Response to Comment Grp 7-80. All mine workings, including those within a few hundred feet of the surface, were included in the groundwater model (see Figure 2-3 of Appendix K.3).

Response to Comment Grp 7-26

The commenter suggests that the faults within the project area were not considered in the groundwater model; however, faults were considered in the groundwater model as discussed in Appendix K.3 to the DEIR. Please see Response to Comment Grp 7-64 through Grp 7-94.

Response to Comment Grp 7-27

The commenter asserts that the DEIR should include monitoring and protections for dewatering due to the faults and irregularities in fractured bedrock. The DEIR includes a groundwater analysis that accounts for the faults and irregularities in the bedrock to determine the extent and severity of impacts to groundwater resources and wells. Further, groundwater monitoring is required for the project, along with other mitigation for dewatering impacts as set forth in Mitigation Measures 4.8-2(a) through 4.8-2(c). See Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring & Mitigation.

Response to Comment Grp 7-28

The commenter states that the DEIR acknowledges that more groundwater level data is needed to assess the potential impacts of the proposed project on groundwater levels. The commenter is not correct. The analysis of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation (see page 4.8-66 of the DEIR). A groundwater monitoring plan (GMP) will be implemented by the applicant to assess how the hydrogeologic system responds to mining, whether the measured results are within those modeled under the various scenarios discussed above. This response to dewatering cannot be measured until mine dewatering commences. The

commenter implies that the mitigation is not achievable, enforceable, and capable of reducing the project's impacts. However, the GMP along with the requirement that the applicant provide water to 30 parcels and provide water to any other parcels with wells that are impacted by the project ensures that the mitigation is enforceable by the County, achievable through water replacement requirements, and capable of reducing the project's impacts.

The commenter asserts that groundwater monitoring networks need to be installed prior to dewatering. This is already required at least 12 months in advance per Mitigation Measure 4.8-2(a). This water level monitoring will provide the baseline levels prior to dewatering. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented.

Please see Response to Comment Grp 21-110.

Response to Comment Grp 7-29

Please see Master Response 15 and Response to Comment Grp 21-119.

Response to Comment Grp 7-30

Please see Response to Comment Grp 21-118.

Response to Comment Grp 7-31

The commenter asserts that the DEIR failed to analyze impacts relating to South Fork Wolf Creek. However, DEIR Chapter 4.4 and Chapter 4.8 analyzed potential project impacts to biological resources and hydrology and water quality affecting South Fork Wolf Creek, respectively. As outlined in Section 4.4.1 (Introduction) and included as Appendix F, eleven different technical studies were prepared documenting existing environmental conditions and analyzing potential biological impacts from the proposed project. This includes a specific biological assessment technical report analyzing treated project water discharge to South Fork Wolf Creek (see Appendix F.10). These technical reports were prepared by biologists with over 30 years of local expertise in the species and environment within the project site. These technical studies were then peer reviewed by the County and their environmental consultants. The peer review of biology reports was conducted by a biological firm with similar local experience that resulted in several rounds of review and revision prior to the County's acceptance of these reports for use in the DEIR. As a result, numerous biological experts with local knowledge have analyzed, and reviewed the characterization and analysis included in these biological technical reports prior to their use and incorporation into the DEIR. In addition, as summarized in Chapter 4.8, and included in appendix H and K, ten different technical reports and peer reviews related to hydrology and water quality were prepared documenting or confirming ground and surface water conditions at the site and potential impacts from the proposed project. Specifically, two technical reports (Appendix K.1 and K.2) analyzed treated water discharge from the project and its potential impact to South Wolf Creek. These technical documents were also peer reviewed by the County and their environmental consultant.

Special status species that may utilize South Wolf Creek were analyzed in Impact 4.4-2 including Foothill Yellow-Legged Frog (FYLF) and Western Pond Turtle. Analysis of the Olive-sided flycatcher, Willow flycatcher, Yellow-breasted chat, and Yellow warbler has been added to Section 4.4 in the Final EIR. No significant impacts to these species was identified. As discussed in Impact

4.4-2, VES method surveys were conducted for FYLF along South Fork Wolf Creek within the project site and portions that flow through public property within Empire Mine State Historic Park. FYLF were not identified during these surveys. Impact 4.4-2 summarizes site and hydrologic conditions in South Wolf Creek within the project site and offsite demonstrating marginal habitat for FYLF. In addition, Impact 4.4-2 addressed potential treated mine water discharge impacts to FYLF and benthic macroinvertebrates and concluded this impact would not be adverse. As explained in Impact 4.4-2, and detailed in Chapter 4.8 and Appendix K.1, the proposed project will discharge a maximum of 5.6 cubic feet per second (cfs) of treated mine water to South Fork Wolf Creek. Base flow in South Fork Wolf Creek may range from 0.17 cfs in the summer to 6.5 cfs in the winter between storm events. Sediment pebble count analysis (see Appendix K.1) indicates that the flow rate at which sediment within the channel may become mobilized ranges from 20 cfs to 90 cfs. With the addition of the maximum proposed discharge of 5.6 cfs and increasing measured baseflows by a 50 percent safety factor, post-project baseflows during nonstorm periods would be expected to range between approximately 5.8 cfs and 15 cfs. These estimates are less than 23 cfs, the threshold for bedload sediment mobility and well below flows that commonly exhibit significant work on the channel (with minimal bed sediment becoming mobilized and minimal or no bank erosion, bed scour, or channel avulsion). The DEIR therefore concludes potential downstream impacts to the stream channel and associated riparian zone along both sides of South Fork Wolf Creek from the additional discharge of 5.6 cfs would be minimal on sensitive biological resources, such as foothill yellow-legged frog, and do not represent a potential significant impact to the stream channel or associated riparian zone within South Fork Wolf Creek. Additionally, peak flows on the South Fork Wolf Creek are expected to be lower than pre-project conditions due to the stormwater detention basin being constructed on the project site as part of the project.

Response to Comment Grp 7-32

The commenter asserts that the project allows continued mine dewatering up to a rate of 2,500 gpm but did not assess impacts of that higher rate for the operational length of the mine. However, the hydrology and geomorphic analysis specifically considered the discharge of treated mine water at 2,500 gpm throughout operations and not just for initial dewatering. As stated on page 71 of Appendix K.2, the maximum discharge rate permitted will be 2,500 gpm, which will allow flexibility for unexpected seasonal inflows, operational issues, and increased groundwater inflows from the expansion of the mine during operations.

Response to Comment Grp 7-33

The hydrology and geomorphic analysis considered the seasonality of stream flow as is discussed throughout these reports (see Appendix K.1 & K.2 of the DEIR). Seasonal changes in water temperature have been considered in the DEIR, please see Master Response 32 – Temperature of Mine Water Discharge. Seasonal differences in Specific Conductance and habitat for BMI have no relevance to the analysis of the DEIR as the project discharge will be required to meet fixed thresholds for conductance (see below) and metals content (see Chapter 4.8 of the DEIR) that do not vary based on season and the commenter does not provide any reason why it should be considered in the DEIR.

There are no US EPA water quality criteria for the protection of aquatic life for electrical conductivity, total dissolved solids, and sulphate (See page D-34 of Order R5-2022-0006). However, the secondary MCL for Electrical conductivity of 900 umhos/com is the recommended level for the protection of agricultural supply by the Central Valley Water Board (See page D-34 and D-35 of Order R5-2022-0006). As discussed on page 4-5 of Appendix K.4, electrical

conductivity (EC) is associated with Total Dissolved Solids (TDS). Appendix K.2 listed EC values for the New Brunswick Shaft water as approximately 385 µS/cm. The mobilized divalent ions from the carbonate and sulfide minerals would add to that specific conductance, although it would require significant contributions of Ca, Mg, and SO4 to surpass the NPDES CAG995002 screening level of 900 uS/cm. However, if treatment is deemed necessary for TDS mitigation at some point during mining operations, it is Linkan's opinion that mobile ion exchange water softeners should be deployed as opposed to building additional permanent infrastructure that may not be needed or only needed for relatively short periods. (See DEIR Appendix K.4.) These mobile units are readily available, and various vendors offer the service of replacing them as necessary as the resin becomes spent and in need of regeneration. Additionally, the resins used for these constituents are common throughout the industry for softening water and do not pose a health or environmental risk. Therefore, the proposed water treatment plant is capable of ensuring that conductance of discharged mine water meets water quality goals and the required Notice of Applicability would ensure compliance (Please see Master Response 35 – Discharge to South Fork Wolf Creek).

Response to Comment Grp 7-34

The impacts to surface vegetation from ground water drawdown was considered in the hydrology analysis. Please see Master Response 33 – Groundwater Dependent Vegetation.

Response to Comment Grp 7-35

Please see Responses to Comments Grp 32-39 and Grp 32-40 (Wolf Creek Community Alliance).

Response to Comment Grp 7-36

Please see Master Response 32 – Temperature of Mine Water Discharge and Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 7-37

Please see response to referenced Baseline comment – Response to Comment Grp 21-127 and Master Response 27.

Response to Comment Grp 7-38

The commenter assumes that if the Centennial site were not available for fill placement, that fill would be immediately hauled to offsite locations which would result in CO2 and NOx emissions exceeding thresholds of significance. However, if the Centennial site were not available, fill placement would take place initially at the Brunswick site rather than being immediately hauled to local and regional construction projects. As stated on page 1-3 of the DEIR, "If the separate DTSC cleanup project is not approved by DTSC and completed within the term of the Idaho-Maryland Mine Project use permit, engineered fill would be placed on the Brunswick site, but not the Centennial site, and the remainder would be hauled to local and regional markets." Moreover, the DEIR already analyzed impacts related to hauling of material to local and regional markets. (Page 1-3 of the DEIR.) GHG emission and NOx emissions would not exceed thresholds in this scenario. Please see response to referenced Baseline comment – Response to Comment Grp 21-122. The applicant has agreed to a condition of approval requiring that if the Centennial Site is not available to accept engineered fill when project operations commence, that the following conditions apply: (a) the engineered fill material will be first placed at the Brunswick Site until that site is at capacity prior to selling waste rock or tailings offsite; or, (b) waste rock or tailings materials sold offsite will be transported in electric trucks.

Response to Comment Grp 7-39

Please see Master Response 25 - Nevada County Energy Action Plan. As stated on page 4.3-89 of the EIR, The Energy Action Plan (EAP) is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(D). Therefore, no CEQA document can tier from the County EAP. Nevertheless, the compliance of the project with EAP strategies has been analyzed and the project was found to be consistent with the EAP. (DEIR p. 4.3-90.)

Please see Master Response 27 – Greenhouse Gas Thresholds.

Response to Comment Grp 7-40

A net zero threshold for GHG emissions is not required for the project. Please see response to referenced Salter comment – Response to Comment Grp 21-130.

Response to Comment Grp 7-41

Please see response to referenced Salter comment – Response to Comment Grp 21-131 through Grp 21-133.

Response to Comment Grp 7-42

Please see response to referenced Salter comment – Response to Comment Grp 21-143 and Grp 21-144.

Response to Comment Grp 7-43

Please see response to referenced CSP comment – Response to Comment Grp 7-188.

Response to Comment Grp 7-44

Please see response to referenced “mine exhaust moisture” comment – Response to Comment Grp 7-95.

Response to Comment Grp 7-45

Please see response to referenced “faulting hazard” comment – Response to Comment Grp 7-96. In addition, please see response to referenced CSP comment – Response to Comment Grp 7-183.

Response to Comment Grp 7-46

The DEIR includes a comprehensive analysis of the potential hazards due to seismic activity in Chapter 4.6, Geology, Soils, and Mineral Resources. Please see Responses to Comments Grp 7-96 and Grp 7-183.

Response to Comment Grp 7-47

Please see Master Response 4 relating to the Separate Centennial Project.

Response to Comment Grp 7-48

Please see Master Response 1. The commenter provides no specific reason why they believe health issues and noise impacts are vastly underestimated. These issues have been analyzed in the DEIR.

Response to Comment Grp 7-49

Mine waste and related run-off is managed by the Waste Discharge Requirements, per CVRWQB requirements. Please see Master Response 8 – Mine Waste Characterization. In addition, please see Response to Comment Grp 7-7 regarding stockpiling concerns.

Response to Comment Grp 7-50

Please see Responses to Comment 9-5 through 9-7. Compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (CCR Title 14 Section 15126.4).

Response to Comment Grp 7-51

Asbestos and silica release have been evaluated in the DEIR. Please see Master Responses 21 and 22.

Response to Comment Grp 7-52

The commenter provides no specific reason why they believe the groundwater model has significant errors, omissions, and is unreliable. These issues have been analyzed in the DEIR. Please see Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 7-53

The commenter provides no specific reason why they believe well monitoring is inadequate. These issues have been analyzed in the DEIR. Please see Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 7-54

The commenter claims the DEIR is inadequate under CEQA, but provides no specific reasons in this comment. The commenter's specific comments are addressed in the preceding responses. No further response is required.

Response to Comment Grp 7-55

This comment provides the file name of a referenced document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-56

This comment provides the file name of a referenced document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-57

This comment provides the file name of a referenced document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-58

This comment provides the file name of a referenced document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-59
This comment provides the file name of a referenced document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-60
This comment provides the file name of a referenced document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-61
This comment provides the name of a cited document. Responses to the comments in the referenced document are provided in Group Letter 21. No response is required.

Response to Comment Grp 7-62
This comment provides the name of a cited document. Responses to the comments in the referenced document are provided in Group Letter 21. No response is required.

Response to Comment Grp 7-63
This comment provides the name of a cited document. Responses to the comments in the referenced document are provided subsequently in this letter. No response is required.

Response to Comment Grp 7-64
The commenter asserts that there is "scant data" relating to the groundwater outflow values reported in the DEIR. However, measured outflows from the drains were completed by EMKO in April 2019 for the preparation of the Groundwater Hydrology and Water Quality Analysis (Appendix K.2 of the EIR) and are presented in Section 3.3.4 of that report. As discussed in the responses below, existing drain outflow is not relevant to the groundwater model, therefore additional flow measurements are not necessary.

Response to Comment Grp 7-65
There have not been seasonal flow measurements at the drains to determine the seasonal variation. The current flow rate from the drains was not used for the preparation or calibration of the Groundwater Model and therefore additional measurements are not relevant to the analysis.

Response to Comment Grp 7-66
The commenter asks what the current outflows are at the Wolf Creek drains under the current model. In the calibration of the model during recovery (1956 to 2019), mine voids were simulated with a zone of high K (5,000 ft/day) and high specific yield (effective porosity of 50%) for the area with drifts and raises. The drain nodes for the mine workings were turned off. The drains along Wolf Creek were simulated as drained with surveyed elevated from 2,497 ft to 2,502 ft amsl. The model recovered water level was then compared against measured groundwater levels in domestic wells in the mine area. Please see Itasca Memo attached to the EIR as Appendix K.3. The current flow rate from the drains was not used for the calibration of the Groundwater Model as explained in Response to Comment Grp 7-21. Therefore, a comparison to the measured flow rate is not relevant to the preparation of the model.

Response to Comment Grp 7-67
Please see Response to Comment Grp 7-68.

Response to Comment Grp 7-68

The commenter asserts that the groundwater outflow discussed in earlier reports for previously proposed mining projects at the site disclosed different outflow volumes from the mine into Wolf Creek. However, this discrepancy is not relevant to the impact analysis in the DEIR, as the Groundwater Model used in the DEIR did not model the current outflow at the drains. The report mentioned by the commenter is a report titled Idaho-Maryland Mine Technical Assessment prepared by James Askew Associates Inc in May 1991. The reference to 500 – 1200 gpm is the historic mine inflow during operations (when the mine was dewatered) as is made clear in Sections 2.3.1 and 7.2.4 of that report. There appears to have been a mistake in drafting of some sections of this report in 1991 where the historic groundwater inflow into the mine is incorrectly attributed to represent the flow rate from the mine drains. This was clearly a drafting error in the report as can be confirmed by reading the historic report. For example, on page 7 of Appendix C, James Askew Associates estimated 150-200 gpm would be lost from the mine discharges when the mine is dewatered (rather than 500 -1200 gpm). In Table 2 of Appendix C, the report provides the measured flow from the drains taken on March 21st 1991. This table provides the following flow data for the drains: IMD-1 = 50 gpm, ED-1 = 110 gpm, IMD-2 = 30 gpm, Drain = 20 gpm (across the street from Roto-Rooter building). These measurements of drain flow are similar to measurements of flow presented in Appendix K.2 of the DEIR.

Response to Comment Grp 7-69

The current flow rate from the drains was not used for the calibration of the Groundwater Model and therefore additional measurements would not be relevant to the analysis. Please see Response to Comment Grp 19-21, Grp 19-66 and Grp 19-68.

The goal of the predictions prepared in the groundwater model is to show the location and the magnitude of the estimated drawdowns relative to the baseline (2019 current condition) in order to determine the potential impact of the project to domestic water wells. A water budget/balance is not necessary to complete this goal and therefore not relevant to the analysis of the DEIR. The commenter does not explain how monthly water budgets would be used or how they would alter the conclusion in the DEIR.

Response to Comment Grp 7-70

The commenter asserts that the analysis of seasonal measurements of the level of water in the mine is flawed and does not support the transmissivity assumptions used in the groundwater model. However, the commenter's assumptions about the analysis are incorrect, as the observations presented in Section 3.3.3.3 of Appendix K.2 of the DEIR are not used as the basis for estimating transmissivity values used in the Groundwater Model. Section 3.3.3.3 of Appendix K.2 of the DEIR discusses the water level in the mine which remains relatively constant at the elevations of the mine drains and is not correlated with rainfall. As the commenter mentions, and is discussed in Section 3.5.2 of the report, the water level in the mine is controlled by the elevation of the mine drains. Domestic wells, discussed in Section 3.3.2.2, show a seasonal fluctuation between wet and dry parts of the year that remains constant over many years. If a domestic well, where ground water levels are higher than the level of water in the mine, were directly connected to the mine workings, the groundwater level in the wells would be controlled by the water level in the mine and a correlation would be observed. As described on page 81 of Appendix K.2, the lack of a seasonal pattern in the mine water levels indicates that the mine workings are not directly connected to the wells by through-going fractures but are instead interconnected by a complex pattern of many fractures present throughout the bedrock.

Response to Comment Grp 7-71

The commenter asserts that seepage of water could occur in the more permeable zone near the surface. The DEIR's analysis concurs that seepage into the mine shafts in the more permeable region near surface is occurring as discussed in Section 3.5.2 of DEIR Appendix K.2.

Response to Comment Grp 7-72

As discussed in Section 3.5.2 of the report, the water level in the mine is controlled by the elevation of the mine drains. There are multiple mine drains at different elevations as shown in Table 3-2, with the East Eureka Drain at ~2497 ft msl, the East Eureka shaft at 2501 ft msl, and the Eureka Drain at 2502 ft msl. If the water height in the Brunswick shaft increases the hydraulic head also increases and the additional drains at higher elevations start to discharge water and consequently the resistance to flow decreases. The physical layout of the shafts tunnels and drains therefore ensure that the water level in the shaft is maintained within a few feet throughout the years and seasons. Therefore, the water level in the mine is not expected to be consistently correlated with rainfall. The fluctuations in the water levels identified in this comment for certain years are less than four feet in any given year, in contrast the seasonal fluctuations observed in domestic wells in the project vicinity are typically several tens of feet per year (see discussion in Appendix K.2 of the DEIR and the Response to Comment Grp 7-77, below). The fluctuations observed in the water levels in the shaft are nominal, at best, compared to the magnitude of the fluctuations in the actual groundwater levels and the variations in the amount of rainfall from year to year. The commenter's requests for more granularity of data would serve no purpose because the relationship of the water elevation in the shaft to the drain elevations is well understood.

Response to Comment Grp 7-73

Revising the graph in Figure 3-7 to 68 inches would not show a direct correlation between precipitation and water level in the shaft. As can be seen in the graph the water levels in the shaft taken by EMKO in 2018 and 2019 only vary by 2 feet. The water level in the mine is controlled by the elevation of the mine drains and not consistently correlated with rainfall. Please see Response to Comment Grp 7-72.

Response to Comment Grp 7-74

As stated in Appendix K.2, the water level in shafts during this time period were measured by Idaho-Maryland Mining Corporation and presented in a report titled Domestic Well Monitoring Baseline Report (2007). The table of measurements from this report is reproduced below. In March 2005 the water elevation is reported at 2491.8 ft and in July 2005 reported at 2488.2 ft. A few months later in September 2005 the water elevation is reported at 2490.8 ft. Then in December 2005 at an elevation of 2488.4 ft. These differences in water elevation are within a few feet. The water elevation in winter (December 2005) is nearly identical to the water elevation in mid-summer (July 2005). A consistent seasonal correlation is not implied by this data. The water level in the mine is controlled by the elevation of the mine drains and not consistently correlated with rainfall. Please see Response to Comment Grp 19-72.

Table 4 – New Brunswick and Round Hole Shaft Water Elevations

New Brunswick	2750 Feet Collar Elevation			
Date	Depth to Water	Units	Water Elevation	Units
3/28/2003	268	Feet	2482	Feet
6/13/2003	258.38	Feet	2491.62	Feet
9/12/2003	258.88	Feet	2491.12	Feet
6/11/2004	168.68	Feet	2581.32	Feet
9/17/2004	258.46	Feet	2491.54	Feet
12/10/2004	257.87	Feet	2492.13	Feet
3/11/2005	258.23	Feet	2491.77	Feet
7/18/2005	261.84	Feet	2488.16	Feet
9/16/2005	259.18	Feet	2490.82	Feet
12/22/2005	261.64	Feet	2488.36	Feet
3/16/2006	260.76	Feet	2489.24	Feet
6/23/2006	263.47	Feet	2486.53	Feet
9/22/2006	262.59	Feet	2487.41	Feet
	Average Elevation		2496.3	

Round Hole	2665 Feet Collar Elevation			
Date	Depth to Water	Units	Water Elevation	Units
3/28/2003	175	Feet	2490	Feet
6/20/2003	174.47	Feet	2490.53	Feet
9/12/2003	175.46	Feet	2489.54	Feet
6/11/2004	174.68	Feet	2490.32	Feet
9/17/2004	174.07	Feet	2490.93	Feet
3/11/2005	174.29	Feet	2490.71	Feet
7/18/2005	175.16	Feet	2489.84	Feet
9/16/2005	175.17	Feet	2489.83	Feet
12/22/2005	178.81	Feet	2486.19	Feet
3/16/2006	175.51	Feet	2489.49	Feet
6/28/2006	176.44	Feet	2488.56	Feet
	Average Elevation		2489.6	

Response to Comment Grp 7-75

The observations presented in Section 3.3.3.3 of Appendix K.2 of the DEIR are not used as the basis for estimating transmissivity values used in the Groundwater Model. The commenter's statements are based on a misunderstanding of the groundwater model and the data used to create the model.

The volume of water inflow into the mine is correlated with seasonal rainfall as shown by the range of historic inflows into the mine during operations as disclosed in the DEIR. As discussed in Section 3.5.2 of the report, the water level in the mine is controlled by the elevation of the mine drains.

Response to Comment Grp 7-76

The current flow rate from the drains was not used for the calibration of the Groundwater Model and therefore additional measurements would not be relevant to the analysis, please see Response to Comment Grp 19-21. An estimate of transmissivity versus depth was prepared by EMKO based on well completion reports as discussed in Section 3.3.5 of the Appendix K.2 of the DEIR. The Ground Water Model prepared by Itasca (Appendix K.3 of the DEIR) assigned hydraulic conductivity (K) values derived from reference values and depth as discussed in Section 4.3.1 of that report. After calibration, the assigned K values were found to be within the ranges of EMKO's estimated K values and literature values.

Response to Comment Grp 7-77

As disclosed in Section 3.3.2.2 of Appendix K.2 of the DEIR, the water levels in the private domestic wells have seasonal fluctuations that may range from 10 feet to 50 feet between wet and dry times of the year but remain relatively consistent from year to year within each individual well. During the monitoring period, several years with below normal rainfall occurred (2001, 2004, and 2007), multiple years with above normal rainfall occurred (1995-1998 and 2006), and several years of near-normal rainfall occurred (1999, 2000, 2002, 2003, 2005). Despite large variations

in annual rainfall from year to year, the seasonal water level cycles in individual wells remain consistent over time and the overall water levels shown on the hydrographs for each well do not fluctuate based on wet or dry climatic cycles.

Based on the lack of changes in the individual well hydrographs between wet and dry climatic cycles, the amount of recharge, as described in Section 3.2, appears to be consistent from year to year and is not affected substantially by drought or wet cycles.

Itasca performed an analysis of the impacts of changing recharge on predicted inflows to the mine and the resulting impacts to drawdowns in shallow groundwater. Changes in recharge would address changes in precipitation. These sensitivity scenarios (Scenarios 4 and 5) are discussed in Section 5.4 of Appendix K.3 of the DEIR. The results are that increasing or decreasing recharge by 50% only changes the predicted inflows to the mine by +/- 3% compared to the base case. The small changes in predicted inflows are due to the low Ks of the deeper geologic units where the mining will occur. Higher recharge reduces the area of drawdown. If the recharge rate in the model domain is decreased by 50%, the extent of the 5-ft drawdown isopleth is larger than in the Base-Case Scenario, as decreased recharge impacts the shallow water-bearing zones more than the deep zone. The 5-ft drawdown isopleth is generally still within the mineral-rights boundary. As shown on Figure 5-9 of Appendix K.3, the simulated 5-foot drawdown contour for Scenario 5 is very similar to the other sensitivity scenarios except for an expansion of the 5-ft drawdown to the south-east towards the greenhorn area by approximately 1500 feet. As further discussed on page 8 of Appendix K.3 of the DEIR, the consistent annual recharge may be due to the limitations of recharge in fractured bedrock, where the annual rainfall amount may be greater than the capacity of the fractures to accept additional flow. In this situation, increases or decreases in the annual rainfall due to climatic cycles do not have appreciable effects on the amount of water that can be recharged because the capacity of the fractures to transmit water in the subsurface is near its maximum. Thus, there may not be a substantial variation in recharge to the water-bearing geologic materials in the project area. Nevertheless, the sensitivity of the model to changes in recharge has been evaluated. The future effects of climate change on groundwater recharge are unknown and CEQA does not require the analysis of speculative impacts. Please see Master Response 16 - Drought and Climate Change. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As the impact of climate change on recharge is speculative, this impact need not be analyzed in an EIR. However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies. An increase in drawdown caused by the project due to reduced groundwater recharge would be detected in the required well monitoring and well mitigation plans. A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). Ongoing groundwater monitoring would be required, and groundwater-level information shall be obtained from the project groundwater monitoring wells and collected on a quarterly basis and submitted in report form to the Nevada County. Mitigation Measure 4.8-2(b) requires, if based on the GMP, it is determined that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the Project Applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted, and if necessary, providing an immediate water supply until the source of the problem is determined and rectified.

Consumptive water uses from individual wells are not considered because of the lack of consumptive-use data and the fact that consumptive use is small relative to regional groundwater fluxes. In addition, much of the water pumped for domestic use would be recharged to groundwater by septic tanks/leach fields and landscape irrigation. Please see Itasca Clarification Memo attached to the Final EIR as Appendix O.

Response to Comment Grp 7-78

The commenter asserts that the DEIR fails to account for potential decrease in groundwater recharge due to the project development. As discussed in the previous response, Sensitivity Scenario 5 decreased recharge by 50% over the entire model area. Decreasing the recharge rate over the small area where the engineered fill will be placed would be trivial in comparison to the sensitivity scenarios already performed for the analysis. However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies. An increase in drawdown caused by the project due to reduced groundwater recharge would be detected in the required well monitoring and well mitigation plans. Please see Response to Comment Grp 7-77.

Response to Comment Grp 7-79

The commenter asserts that the groundwater model's conclusions are flawed because the assumptions regarding surface area of the underground mine works are not accurate. However, the surface areas of mine workings or drift dimensions were not used to estimate groundwater transmissivity and therefore do not affect the assumptions of transmissivity and the overall hydrological model whatsoever.

As discussed in Section 4.4 of Appendix K.3 of the DEIR, the historical mine workings were simulated using 9,344 drain nodes, and the future mining operation was simulated with 3,888 additional drain nodes.

The reference to typical drift dimensions of 7.5ft x 8.5 ft on page 37 of Appendix K.2 of the DEIR is attributed to Amec Foster Wheeler Americas Limited. (2017). Technical Report on the Idaho-Maryland Project, Grass Valley, California, USA. Vancouver, BC. as indicated in the report.

Response to Comment Grp 7-80

The commenter asserts that the proposed new service shaft was not included in the groundwater analysis and no cone of depression is included with regard to the new shaft. However, the service shaft was included in the ground water model, and a small cone of depression is clearly shown at the proposed service shaft location on Sheet 12 of DEIR Appendix K.2 (located near the center of the Brunswick Industrial Site).

The proposed service shaft is located approximately 440 ft east of the South Fork Wolf Creek as shown in Figure 3-8 of the DEIR. The service shaft and the excavation to construct it will not be within 100 feet of the creek.

The excavation to install the service shaft is described on page 3-22 of the DEIR. The overburden (i.e., soil and weak rock) would be excavated from the surface and a concrete collar installed from the surface profile to the bedrock. The depth to bedrock is approximately 60 feet. The overburden material would be excavated to allow the shaft and concrete collar to be constructed, and then the overburden would be placed and compacted around the concrete collar to the original ground surface elevation. Any groundwater that infiltrated into the excavation during construction would

be discharged to land (and recharged into the ground) under the requirements of the Construction Stormwater Pollution Prevention Plan (C-SWPPP) required by Mitigation Measure 4.8-1(b) of the DEIR. The excavation would not lead to more groundwater drawdown, or impact near-surface groundwater, because it would be backfilled after construction.

As discussed on page 3.31 of the DEIR, a buried 48-inch culvert crosses the Brunswick Industrial Site. The culvert transports off-site surface drainage from Brunswick Road and a portion of the watershed to the east and south of the Brunswick Industrial Site. South Fork Wolf Creek originates from the outlet of this 48-inch culvert. The primary source that feeds this section of the creek is therefore not associated with groundwater nearby the service shaft area.

Response to Comment Grp 7-81

The commenter asserts that the near-surface features were not considered in the groundwater model for the DEIR; however, the historic workings of the Idaho-Maryland mine and Union Hill mine were included in the Groundwater Model as shown in Figures 1-1 and 2-3 of Appendix K.3 of the DEIR.

The paragraph the commenter refers to on page 5 of Appendix H.6 clearly refers to the Idaho Shaft. The Idaho Shaft is one of the major shafts of the historic mine and is included in the Groundwater Model.

Itasca Denver considered the location of the Empire mine workings as shown in Figure 2-2 of Appendix K.3 of the DEIR. Please see Itasca Memo attached to the Final EIR as Appendix O.

Response to Comment Grp 7-82

The commenter states that the groundwater model should assume that all areas within the mineral rights zone would be mined. However, its speculative and unreasonable to assume that economic gold mineralization exists everywhere within the mineral rights at 500 feet below surface. The mining depths analyzed in the groundwater model was based on the applicant's intended mining plan which is focused on the areas where gold mineralization was actually encountered, at depths deeper than 1,000 feet below the surface.

Itasca analyzed the impacts of new underground mining excavations based upon information provided by the applicant as shown on Figures 5-1 of Appendix K.3 and Sheet 15 of Appendix K.2. As shown in these figures, assumed mining areas are based on the projected down-dip extensions to mineralized veins historically mined. Sensitivity Scenario 6 considered the significant expansion of mining in areas with potential for mineralization as shown in Figure 5.10 of Appendix K.3. As shown in Figure 5-12 the major mining expansion studies in Scenario 6 did not result in a significant expansion in the simulated 5-foot drawdown contour versus the base case.

As stated on page 31 of Appendix K.3, it is expected that the actual mining areas will change from the modeled mining areas due to vein geometry and discoveries, which will only be known after extensive underground exploration is completed in the future. Itasca recommends that the groundwater flow model be updated periodically after dewatering commences. Updated modeling would incorporate changes to the long-term mining plan, data from monitoring wells, and measured pumping rates.

However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies. A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining, is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess how drawdowns in the water-bearing zones. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(a) requires that a projected water-level impact assessment for individual domestic wells shall be performed once dewatering of the underground mine workings commences, based on responses of the measured groundwater levels of the project monitoring wells. The projected groundwater drawdown shall be estimated for each domestic well in the project area. This impact assessment shall be performed by tabulating the variation of the measured water levels from the project monitoring wells over the monitoring period and during the dewatering of the underground mine workings and mining operations. For each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings. If the water level impact assessment showed a potential impact to wells outside of the E. Bennett area, assuming the 100% safety factor, the applicant would be required to mitigate this impact before it occurs in accordance with Mitigation Measure 4.8-2(b). The mitigation would be for properties which may be potentially impacted as determined in the projected water-level impact assessment. As discussed in the Well Mitigation Plan, if a dewatering impact to an area outside of the E. Bennett area were projected during operations, pre-emptive action would be taken as necessary to ensure immediate water supply and compensation. The 10% drawdown threshold of significance is extremely conservative and, in most cases, would not lower the water level below the casing of the domestic well. Therefore, well mitigation may not be required after inspection. If reduction of the water column was great enough to reduce the well's yield, a simple adjustment to the pumping system may only be required. For example, by pumping at a lessor rate over a longer duration and if necessary, installing or increasing the size of a pressure or holding tank. In the unlikely case where these measures were not sufficient, appropriate mitigation could be the deepening of a single well, drilling of a new well, or the provision of potable water service to a group of wells. The Well Mitigation Plan has been modified to clarify the actions that would be taken as described above.

Response to Comment Grp 7-83

The commenter asserts that the groundwater model should be run for an 80-year period rather than 65 years. The groundwater model was based on the expected mining plan during year one to year 25, and then Sensitivity Scenario 6 considered the significant expansion of mining in areas with potential for mineralization as shown in Figure 5.10 of Appendix K.3 of the DEIR for an additional 40 years of mining. As shown in Figure 5-12, and discussed on page 29 of the report, the 5-ft drawdown contour extent of Scenario 6 at the end of potential additional mining (to Year 65) relative to the 2019 water level expands less than 500 ft from that of the Base-Case Scenario.

The drawdown contour of the Base-Case Scenario is at the end of the original planned future mining (Year 25) relative to the 2019 water level. The comparison of drawdown contours between Scenario 6 and the Base-Case Scenario suggests that the added potential mining (beyond the 65 years modeled) will not lead to large incremental drawdowns as the mining progresses because the mining activities occur in deep, low-K rocks.

As stated in the previous response the groundwater flow model would be updated periodically after dewatering commences and additional groundwater level data is collected to evaluate, dewatering impacts. New groundwater level data and updated modeling would incorporate changes to the long-term mining plan, data from monitoring wells, and measured pumping rates.

Information on the code MINEDW including a list of projects in which MINEDW was used for groundwater modeling is provided in the appendices of Appendix K.3 of the DEIR.

Response to Comment Grp 7-84

As stated in Section 4.0 of Appendix K.3 of the DEIR, the groundwater flow model that was constructed for this investigation utilizes the numerical code MINEDW, which was developed by Itasca (2012) to solve 3-D groundwater flow problems with an unconfined (or phreatic) surface using the finite-element method. MINEDW is a commercial software that was thoroughly reviewed by Sandia National Laboratories (Corbet et al. 1998). MINEDW has been used successfully at more than 100 mine sites located throughout the world and in diverse hydrogeologic and climatic conditions. The code has been in use for approximately 30 years, and its predictions have been validated by field data collected over many years.

Response to Comment Grp 7-85

The predicted inflow and water-level drawdown over time is provided in the report (Appendix K.3 of the DEIR).

Response to Comment Grp 7-86

Initial conditions and data inputs have already been provided throughout the report in DEIR Appendix K.3.

Response to Comment Grp 7-87

All assumptions and data used for the preparation in the simulation have been provided in DEIR Appendix K.3.

Response to Comment Grp 7-88

The commenter questions the groundwater model's assumptions regarding transmissivity and anisotropy ratios and consideration of faulting. As stated on page 15 of Appendix K.3 of the DEIR, the assignment of the anisotropy ratio of 10 was based on model calibration. As stated on page 15 of Appendix K.3, based on the model calibration, all of the geologic units were assigned an anisotropy ratio (i.e., a Kx/Kz value) of 10. The description of the model calibration is provided in Sections 4-5 and 4-6 of the report.

Faults in the mine area, 6-3 fault and Morehouse fault were modeled and included in the analysis as discussed in Appendix K.3. The Idaho fault was not modelled but is located at the lithological boundary between the Brunswick Porphyrite Block and the serpentinite unit as discussed on page 4 of the report.

As shown in Table 4-2 of the report the 6-3 and Morehouse faults are assigned hydraulic conductivity (k) significantly lower than (less permeable than) the surrounding strata in the weathered to middle zones for the base case. Therefore, the requested analysis of the commenter has already been completed. As discussed in Section 5.4 of the report, sensitivity Scenario 2 increases the K value of these faults by one order of magnitude and Scenario 3 excludes the faults from the model. The most sensitive scenario is used to estimate impacts to wells as discussed on page 80 of Appendix K.2.

Response to Comment Grp 7-89

As discussed in the previous response, the requested analysis has already been performed as the base case.

Response to Comment Grp 7-90

As stated on page 15 of Appendix K.3 of the DEIR the assignment of the anisotropy ratio of 10 was based on model calibration (see Response to Comment Grp 7-88). Therefore, modelling with different anisotropic ratios would not be appropriate.

Response to Comment Grp 7-91

The three main faults, Morehouse fault, Idaho fault, and 6-3 fault discussed in the Amec Foster Wheeler Americas Limited (2017) Technical Report on the Idaho-Maryland Project have been considered in the model as discussed in Response to Comment Grp 7-88.

Figures 7.8 and 7.9 of that report show additional lessor faults which are part of the Idaho Fault Zone as discussed in Section 7.3.1 of that report. Therefore, these faults have already been considered as part of the Idaho fault.

Figure 7-10 of that report shows several minor faults (22, 20, 11, 20C) which are coincident with veins of the Brunswick veins which are already mined and are shown not to extend towards the surface in the figure. As discussed on page 13 of Appendix K.3 of the DEIR, the minimum horizontal length of an element is about 20 to 25 ft. Therefore, the modeling of these minor faults would serve no purpose because most of this area is already modelled as mining voids. Please see Itasca Clarification Memo attached to the Final EIR as Appendix O.

Response to Comment Grp 7-92

Scenario 3 excludes the faults from the model as discussed in Response to Comment Grp 7-88. Therefore, the removal of all of the “impermeable fault wall” has already been considered in the analysis.

Response to Comment Grp 7-93

Groundwater levels are discussed in Section of 3.3.2.2 of Appendix K.2 of the DEIR. There are no references to measurable drop offs in groundwater surface topography.

Response to Comment Grp 7-94

Please see Response to Comment Grp 7-64 through Grp 7-94.

Response to Comment Grp 7-95

The commenter expresses concern regarding mine exhaust moisture affecting air traffic at the nearby Nevada County Airport. The Nevada County Airport Land Use Compatibility Plan (ALCP) provides information on policies for compatibility planning in the vicinity of the Nevada County

airport. The northern portion of the Brunswick site and New Brunswick shaft is in Zone D – Traffic Pattern Zone of the Nevada County Airport (See Map 2A of ALCP). The Federal Aviation Regulations (FAR) Part 77 Surfaces at the location of the shaft is at an elevation of 3,307 feet or higher (See Map 2B of ALCP). Objects which exceed the FAR 77 height limits constitute airspace obstructions. The top of the proposed New Brunswick shaft headframe is at an elevation of approximately 2,921 ft above mean sea level (MSL), which equates to at least 386 feet below the FAR surface.

At 200,000 cubic feet per minute (CFM), ventilation exhaust velocity at the exit of the headframe opening (approximately 14 feet by 30 feet) would be approximately 476 feet per minute (5.4 miles per hour [mph]). The velocity would quickly diminish but even at maximum velocity is less than the average wind speed at the Nevada County Airport (approximately 6 mph).

The ventilation system for the mine downcasts fresh air into the mine at the Service shaft. As the air descends, it is compressed, and this auto compression increases the air temperature. As the air travels through the mine, it gains additional heat from the natural temperature of the rock. The moisture carrying capacity of air increases with temperature and water used in the mine is absorbed by the air as it travels through the mine workings. When mine air is exhausted back to the surface at the Brunswick shaft, the auto-compression of the air reverses and the air expands and cools. The moisture carrying capacity of the air decreases and excess water released (water vapor and precipitation) as it upcasts through the shaft. The result is that exhausted air is at or near saturation point when it reaches the surface. The natural rock temperature influences the air temperature and therefore the exhausting air temperature would be fairly constant through the seasons. If the ambient air temperature is low, the mixing of the air could result in water vapor as the mine air is further cooled. This water vapor would be quickly dispersed.

The mixing of air at two different state points results in air at an intermediate state point. The new state point is a function of the flow rates of the original masses of air. Considering a column of air from the top of the headframe to the FAR (386 feet above top of headframe) at the average wind speed of 6 miles per hour (528 feet per minute), the 200,000 CFM mine exhaust would be mixed with 4,484,000 CFM of ambient air and only comprise 4.3% of the mixed air. On a calm day (1.1 mph or 0.5 m/s windspeed), the mine air would only compose 19% of the mixed air. The actual mixing would be much greater than this simple example as the column of air is dispersed and exposed to increasing mass flow of ambient air.

Due to the relatively low velocity of airflow and large amount of mixing expected between the headframe and the airport, there is no potential impact to aircraft in the traffic pattern zone of the Nevada County Airport due to the project. In certain conditions (i.e., calm and very cold days), water vapor could be visible immediately above the headframe. Complex modeling and viewpoint renderings of water vapor would not change the conclusion of the DEIR and therefore is not required for the project.

https://wind.willyweather.com/ca/nevada-county/grass-valley.html

https://www.nctc.ca.gov/documents/NCALUC/NCALUCP%20Final%209-21-11%20-%20Chapter%202%20-%20Policies.pdf

Response to Comment Grp 7-96

The commenter asserts that the DEIR should have evaluated the project's potential to activate local faults and induce seismic activity due to the removal of rock and placement of fill. However, the magnitude of the mine rock excavation and placement is far smaller than the magnitude of the mass of bedrock underlying the site. The magnitude of the energy released during mining excavations by rock removal and rock placement is much smaller than the magnitude of energy activation required to trigger the release of a local pre-Holocene fault. No analysis was performed or is necessary, as there is no potential for inducement of seismic activity on these faults from the proposed mining activity. Please see the NV5 Memo attached as Appendix P to the Final EIR.

Response to Comment Grp 7-97

Please see Response to Comment Grp 7-96.

Response to Comment Grp 7-98

Please see Response to Comment Grp 7-96.

Response to Comment Grp 7-99

Extensive geotechnical analysis was performed for the project as evidenced by the analysis in Chapter 4.6, Geology, Soils, and Mineral Resources, of the DEIR. Please also see Response to Comment Grp 7-96.

Response to Comment Grp 7-100

Please see Response to Comment Grp 7-96. No impact to integrity of near surface historical and proposed mine works would occur from the placement of engineered fill on surface. The magnitude of the mine rock placement is far smaller than the magnitude of the mass of bedrock underlying the site where these tunnels are located.

Response to Comment Grp 7-101

The location of proposed buildings within the area of the 6-3 fault shown on the drawing provided by the commenter has already been extensively analyzed in the DEIR. Please see Section 4.6 and Appendix H.2 of the DEIR.

Response to Comment Grp 7-102

The magnitude of the energy released during mining excavations by rock removal and rock placement is much smaller than the magnitude of energy activation required to trigger the release of a local pre-Holocene fault. Please see Response to Comment Grp 7-96. Given that the larger faults do not present geotechnical concerns, lesser faults in the mine area also do not present concerns of significance. Seismicity and faulting have been thoroughly analyzed in the DEIR. Please see Chapter 4.6 of the DEIR.

Response to Comment Grp 7-103

The commenter notes that a sampling plan for asbestos under the relevant Asbestos ATCMs has not yet be approved by the NSAQMD. However, the sampling plan does not need to be approved until rock production commences. The Asbestos ATCM for Construction, Grading, Quarrying and Surface Mine Operations and Asbestos ATCM for Surfacing is applicable to the project because a portion of the area to be disturbed is located in a geographic ultramafic rock unit. A Geological Evaluation would be required if an exemption from the ATCM's was requested. Such an exemption is not being requested.

In accordance with the ATCM for Surfacing, and the required use of ARB 435 Test Method, prior to conducting any sampling, the sampling plan shall be submitted to the Northern Sierra Air Quality Management District (NSAQMD) for approval. This is not required until the mine produces rock from the underground mine.

Response to Comment Grp 7-104

The requirements of ARB Method 435 in relation to the ATCM for Surfacing is discussed in the ASUR Plan (Appendix E.2 of the DEIR). The California Air Resources Board announced on May 18, 2017 the release of the Implementation Guidance Document for Test Method 435 Field Sampling and Laboratory Practices. This guidance document is intended to be used in conjunction with the regulation, Test Method 435, to assist laboratories, consultants, local air pollution control districts, and other asbestos stakeholders in the application and performance of M435. This non-regulatory guidance document consists of clarifications and recommendations. Notably, the guidance document contains recommendations, not requirements of ARB Method 435.

Response to Comment Grp 7-105

The ASUR Plan was authored by the applicant based on applicable regulations and sound geologic principles. The ASUR Plan is a management plan and discusses how rock will be managed (including sampling and testing) in the future during operations; however, the ASUR Plan is not a state regulatory requirement and therefore is not subject to certain licensing requirements. As such, the current licensing of the applicant's management, directors, and consultants is not relevant. However, it should also be noted that the California Air Resources Board's ATCMs that pertain to naturally occurring asbestos are the overarching regulations with which the project is required to comply, and the ASUR Plan was developed to be consistent with the ATCMs; however, the ASUR Plan does not supersede requirements contained within the ATCMs. As such, any licensing requirements in state law relating to implementation of the ATCMs will still apply to the project.

Response to Comment Grp 7-106

Asbestos by Polarized Light Microscopy (PLM) cannot be directly compared to Transmission Electron Microscopy (TEM) or Phase Contrast Microscopy (PCM) results. The OEHHA Guidelines provide a conversion of TEM structures to PCM equivalent fibers and from PCM fibers to PCM weight percent.

Response to Comment Grp 7-107

The commenter provides a description of PCM asbestos testing methods, advantages and disadvantages. As stated on page 18 of the ASUR plan, underground mining operations are obligated to comply with MSHA (Mine Safety and Health Administration) Federal Regulations. Potential asbestos fiber concentrations shall be determined by phase contrast microscopy (PCM) for compliance with MSHA regulations for worker exposure to asbestos.

As stated on page 7 of the ASUR plan, TEM is the method recommended by OEHHA. However, TEM measurements cannot be directly related to the cancer potency factors because the studies upon which OEHHA's risk assessment was based used PCM analysis. Thus, the TEM measurements must be converted to PCM-equivalent units. The public health risk assessment prepared for the project has been developed in accordance with OEHHA Guidelines.

Response to Comment Grp 7-108

The commenter provides a description of PLM asbestos testing methods, advantages and disadvantages. PLM testing is required to comply with the Asbestos ATCM for Surfacing.

Response to Comment Grp 7-109

The commenter inquires how the method for bulk sampling was modified for rock cores. The modifications and sample preparation used by the laboratory are detailed on page 89, the cover sheet for Asbestos TEM Laboratories of Appendix E.2 of the DEIR. Sample preparation followed a standard CARB 435 prep method. The entire sample was dried at 135-150 C and then crushed to ~3/8" gravel size. If the submitted sample was >~1 quart, the sample may have been split using a 1/2" riffle splitter following ASTM Method C-702-98 to reduce the sample volume for pulverization. The remaining aliquot, or entire original sample, was then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product.

Response to Comment Grp 7-110

Asbestos by Polarized Light Microscopy (PLM) cannot be directly compared to Transmission Electron Microscopy (TEM). PLM testing is required to comply with the requirements of the Asbestos ATCM for Surfacing. TEM testing is OEHHA's preferred analytical approach for outdoor asbestos samples because of its ability to detect small fibers (greater than or equal to 0.0002 microns in diameter) and to distinguish between asbestos fibers and non-asbestos fibers. As such, TEM testing is OEHHA's recommended approach to conduct a health risk assessment.

Response to Comment Grp 7-111

Please see Master Response 23 - Adequacy of Asbestos Sampling.

Response to Comment Grp 7-112

The commenter asserts that some samples are mislabelled in Asbestos Sample Memo June 2020 Appendix A. This report is not included in the DEIR but is referenced in the ASUR plan (Appendix E.2 of the DEIR). The photo in Appendix A is mislabeled as Y962880 instead of Y962980. This is a typo in the report and has no effect on the analysis of the DEIR. The commenter asserts that asbestos sampling was "extremely limited" and stopped drilling when asbestos was detected. Please see Master Response 23 - Adequacy of Asbestos Sampling.

Response to Comment Grp 7-113

The commenter questions why samples with different TEM weight percentages can have equivalent PCM fiber counts, and questions why duplicate samples may show different results. For the purposes of the Air Toxics Hot Spot Program, asbestos should be converted using the relationship of 1 PCM Fiber = 320 TEM structures (OEHHA Appendix C). TEM weight percent is not used and has no relevance to a health risk assessment. TEM weight percent will vary depending on the size and mass of each structure detected. Duplicate samples are taken from the same location of drill core but are not identical samples. Therefore, it is expected that there will be variations in naturally occurring asbestos fibers between samples. The commenter's conclusions regarding asbestos content are incorrect because the commenter mistakenly correlates TEM weight with PCB fiber count, which are not directly correlated.

Grouping by lithology is important as mining is planned and completed in the distinct geological units present in the mine. As the commenter notes, serpentine is a lithology of concern due to the presence of chrysotile asbestos.

Response to Comment Grp 7-114

The commenter asks why the report was revised and questions the implication of not having blind blanks or blind duplicates, along with the implication of noted grid opening damage and possible contamination. The laboratory provided their final work product which is included in the appendix of the ASUR Plan. The laboratory report NO.375516 is marked as rev.1 because the results from sample Y962992 was not included in the first version of this report. This incomplete "original" version of the laboratory report is redundant and its inclusion in the ASUR plan is not required. Grid openings damage is noted by the laboratory and is part of their internal processes. As a certified laboratory it is up to the lab to determine whether a damaged grid unacceptably impacts the accuracy of their reporting results and repeat testing if deemed necessary. Where only a single structure of asbestos is detected the laboratory notes "possible contamination". This does not affect the analysis of the DEIR other than adding additional conservatism with the assumption of asbestos that does not exist. Duplicates and blanks were not re-inserted as the 40 samples previously submitted (and analyzed by PLM) were reanalyzed using the TEM method. Blanks and duplicates were inserted into the original group of samples. However, future sampling during operations under the ASUR Plan will require a Quality Assurance Quality Control program which would require blanks and duplicate samples.

Response to Comment Grp 7-115

The commenter questions the implication of the possibility of amphibole asbestos in the rock versus chrysotile asbestos. The commenter asserts that there may be different health risks associated with different types of asbestos; however, OEHHA guidelines do not attribute different cancer risk for amphiboles and chrysotile asbestos fibers. OEHHA is the lead state agency for the assessment of health risks posed by environmental contaminants in California, and the health risk assessment is required to be based on OEHHA guidelines.

Response to Comment Grp 7-116

The commenter asserts that the presence of certain elements in asbestos fibers may affect the toxicity of those fibers. However, OEHHA guidelines do not attribute different cancer risk based on metal content or presence of other elements. The OEHHA guidelines provide the mandatory methodology for use in health risk assessments.

Response to Comment Grp 7-117

The commenter asserts that the samples submitted for laboratory analysis of metal toxic air contaminants were "expired" because they were submitted in early 2019, but could have been drilled as early as 2017. However, rock material does not "expire" after even a few years. The analyses related to metals were conducted on native geologic material that have been present in the environment for many millions of years. The purpose of the testing was to assess the potential for actions related to the proposed project to mobilize naturally-occurring metals within the minerals in the rock. The time between collection of the rock sample and the lab analysis, and the temperature at which the rock samples were stored or transported, has no effect on the presence or mobility of the naturally occurring metals within the rock itself. As such, the hold times for the rock samples do not affect the validity of the results or the validity of the DEIR's analysis.

Response to Comment Grp 7-118

The commenter questions whether the ASUR plan's proposed method of obtaining samples complies with CARB Method 435, as the ASUR plan requires samples to be taken at the transfer point in between the skip and the silo. The commenter implies that the ASUR's method is not proper because it does not draw directly form a storage pile, conveyor belt, or aggregate covered

surface. The ASUR Plan complies with CARB Method 435, Section 5.2 of which states that "The grab samples shall be taken from the product staking belt or if this is not possible then at the first transfer point before the stockpile." Page 13 of the ASUR Plan states that "Samples will be taken from the transfer point between the skip and silo and may be taken either manually or with an automated sampler." As such, the ASUR plan complies with CARB Method 435. Moreover, the method apparently suggested by the commenter of placing all the material into a large stockpile could actually lead to greater air quality impacts. The project proposes no outdoor stockpiles, and by keeping the material in silos reduces impacts associated with any dust created by stockpiles.

Response to Comment Grp 7-119

The employee tasked with taking the sample would take the sample at the transfer point. The internal structures of the headframe, including platforms etc., are not shown on Figure 2 of the ASUR plan and are not required for the purpose of the illustration.

Response to Comment Grp 7-120

The commenter asserts that taking a sample of barren rock prior to its placement in the silo may be appropriate, but that such sampling is not appropriate for tailings because that sampling point is not the point closest to the end of processing, as the commenter asserts is required by Carb Method 435. However, the commenter has truncated its cited reference to CARB Method 435 requirements. The full text on page ii of the Implementation Guidance Document ARB Test Method 435 document states: "Choose to sample aggregates on conveyor belts closest to the final product rather than piles if at all possible."

Notably, the above sentence is a recommendation, not a requirement of ARB Method 435. The ASUR plan does not propose to sample from piles, so this recommendation is not directly applicable to the tailings. The sampling point chosen allows for testing to be completed before the material is transported for use in surfacing and is the closest sampling point that is practical to the end product for the tailings.

Response to Comment Grp 7-121

The commenter asks at what intervals the 3 samples will be taken per 1,000 tons. Sampling is at random intervals and not at set timing. As required by ARB Method 435, the method of randomly choosing the sampling locations and intervals is left up to sampling personnel but must follow the procedure specified in the sampling plan (which would be approved by NSAQMD).

Two methods of asbestos testing are required under the ASUR Plan. PLM testing is required to comply with the Asbestos ATCM for Surfacing and trucks may not transport material without a receipt based on the PLM results. Any materials with detectable asbestos would not be allowed to be used for surfacing.

The commenter also asks whether barren rock and mineralized rock would be analyzed separately. Barren rock and mineralized rock would be analyzed separately to allow the issuance of the required receipt. Barren and mineralized rock are placed in different bins of the silo.

As discussed on page 4.3-61 of the DEIR, the average asbestos content of the total mined material is of primary concern given that asbestos does not have established acute noncancer effects. The purpose of TEM testing in the ASUR Plan is not to control the fate of the rock and tailings after it reaches surface (that is the purpose of the PLM testing described above). Rather,

the TEM testing is done to verify that mine planning is effectively minimizing the potential for public exposure to airborne asbestos from the project.

Response to Comment Grp 7-122

The commenter questions the purpose of the different testing methods used as part of the ASUR plan. As described below, the ASUR plan utilizes TEM and PLM testing of material, but uses each method for different purposes, as appropriate.

The ASUR includes both an Engineered Fill Placement Plan and Asbestos Inventory. The Engineered Fill Placement (EFP) Plan (Section 8.5 of the ASUR Plan) will include schedules and planned material placement locations and haul roads. The EFP Plan will be designed to ensure that Asbestos Containing Material is not used for Surfacing. The EFP Plan will designate areas which are suitable for the placement of Asbestos Containing Material and maintain an estimate of the capacity of these areas. Whether material is suitable for Surfacing is determined by PLM testing in accordance with the Asbestos ATCM for Surfacing.

The Asbestos Inventory (Section 8.3 of the ASUR Plan) is based on asbestos content, using TEM testing, which is to verify that mine planning is effectively minimizing the potential for public exposure to airborne asbestos from the project.

Response to Comment Grp 7-123

As discussed on page 4.3-61 of the DEIR, the average asbestos content of the total mined material is of primary concern for health risk impacts given that asbestos does not have established acute noncancer effects. The purpose of TEM testing in the ASUR Plan is not to control the fate of the rock and tailings after it reaches surface. The TEM testing is done to verify that mine planning is effectively minimizing the potential for public exposure to airborne asbestos from the project.

A new weighted average will be calculated upon the receipt of analytical results from TEM testing as described in the ASUR Plan. No material is planned to be “stored” or “maintained”. Mining will continue as normal during the two week turn-around time for TEM samples. The asbestos content mined material is managed through the measures of the ASUR plan which included exploration sampling, mine planning, and testing of materials on surface to monitor and ensure the effectiveness of these measures.

The commenter provides a theoretical example of a sample which has no detectable asbestos by PLM (and therefore suitable for use in Surfacing) but has detectable asbestos by TEM testing. A sample which has detectable asbestos does not “fail” as the commenter asserts. Rather the measures of the ASUR Plan fail if the rolling three-month weighted average of materials brought to surface exceeds 0.01% asbestos in equivalent PCM units. The ASUR Plan describes measures which prevent such a failure from occurring and also actions that would be taken if such a failure did occur. The rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials. Samples would not be re-tested as individual samples do not “fail” as discussed above.

Response to Comment Grp 7-124

The commenter asks how the 500 tons of material designated for cemented paste fill will be selected, and how it will be culled from the inventory. The amount of cemented paste fill poured underground is estimated to average 500 tons per day, but will vary based on operational

considerations and availability of mine voids underground. The selection of which materials are used for backfill is determined by technical and management personnel of the operation. The rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials.

Response to Comment Grp 7-125

No large-scale temporary storage facilities are proposed for the project. The project includes temporary storage of materials at the Brunswick Shaft, inside the process plant, and at the Brunswick and Centennial sites where material would be dropped by trucks and later graded and compacted during weekday daylight hours. Toxic air contaminant fractions within particulate matter have been estimated based on these material processes and were already incorporated into the Health Risk Assessment.

Response to Comment Grp 7-126

The rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials.

Response to Comment Grp 7-127

The rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials. Accordingly, the rock truck loading building is not designed to hold inventory of rock. Rather the inventory of rock is held in the silo until loaded into trucks.

Response to Comment Grp 7-128

No trucking is allowed during nighttime hours (8 hours of the day). During this overnight period the sand tailings produced from mineral processing are stockpiled inside the process plant building. This material must be loaded into trucks by a front-end loader outside of the process plant building the following day.

Response to Comment Grp 7-129

Sand tailings will be stored inside the process plant building overnight, but will be loaded into trucks by a front-end loader outside of that building. The loader loads its bucket from a stockpile located inside the building and loads the waiting truck outside of the building. The rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials. Accordingly, there would be no changes to the loading procedures due to inventory issues that would affect the noise or air quality impacts. Noise from this equipment has been analyzed in the DEIR. Additionally, asbestos health risk is associated with long-term exposure and correlates to the average asbestos content of all mined materials. Given that asbestos is not an acute toxin, “decontamination” of the equipment is not necessary nor required for the project. Rather, changes in the mine plan would be developed to prevent and respond to any higher than anticipated asbestos content as disclosed by TEM testing. The Health Risk assessment assumes average asbestos content of all dust at 0.01% weight percent asbestos in PCM equivalent units. The potential for equipment and storage areas to generate dust is included in the analysis which has determined the risk to the public from this dust to be less than significant after mitigation.

Engineered fill (barren rock and sand tailings) are kept separate in the process plant and in trucks delivering the materials to their destination. Once they are used for engineered fill at the destinations they would be blended as necessary for geotechnical criteria and operational

planning. As discussed on page 14 of Appendix H.1 of the DEIR, laboratory testing of selective ratio of blended materials would be conducted to verify geotechnical parameters. Nuclear density gauges or procedural test methods would be used to verify compaction reached required densities as appropriate.

Response to Comment Grp 7-130

Shotcreting of wall for asbestos mitigation is contemplated in Section 6.1 of the ASUR Plan when planned tunneling in Barren rock is projected to result in the Asbestos Inventory 3-month rolling average to exceed 0.01% by mass of equivalent PCM units. This situation is not expected based on the percentage of asbestos encountered in samples obtained from the project site; however, in such an unlikely situation, the entire tunnel project would be considered to contain significant asbestos. The greenhouse gas from the manufacturing of cement is not attributable to the project for analysis of GHG emissions in the DEIR analysis. The use of shotcrete is expected to be minor and any transport of this material is accounted for in the freight trucks already included in the air quality analysis. Shotcrete application is a wet process and generates minimal dust. Hexavalent chromium could be present in cement but would not be mobile once shotcrete is cured, similar to any concrete product. The use of shotcrete would be trivial in comparison to the mass of cement used in cemented paste backfill.

Response to Comment Grp 7-131

The commenter asks whether shotcrete will be used in all tunnels. Shotcrete is used as ground support in certain situations where rock bolts and screens are not sufficient. In construction of most new underground works shotcrete is not expected to be required based on the solid character of the rock encountered during drilling.

Response to Comment Grp 7-132

The commenter asks whether and how asbestos will be removed from mine water and how much volume of water may be contaminated with asbestos. Note that the word “sediments” is missing from the sentence in the ASUR Plan that is cited by commenter. This is an editing error in the document.

The corrected sentence should read:

> “Water generated from drilling and dust suppression during tunneling in Asbestos Containing Material shall be collected in sumps or tanks and sediments shall not be used for Surfacing.”

Contrary to commenter’s implication, there is no separate water process for asbestos containing water, as all water pumped from the mine will follow the same treatment path, which involves removal of solids. Sumps or tanks used in the underground mine are designed to remove the majority of solids from the water. The water would then be pumped to main underground sumps located on various levels, then to the surface water treatment pond. Solids would be removed from water at all these stages. Under the requirements of Order R5-2022-006 the final discharge must have less than 10 ppm total suspended solids (Average monthly) and 7MFL (million fibers per liter) asbestos in water. Accordingly, any water discharged from the project will have been treated at multiple stages and will be required to comply with RWQCB standards for numerous constituents, as well as asbestos content.

Response to Comment Grp 7-133

The commenter asks whether the MERV 16 filters will be limited to serpentinite mining only, what type of filters are used in the main ventilation system, and what is the quantity of asbestos in the total mined quantity of serpentinite. No filtration is proposed in the main ventilation system. Air filtration is contemplated in Section 6.1 of the ASUR Plan when planned tunnelling in Barren rock is projected to result in the Asbestos Inventory 3-month rolling average to exceed 0.01% by mass of equivalent PCM units. Asbestos emissions are controlled by utilizing dust collection (air filtration).

The filtration measures in Section 6.1 of the ASUR Plan ensure that asbestos emissions that flow into the mine ventilation system are not increased beyond the baseline scenario (with all mined material averaging 0.01% PCM equivalent asbestos content). Therefore, the assumed ratio of serpentinite in barren rock is not relevant to the health risk assessment.

For example, serpentinite sample Y962992 (Appendix C of the ASUR Plan) contains the highest content of asbestos from exploration sampling with 7.3 TEM structures per nanogram or 0.069% PCM equivalent weight percent. The dust generated from each activity would be reduced by 95% by air filtration before entering the main ventilation system and exhausting to surface. The dust emission factor (EF) for the activity remains constant.

Serpentinite sample Y62992 with filtration
Asbestos dust per ton mined = 0.069% x EF x 5% = 0.0035% x EF

Maximum ASUR asbestos content without filtration
Asbestos dust per ton mined = 0.01% x EF = 0.0100% x EF

Page 300 of the Air Quality Technical Report refers to existing mine fill at the Brunswick site which will be disturbed during site construction and assumes a conservative serpentinite content for the purpose of the health assessment due to limited testing in this area. The Health Risk Assessment assumes the maximum asbestos content possible under the ASUR Plan for mining materials derived from proposed underground mining.

The commenter also asked how the mine fill can be 14% serpentinite if only 1% of mined material is serpentinite. Contrary to the commenter's statement, engineered fill was not assumed to have 14.3% serpentinite; rather, the existing mine fill at the Brunswick site was assumed to have 14.3% serpentinite. As discussed on page 300 of the Air Quality Technical Report, existing mine fill at the Brunswick site will be disturbed during site construction and the report assumes a conservative serpentinite content for the purpose of the Health Risk Assessment due to limited testing in this area. Based on the overall serpentinite content found in the rock underlying the site, and the testing on the existing fill material, the 14.3% assumption likely overstates the serpentinite in the existing fill. For material that will be mined at the site as part of the project and brought to the surface, the Health Risk Assessment assumes the maximum asbestos content possible under the ASUR Plan for mining materials derived from proposed underground mining.

Response to Comment Grp 7-134

Based on cited language from the ASUR Plan, the commenter asks why the mine operator would remove barren rock surrounding mineralization if it is not going to mine the gold mineralization. Gold mineralization is treated differently than barren rock in Section 6.0 of the ASUR Plan (Mine Planning) because the gold mineralization must be crushed, hoisted to surface, and processed.

These activities could generate significant dust which could be harmful if the materials contained significant asbestos. As such, if identified gold mineralization contains sufficiently high asbestos content such that its mining would cause the 3-month rolling asbestos inventory average to exceed 0.01% asbestos by mass of PCM equivalent units, that gold mineralization would need to be avoided. Conversely, engineering controls for tunneling in barren rock can be more easily implemented and the material could remain underground. As described on page 3-19 of the DEIR, new underground tunnels and raises would be created as necessary to access gold-quartz veins or provide the necessary underground infrastructure to transport rock and provide ventilation and escape routes. As such, the mine operator may need to mine through barren rock to reach other target areas, even if certain gold mineralization is avoided.

Response to Comment Grp 7-135

The commenter requests that the mine operator be required to maintain records of asbestos content in mined material indefinitely. The ASUR Plan is intended to reflect the requirements of the ATCM's which are attached to the ASUR plan.

Section (e)(5)(A) of the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations requires the maintenance of certain records (including air monitoring) for 7 years following the completion of construction or grading operations. Section (f)(5)(A) of the ATCM requires the owner/operator of a surface mining or quarrying operation to maintain certain records (including air monitoring) for at least 7 years.

Section (e) of the Asbestos ACTM for Surfacing requires receipts (verifying the asbestos content) to be retained for a minimum period of seven years from the date of supply or use of the material. As such, there is no legal requirement to keep records beyond 7 years, and there is no environmental impact associated with not maintaining these records indefinitely.

Response to Comment Grp 7-136

The ASUR plan is part of the project description and will be required by the County pursuant to a condition of approval. As such, the ASUR Plan will be binding on any successors in interest to the mine. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring. Components of the ASUR Plan will become part of the approved ADMP and other components will be used as company policy and procedures to assist with compliance with the ADMP. Accordingly, the ADMP is the tool used by the NSAQMD for enforcement, rather than the ASUR plan. Nonetheless, the ASUR plan is binding on the applicant, can be enforced by the County, and to the extent that provisions in the ASUR plan are incorporated into the ADMP, those provisions would be enforceable by the NSAQMD.

Response to Comment Grp 7-137

The commenter asserts that the 3-month rolling inventory will cause increased fugitive dust emissions; however, the commenter misunderstands the rolling inventory and seems to believe that it is a physical stockpile of 3-months of mined material. The rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials. The project site is not designed to hold 3-months of mined material in inventory and will not do so.

The commenter also asks whether all material can be properly assumed to contain only 0.01% asbestos for purposes of calculating air emissions. The assumption that all mined rock will average 0.01% is appropriate and the Health Risk Assessment' analysis of asbestos-related health risk is based on conservative assumptions. Please see Master Response 22 – Conservatism used for Asbestos Assumptions.

The commenter also states that qualification of asbestos content is not possible until after testing by TEM occurs, which may not be known for two weeks, resulting in unknown impacts to the public. This is not an accurate statement; as discussed in Section 6.0 of the ASUR Plan asbestos content is determined by TEM during the exploration and pre-mining phase before mining is commenced. The TEM sampling conducted on materials (barren rock and sand tailings) at surface is done to verify that mine exploration and planning is successfully minimizing the content of asbestos in mined materials brought to surface. Therefore, the TEM testing is done on samples prior to actual mining to improve mine planning and avoid impacts.

As stated on page 4.3-42 of the DEIR, the NSAQMD's cancer and noncancer thresholds to assess health risk significance for CEQA are consistent with what are used for the AB 2588 risk assessment procedures. The threshold of significance for health risk is an increased cancer risk of >10 cases per million persons. The Health Risk Assessment prepared for the project concluded that the health risk to the most sensitive receptor will be below this threshold.

Nevertheless, the DEIR concludes that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the EIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring. Components of the ASUR Plan will become part of the approved ADMP and other components will be used as company policy and procedures to assist with compliance with the ADMP.

Notably, compliance with the CARB ATCMs for naturally occurring asbestos, including development of an ADMP, is the standard approach within CEQA documents to address health concerns associated with exposure to asbestos from unpaved surfaces, construction and grading operations and quarries where asbestos is found or likely to be found in order to ensure potential health risk impacts to the public would be minimized to a less than significant impact. Multiple other projects in the NSAQMD jurisdiction, as well as throughout the state, have relied upon compliance with these naturally occurring asbestos ATCMs in order to control any potential asbestos emissions to the extent possible. As described in Mitigation Measure 4.3-2 of the DEIR, the proposed project shall also comply with all applicable criteria in the CARB ATCMs for naturally occurring asbestos.

Response to Comment Grp 7-138

The commenter notes that the HRA prepared for the project uses a 30-year exposure timeframe, and asks what health impacts will occur after that 30-year period. As stated on page 26 of the Health Risk Assessment (Appendix E.1 of the DEIR), OEHHA describes cancer risk evaluations for 9-, 30-, and 70-year exposure durations in the 2015 OEHHA Guidelines and identifies that the 9- and 30-year durations correspond to the average and high-end of residency time

recommended by the EPA, with the 30-year exposure duration recommended for use as the basis for estimating cancer risk at the maximally exposed individual resident in all HRAs. OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the maximum exposed individual resident (MEIR) in the Hot Spots Program. This exposure duration represents the time of residency for 90 to 95% of Californians at a single location and should provide adequate public health protection against individual risk. (Section 8.1 OEHHA 2015 Air Toxics Hot Spots Program Manual). As standard practice, the duration of exposure is based on 30-year sensitive receptor residency rather than the life of a project.

Further, additional conservatism is layered into OEHHA's recommendations that were incorporated into the HRA prepared for the project, including the assumption that exposure at all sensitive residential receptors would begin in the 3rd trimester of gestation, which accounts for the higher sensitivity of infants and children by applying age-specific daily breathing rates and age-sensitivity factors (ASFs), and that the baby grow through childhood and adulthood at the same home for the next 30 years. This scenario is unlikely to happen, yet it evaluates and reflects conservative, health-protective methodologies to assess health impacts to adults, as well as infants, children, and other sensitive subpopulations.

Response to Comment Grp 7-139

The commenter questions the use of meteorological data in the HRA. Please see Master Response 17 - Meteorological Data Used in HRA.

Response to Comment Grp 7-140

The attainment status of Nevada County is discussed on page 4.3-9 and shown in Table 4.3-3 of the DEIR. Western Nevada county is in attainment for PM2.5 and non-attainment for PM10. Ambient Air Quality Standards are determined by the US and California EPA and not the World Health Organization.

As discussed on page 4.3-41 of the DEIR, the NSAQMD established thresholds of significance for CEQA purposes to achieve and maintain the National and California Ambient Air Quality Standards (AAQS). Because an AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the AAQS, a project that complies with the thresholds established by a local air district, such as the NSAQMD, would not result in adverse effects to human health related to criteria pollutant emissions. The NSAQMD thresholds of significance for PM10 and PM2.5 do not consider baseline measurements, so the commenter's request for baseline measurements is not relevant to the significance analysis in the DEIR.

Regarding the health risk assessment, the threshold of significance for exposure to toxic air contaminants is based on an incremental increase in cancer and non-cancer risk associated with a project. As such, the baseline concentration does not factor into this impact determination.

Response to Comment Grp 7-141

The County acknowledges the comment and notes it expresses the opinions of the commenter, and does not raise an issue related to the adequacy of any specific section or analysis of the DEIR. The County will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. No further response is required or necessary.

Response to Comment Grp 7-142

The commenter questions the 30-year exposure duration assumption versus the 80-year project life. Please see Response to Comment Grp 7-138 above.

Response to Comment Grp 7-143

Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP.

Response to Comment Grp 7-144

The commenter asks about air quality health impacts to the Durham School Bus Depot. As discussed in Section 2.1 of the Health Risk Assessment, the cancer risk accounts for the higher sensitivity of infants and children by applying age-specific daily breathing rates and age-sensitivity factors (ASFs). Accordingly, the HRA evaluates and reflects conservative, health-protective methodologies to assess health impacts to adults, as well as infants, children, and other sensitive subpopulations.

As stated on page 27 of the Health Risk Assessment (Appendix E.1 of the DEIR), the maximally exposed individual residence (MEIR) would be the nearest existing residence to the north of the Brunswick Industrial Site. Emissions would be dispersed as distance increases from the emission source. Given that the Health Risk Assessment presents the health risk levels at the maximally exposed individual, all other receptors in the vicinity of the project, including the Durham Bus Depot, would have less exposure and consequently less potential health risk than the MEIR.

Response to Comment Grp 7-145

The commenter requests that the demographics of the community, including age and specific illness rates, be considered in the health risk analysis.

Health risk assessments do not account for County-specific illness rates. However, as discussed in Section 2.1 of the Health Risk Assessment for the project, implementing the OEHHA Guidance, as was done for the project, reflects conservative, health-protective methodologies to assess health impacts to adults, as well as infants, children, and other sensitive subpopulations. For example, the reference exposure levels (RELs) used in the evaluation of non-cancer risk are designed to protect the most sensitive individuals in the population, including infants and children, by selecting appropriate toxicological data and including margins of safety. Accordingly, the evaluation methods are assumed to protect children and other sensitive subpopulations (groups of more highly susceptible individuals) from adverse health effects in the event of exposure. A similar approach was taken for cancer risk, which accounts for the higher sensitivity of infants and children by applying age-specific daily breathing rates and age-sensitivity factors (ASFs), as well as conservative exposure period, fraction of time at home, and cancer potency factors as recommended by OEHHA.

Sensitive receptors, including the facilities mentioned by the commenter, are at a further distance than receptors around the sites and would have less exposure and consequently less potential health risk than the MEIR. Please see Response to Comment Grp 7-144.

Response to Comment Grp 7-146

The commenter asserts that there is an error in the AERMOD dispersion model, which would indicate the model was run at the wrong elevation. The Base Elevation for STCK8, STCK9, STCK10 shown in Table 2 are in feet. The units shown as meters is an error (typo) in the table. This can be verified in the model output files on page 395 of the document where these stacks are shown at elevations of 837.71, 838.72, and 759.39 meters. As such, the AERMOD dispersion model was run at the correct elevations.

Response to Comment Grp 7-147

No fuel monitoring or other provisions in regard to the backup generator are proposed or required to be analyzed in the DEIR. As stated on page 58 of Appendix E.1, the Stationary Engine ATCM allows owners and operators of emergency standby engines to use those engines to provide electrical power when a facility experiences the loss of normal electrical service that is beyond the reasonable control of the facility. Electrical service loss resulting from Public Safety Power Shutoff events is beyond the reasonable control of back-up engine owners and operators, and therefore, appropriately permitted emergency standby engines may be operated to provide electrical power during such an event pursuant to the Stationary Engine ATCM. Mitigation for emissions from generator use during power outages is not required because such use is speculative, and it is uncertain if or when such use would occur. Emissions from routine testing of these generators has been included in the emissions of the project.

The commenter asks if there will be penalties if the Teir4F engines are not used exclusively due to “commercial availability” status. Tier 4F generators are commercially available, and therefore will be required to be used for the project. As stated on Page 4.3-49 of the EIR, a representative Cummins model QSK60-G17 generator with a Tier 4F engine was used for emission factors.

Response to Comment Grp 7-148

The commenter expresses concern regarding silica exposure, and asserts that the Health Risk Assessment underestimates silica content in the rock that will be mined as part of the project. The assumed crystalline silica content and modeling of respirable silica in the Health Risk Assessment prepared for the project is conservative and overestimates the relevant exposure in any situation, as described in Master Response 21 – Conservatism of Silica Assumptions. Given that the Health Risk Assessment uses the most conservative assumptions regarding silica content and exposure, sampling of materials for crystalline silica content is not required.

Response to Comment Grp 7-149

The commenter questions why mine fill was analyzed at 14.3% serpentinite, when the DEIR assumed that only 1% of the mined material will be serpentinite. Contrary to the commenter’s statement, engineered fill was not assumed to have 14.3% serpentinite; rather, the existing mine fill at the Brunswick site was assumed to have 14.3% serpentinite. As discussed on page 300 of the Air Quality Technical Report, existing mine fill at the Brunswick site will be disturbed during site construction and the report assumes a conservative serpentinite content for the purpose of the Health Risk Assessment due to limited testing in this area. Based on the overall serpentinite content found in the rock underlying the site, and the testing on the existing fill material, the 14.3% assumption likely overstates the serpentinite in the existing fill. For material that will be mined at the site as part of the project and brought to the surface, the Health Risk Assessment assumes the maximum asbestos content possible under the ASUR Plan for mining materials derived from proposed underground mining.

Response to Comment Grp 7-150

The commenter seems to imply that the rolling inventory is a physical inventory; however, the rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials.

The commenter asserts that the detection limit of PCM equivalent units is 0.01%. However, the detection limit for TEM testing is one structure located within the number of grids scanned. Depending on how many grids are scanned the detection limit would range from approximately 0.0003% to 0.0011% PCM Weight equivalent.

Two methods of asbestos testing are required under the ASUR Plan. PLM testing is required to comply with the Asbestos ATCM. TEM testing is done to verify that mine planning is effectively minimizing the potential for public exposure to airborne asbestos from the project. Please see Response to Comment Grp 7-121.

Drilling was stopped when the exploration geologist determined there was little potential for discovery of gold mineralization and not when asbestos was detected. Asbestos sampling is not done at the same time as drilling and cannot be detected visually at the low levels present without sophisticated microscopy.

Samples from various lithologies at the Idaho-Maryland Mine Project were selected for asbestos testing. Sampling was based on lithologies where mining could take place and not on percentages of drill holes completed during exploration. Please see Responses to Comments 7-111 and 7-112. The location of exploration samples tested for asbestos are shown on sheets 1-3 of the ASUR Plan, sample name, drill hole, downhole depths, sample interval, rock type, and test results are provided in the appendix of the ASUR Plan (Appendix E.2 of the DEIR).

Prior to underground gold mining, intensive planning efforts will be required to meet state and federal regulations and achieve safety, environmental, and economic goals. Underground mine planning includes exploratory drilling, geologic mapping, material logging, and testing. These same processes also ensure future mining operations avoid and manage rock types that may contain naturally occurring asbestos. Please see Section 6.0 of the ASUR Plan (Appendix E.2 of the DEIR).

The commenter states that twenty percent of the samples tested had asbestos levels greater than 0.01% PCM equivalents. However, this ratio has no relevance as the sampling results for asbestos content grouped by rock lithology and the quantities of each lithology mined are what will determine the potential quantity of asbestos exposure from dust generated by mining activities.

The Health Risk Assessment is based on conservative assumptions. Please see Master Response 22 – Conservatism used for Asbestos Assumptions.

Nevertheless, the DEIR concludes that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements

as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP.

The commenter asserts that the asbestos emissions should not be assumed to be only 0.01% because the applicant cannot control the amount of asbestos in the actual mined material. The commenter is incorrect. As discussed in the ASUR plan the applicant can control the amount of asbestos in actual mined material through exploration, sampling, and mine planning. This sampling is completed before mining of this material and any problematic materials would either not be mined or mined using measures discussed in the ASUR Plan. The ASUR Plan provides specific measures to ensure average asbestos content does not exceed 0.01% PCM equivalent.

Response to Comment Grp 7-151

The commenter asks how much asbestos will be in the remaining 5% of asbestos fibers after use of MERV filters for situations where serpentinite would be mined. The amount of asbestos released during serpentinite mining would be the same as during mining of non-serpentinite mining through the use of measures outlined in the ASUR plan. The filtration measures in Section 6.1 of the ASUR Plan ensure that asbestos emissions into the mine ventilation system are not increased beyond the baseline scenario (with all mined material averaging 0.01% PCM equivalent asbestos content). Please see Response to Comment Grp 7-133.

Response to Comment Grp 7-152

The commenter implies that there will be asbestos emissions associated with stockpiling of the rolling inventory, and that these emissions were not analyzed. However, the rolling inventory in the Asbestos Inventory (Section 8.3 of the ASUR Plan) is a digital accounting of asbestos sample results. It does not refer to a physical inventory of mined materials.

The commenter states that the DEIR underestimates the level of asbestos exposure that could be caused by the project. However, the Health Risk Assessment is based on conservative assumptions that likely overestimate asbestos exposure. Please see Master Response 22 – Conservatism used for Asbestos Assumptions.

As stated on page 4.3-42 of the DEIR, use of the NSAQMD's cancer and noncancer thresholds to assess health risk significance for CEQA is consistent with AB 2588 risk assessment procedures. The threshold of significance for health risk is an increased cancer risk of >10 cases per million persons. The Health Risk Assessment prepared for the project concludes that the health risk to the most sensitive receptor will be below this threshold.

Nevertheless, the DEIR concludes that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring. Notably, compliance with the CARB ATCMs for naturally occurring asbestos, including development of an ADMP, is the standard approach within CEQA documents to address health concerns associated with exposure to asbestos from unpaved surfaces, construction and grading operations and quarries where asbestos is found or likely to be found in order to ensure potential health risk impacts to the public would be minimized to a less than

significant impact. Multiple other projects in the NSAQMD jurisdiction, as well as throughout the state, have relied upon compliance with these naturally occurring asbestos ATCMs in order to control any potential asbestos emissions to the extent possible. As described in Mitigation Measure 4.3-2 of the DEIR, the proposed project shall also comply with all applicable criteria in the CARB ATCMs for naturally occurring asbestos.

Response to Comment Grp 7-153

The commenter asserts that the samples submitted for laboratory analysis of metal toxic air contaminants were "expired" because they submitted in early 2019, but could have been drilled as early as 2017. However, rock material does not "expire" after even a few years. The analyses related to metals were conducted on native geologic material that have been present in the environment for literally many millions of years. The purpose of the testing was to assess the potential for actions related to the proposed project to mobilize naturally-occurring metals within the minerals in the rock. The time between collection of the rock sample and the lab analysis, and the temperature at which the rock samples were stored or transported, has no effect on the presence or mobility of the naturally occurring metals within the rock itself. As such, the hold times for the rock samples do not affect the validity of the results or the validity of the DEIR's analysis. Metal content in dust generated by all activities of the project were evaluated in the Health Risk Assessment. Please see also Master Response 20 – Conservatism used for Metals Assumptions.

Response to Comment Grp 7-154

The comment generally asserts that the health risk assessment is not valid. The commenter's specific comments are addressed in the preceding responses to comments. The County acknowledges the comment and notes it expresses the opinions of the commenter. The County will include the comment as part of the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. No further response is required or necessary.

Response to Comment Grp 7-155

The commenter describes the drilling program used by Rise to explore the geology beneath the project site. However, the sampling pattern described by the commenter is not accurate. Page 96 of Appendix K.2 states:

> Rise completed 19 drill exploration drill core holes, totaling 67,500 linear feet, from 2017-2019. Exploration drilling was designed to test a variety of mineralization throughput the deposit in areas where mining is expected to occur. Drill core was logged by company geologists in Grass Valley. The core was sawed in half in zones of interest and sent to ALS Laboratories in Reno, Nevada to be assayed.

The drill logs are not necessary for the analysis conducted in Appendix K.2.

Response to Comment Grp 7-156

The commenter asked whether the sample material submitted for laboratory testing was 2mm material or 6mm material. As stated on page 98 of Appendix K.2 the material was -2mm. During crushing not all material is less than 2 mm as all crushing procedures specify a percent passing 2 mm. Therefore, some portion of the material would be larger than 2 mm. The metallurgical lab noted the material "appeared to be approximately 6 mm in size". They did not state that they measured the particle size.

Sample locations and depth intervals of the 76 mineralized samples used for the metallurgical composite sample are shown on sheets 5, 6, and 7 of Appendix K.2 (noted in Section 4.4.2 of the report).

Response to Comment Grp 7-157

The commenter provides a description of the selection process for rock samples that were selected to be representative of the barren rock surrounding the mineralized zones and then tested in a laboratory. The commenter implies that the amount of rock tested was of an insufficient volume compared to the total amount of cores collected. As discussed in Section 2.3 of Appendix K.2, an extensive network of underground workings would be constructed throughout the life of the mine to access the gold ore. These underground workings would be constructed within nonmineralized "barren" rock. The barren rock would be used as engineered fill after it is removed from the mine. The barren rock samples used for the geochemical evaluation presented in Section 4.4 of Appendix K.2 were collected to obtain data regarding the general geochemical character of the different geologic formations that would be encountered during mining. The samples were collected by a California-licensed professional geologist with experience in mining to be representative of the individual rock types that make up the barren rock (meta-andesite, altered meta-andesite, diabase, and serpentinite). Each rock type is composed of a relatively uniform lithologic material that formed from a common source. Thus, the general geochemistry of each barren rock type does not vary substantially because it all has a common source and has not been mineralized.

The overall purpose of the barren rock sampling and laboratory analysis was to identify the general characteristics of that specific material type. Given that the objective was to understand the general character of the barren rock, the number of samples or the length of the samples compared to the total linear feet of core drilled for mineral exploration has no relevance. As the samples were selected by a California licensed geologist to be representative of the mineral types expected in the barren rock, the results of the barren rock testing provide reliable and representative results for consideration in the DEIR and for assessment of the potential effects of the use of that material for engineered fill.

Furthermore, prior to mining, the applicant will need to obtain several approvals from the Central Valley Regional Water Quality Control Board (RWQCB), which will require further testing of the rock at the project site. As described in the April 4, 2022 comment letter from the RWQCB, additional laboratory studies will be required to characterize the waste materials as part of a Report of Waste Discharge. The RWQCB cannot issue permits for the placement of engineered fill unless the testing that is part of the Report of Waste Discharge clearly demonstrates that use of the barren rock for engineered fill will not violate water quality standards or conflict with the Water Quality Control Plan. The barren rock testing that was conducted in support of the project application and used in the DEIR provides evidence of the potential water quality effects that might occur due to the use barren rock as engineered fill, while the RWQCB permits, which are a requirement of the project because mining cannot occur until such permits are issued, ensure that water quality standards will be met. Please see Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 7-158

The commenter implies that the amount of core samples submitted for metals analysis is insufficient because samples were drawn from 5 of the 19 cores that were drilled as part of

exploration. Note that the table cited by the commenter, Table 4-9, is located on pages 104 and 105 of Appendix K.2 and not pages 101-102 as stated by the commenter.

As stated on page 98 of Appendix K.2, in addition to the barren rock samples, Rise provided 48 crushed core samples for trace element test work. The 48 samples were unused portions of samples crushed to 2 mm in size (referred to as assay rejects). This material provides additional information on the variability of trace metals that may be present in the rock that would be produced from tunneling in barren rock in different lithologies. All sample locations are shown on Sheets 5, 6, and 7 of Appendix K.2.

The purpose of this sampling is to provide information on materials that may be present in various rock types that would be produced from tunneling, so that the DEIR can properly analyze any impacts from those materials. The areas where tunneling is anticipated to take place are shown on Sheet 15 of Appendix K.2. The purpose of the sampling is not to sample every drill hole and the full lengths of each drill holes (which may be drilled thousands of feet before reaching an exploration target). Rather, samples were taken that are representative of where mining is actually expected to take place, and the types of rock present in those zones, not the thousands of feet of rock that was drilled just to reach the target area. Therefore, the number of samples or the length of the samples compared to the total linear feet of core drilled for mineral exploration has no relevance to whether the samples are representative of the barren rock. The 48 samples were portions of the samples (referred to as assay rejects) remaining from exploration conducted by the applicant and therefore the details on sample weights and assay procedures used to generate the rejects are not included in Appendix K.2. The samples were selected by a professional California-licensed geologist to be of adequate quantity and quality sufficient to represent the barren rock.

Response to Comment Grp 7-159

As noted by Itasca in the Cemented Paste Backfill study: Samples were analyzed using a strong-acid digestion (EPA 1996) conducted by ACZ. This method is not intended to be a total digestion; however, it is a very strong acid digestion that will dissolve almost all elements that could potentially become environmentally available (E PA. 1996. Method 3050B acid digestion of sediments, sludges, and soils. In Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846. Environmental Protection Agency, December.)

ACZ laboratories received 47 pulverized samples, (the Barren Rock Crushed Core Samples) which were split from materials previously assayed at ALS Labs. The reference to 48 samples in the Hydrology Technical Report is an error. The 47 pulps from various barren rock lithologies were run for metals content only using ICP-MS. This material provides information on the variability of trace metals that may be present in the rock that would be produced from tunneling in barren rock in different lithologies.

The 6 barren rock samples submitted to ACZ for metals, DI-Wet and acid potential were crushed and pulverized in accordance with EPA method EPA-600/2-78-054 3.1.3 as noted in the ACZ analytical reports contained in the appendix of the Hydrology Technical Report. The samples were analyzed for Total Metals, dissolved metals using California Waste Extraction Testing (WET), and acid potential (ABA) at ACZ.

It is unclear what the commenter means in the statement "Any conclusions comparing metals content, leachate capacity, ABA, etc. between pulp results and barren rock results is moot since the sample preparation (pulverization) is identical."

The crushed core samples were not subject to WET or ABA testwork and no comparisons were made to the barren rock sample results (which were subjected to these tests).

The crushed core samples and barren rock samples were analyzed for total metals using the same method and at the same laboratory.

Response to Comment Grp 7-160

The commenter questions how the composite sample was prepared and analyzed months before the individual samples were submitted to ACZ. The commenter refers to the composite sample which was used by McClelland Labs to prepare tailings samples F1-F4. As stated on page 98 of Appendix K.2, the composite sample was prepared from 76 samples of -2mm material remaining from assaying (for gold) during exploration. This exploration took place before the barren rock samples were taken to support the analysis presented in Appendix K.2, which explains why the composite sample was prepared before the individual samples.

As stated on page 98 of Appendix K.2, the applicant's geologist selected mineralized samples for metallurgical testwork by reviewing drill logs and maps. A composite sample was prepared from 76 samples of the -2mm material remaining from assaying. A portion of the material from each sample was weighed to represent the interval length and merged to make the metallurgical sample. Sufficient material was available for most samples, except for five samples where no material was available from the assay lab. The 76 samples were unused sample material (referred to as assay rejects) remaining from exploration conducted by the applicant and therefore chain of custody reports are not included in Appendix K.2.

Response to Comment Grp 7-161

As discussed in Section 4.4.2 of the Hydrology Technical Report (Appendix K.2):

> Rise selected mineralized samples for metallurgical testwork by reviewing drill logs and maps. Samples were selected to be representative of materials expected to be encountered during future mining. Factors considered in selection were gold grades, minimum mining widths, mineralization style, and locations throughout the potential mining areas. Sample locations and depth intervals are shown on Sheets 5, 6, and 7.
>
> A composite sample was prepared from 76 samples of the -2mm material remaining from assaying. A portion of the material from each sample was weighed to represent the interval length and merged to make the metallurgical sample. Sufficient material was available for most samples, except for five samples where no material was available from the assay lab. The 76 samples created a composite metallurgical sample of approximately 46 kilograms (kg) (about 100 pounds).
>
> The 46 kg metallurgical sample was shipped (in a bucket) in July 2019 to McClelland Laboratories in Reno, Nevada for testwork.

The environmental testwork on tailings samples F1-F4 were completed as discussed in 4.4.2 of Appendix K.2. As stated in Section 4.4.1, a California-licensed Professional Geologist from Benchmark Resources collected six drill core samples in Grass Valley on October 29, 2019 from

barren rock intervals. These were the barren rock samples used for the geochemical characterization discussed in this section of the report.

Response to Comment Grp 7-162

The cores were drilled for mineral exploration purposes such that the number of cores drilled and the length of a certain rock type in each core has no bearing on the amount of barren rock or tailings that may be produced from the mine. The cores were also drilled through thousands of feet of rock that will not be subject to any mining, in order to reach the target zone. Testing of the full length of these cores would misrepresent the type of rock likely to be encountered during mining. The laboratory testing was conducted to identify the general geochemical parameters of each individual rock type or formation. Please see Responses to Comments Grp 7-157 and Grp 7-158.

Response to Comment Grp 7-163

The commenter generally asserts that not enough samples were analyzed for metals content, and states that only one sample was analyzed from the Brunswick area. See Responses to Comments Grp 7-157 and Grp 7-158 regarding the adequacy of the sampling volume. As shown on Sheets 5-7 of the Hydrology Technical Report (Appendix K.2 of the DEIR), the Brunswick mine is hosted in meta-andesite. Numerous meta-andesite samples were submitted for laboratory testing.

Further mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and obtain approved Waste Discharge Requirements (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). Please see Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 7-164

The commenter asserts that there are issues with the chains of custody for rock samples, and that the samples were drawn from too few of the cores. Chain of Custody forms are presented within the laboratory reports that are part of the appendices to the Appendix K.2 report. These include the submission of the barren rock and tailings samples to ACZ labs which were used for the WET testing that is relevant to the analysis. Some of the exploration testing was not used as part of the evaluations in the Appendix K.2 report and was conducted by the applicant during mineral exploration. As such, sample collection, lab results, and Chain of Custody forms related to that work was not addressed in Appendix K.2.

The selection of samples was done in order to be representative of the rock in which mining will take place, not representative of the full length of each core. Please see Responses to Comments Grp 7-157 and Grp 7-158. The applicant's exploration work was conducted under the supervision of qualified geologist, using a quality control program, and analytical work completed at a professional laboratory, as noted in the disclosure of explorations results published by the applicant. (see below)

Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)).

During this process, a sampling plan that addresses representative sampling of the mining waste would be submitted to the CVRQCB prior to sampling and the CVRQCB would to be notified when the samples are to be collected so that they may observe the process. Collection of field samples and subsequent testing of the expected mining waste would be based on clearly defined objectives identified in a sampling plan prepared by professional(s) registered to practice in California in the field of engineering or geological sciences.

https://www.risegoldcorp.com/uploads/content/Mar19RiseGoldIntersects90gptgoldover4.3metersatIdahoMaryland.pdf

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https://www.risegoldcorp.com/uploads/content/Sep4RiseProvidesExplorationUpdateforIdahoMarylandGoldProject.pdf

https://www.risegoldcorp.com/uploads/content/Aug7RiseIntersectsHighGradeGoldover1kmbelowIdahoMarylandMine.pdf

https://www.risegoldcorp.com/uploads/content/JULY23RISEINTERSECTS22GPTGOLDOVER5METERSATBRUNSWICK.pdf

https://www.risegoldcorp.com/uploads/content/JAN3INTERSECTSHIGHGRADEGOLDONBRUNSWICK1VEIN.pdf

Response to Comment Grp 7-165

The lithology between these samples is meta-andesite as shown on Sheet 7 of Appendix K.2. The serpentinite begins near the location of sample S-1 and is interpreted to be several thousand feet wide in that region as shown on Sheet 7.

Response to Comment Grp 7-166

These samples are taken at the contact of the meta-andesite and serpentinite unit as shown on Sheet 7 of Appendix K.2. Downhole or “below” theses samples is serpentinite as is shown on Sheet 7.

Response to Comment Grp 7-167

The page 510 referenced in the comment seems to be incorrect. The page discussed in the comment seems to be on page 667 of the Hydrology Technical Report pdf. (page 17/21 ACZ Analytical Report project number L57125.

ACZ Laboratories holds certification from the State of Nevada for acid-base accounting methods. Nevada is currently the only state agency offering this certification. https://acz.com/index.php/geochemistry/ The lack of California certification for these methods, cited by the commenter, is not relevant as California does not offer certifications for these methods.

Response to Comment Grp 7-168

The assumed crystalline silica content and modelling of respirable silica is conservative and overestimates the relevant exposure in any situation. Therefore, sampling of materials for crystalline silica content is not required. Please see Master Response 21 – Conservatism of Silica Assumptions.

Response to Comment Grp 7-169

The commenter questioned why drilling ceased when serpentinite was encountered. Drilling was stopped when the exploration geologist determined there was little potential for discovery of gold mineralization. Serpentinite is a poor host rock for gold mineralization and holes which encounter it are not continued in this lithology. Mining activity will not be focused in the serpentinite areas, and will attempt to avoid those areas, as there is little or no gold there. Asbestos sampling is not done at the same time as drilling and cannot be detected visually at the low levels present without sophisticated microscopy. Please see Responses to Comments Grp 7-157 and Grp 7-158 regarding volume of sampling and representation of rock types.

The commenter implies that more than 1% serpentinite will be mined because quartz veins run along contact points with serpentinite. Gold mineralization at the contact of meta-andesite and serpentinite are typically hosted in ankerite. Ankeritized serpentinite has negligible asbestos content due to the alteration of minerals that occurs during mineralization (See ASUR Plan - Appendix E.2). Maps showing lithological units and exploration drilling is provided in Sheets 4-7 in Appendix K.2.

The commenter questions why mine fill was analyzed at 14.3% serpentinite, when the DEIR assumed that only 1% of the mined material will be serpentinite. Contrary to the commenter's statement, engineered fill was not assumed to have 14.3% serpentinite; rather, the existing mine fill at the Brunswick site was assumed to have 14.3% serpentinite. Page 300 of the Air Quality Technical Report refers to existing mine fill at the Brunswick site which will be disturbed during site construction and assumes a conservative serpentinite content for the purpose of the health assessment due to limited testing in this area. The Hydrology Technical Report refers to estimated mining materials derived from proposed underground mining.

The Health Risk Assessment is based on conservative assumptions. Please see Master Response 22 – Conservatism used for Asbestos Assumptions.

Response to Comment Grp 7-170

The commenter asks how the ratios of the different types of rock to be mined can be known. The ratios of different barren rock types to be mined is shown in Table 4-5 of Appendix K.2 and is based on mine models developed by the applicant as shown on Sheet 15 of Appendix K.2. As stated in Section 4.4.1 of Appendix K.2, most of the underground work that would occur as part of the project would be tunneling to access the ore deposit and to provide access routes to move material and provide ventilation. These workings would be almost exclusively within barren meta-andesite rock. Cross-cuts into the mineralized veins would produce some altered meta-andesite, as well as diabase and serpentinite in some of the Idaho vein areas. The ASUR Plan, Mitigation Measure 4.3-2, and conservatism of assumptions in the Health Risk Assessment would ensure the protection of the public from heavy metals, silica, and asbestos should the ratio of rock mined vary from the assumed ratios estimated by the applicant.

Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP.

Assumptions used in the health risk assessment for respirable silica are already very conservative. Further sampling would reduce the impact from silica. Please see Master Response 21 – Conservatism of Silica Assumptions.

Metal content of dust emissions are considered in the health risk assessment based on sampling and material ratios presented in Section 4.4 of Appendix K.2. The Health Risk Assessment used conservative assumptions of metal content in fugitive dust. Please see Master Response 20 – Conservatism of Metals Assumptions.

Response to Comment Grp 7-171

The commenter asked why more testing was not done in the Brunswick area. As shown on Sheets 5-7 of the Hydrology Technical Report (Appendix K.2 of the DEIR), the Brunswick mine is hosted in meta-andesite. Numerous meta-andesite samples were submitted for laboratory testing. Please see Responses to Comments Grp 7-157 and Grp 7-158 regarding volume and representation of samples from cores.

Response to Comment Grp 7-172

The commenter asked how the data from the sampling can be extrapolated to 2,585 acres of mineral rights that could potentially be mined. Economic gold mineralization does not exist everywhere within the 2,585 acres of mineral rights, so the geology of much of the 2,585-acre area is not relevant. As shown on Sheet 15 of Appendix K.2, assumed mining areas are based on the projected down-dip extensions to mineralized veins that were historically mined.

The barren and mineralized rock samples used for the geochemical evaluation presented in Section 4.4 of Appendix K.2 were collected to obtain data regarding the general geochemical character of the different geologic formations that would be encountered during mining.

As described in Chapter 3 (page 3-19) of the DEIR, underground exploration would take place after mine dewatering is complete and throughout the life of the mine. Exploration would be done primarily with diamond core drilling throughout the mine area. Exploration would produce core samples that would be brought to the surface for analysis to determine future mining areas. Therefore, numerous additional samples would be taken throughout the mine life, and the mine operator can adjust mine planning depending on the information obtained from additional samples.

Response to Comment Grp 7-173

This is an introductory comment. The commenter's specific comments are addressed in the responses to comments below.

Response to Comment Grp 7-174

This is an introductory comment. The commenter's specific comments are addressed in the responses to comments below.

Response to Comment Grp 7-175

The commenter opines that the project does not have sufficient information to meet the standards set forth for Canadian National Instrument 43-101. Canadian National Instrument 43-101 and regulatory definitions of Mineral Resources and Mineral Reserves are public disclosure regulations designed for the protection of investors investing in Canadian markets and are not relevant to the CEQA process for approval of a mine permit. As described in Chapter 3 of the DEIR Underground exploration would take place after mine dewatering is complete and throughout the life of the mine and would be done primarily with diamond core drilling throughout the mine area.

Response to Comment Grp 7-176

The commenter states that the sample testing method used for the project is not consistent with standards for Australian mine projects. However, Australian mining standards are not applicable in California, and the commenter fails to note the additional waste rock characterization that is required in California as part of the Report of Waste Discharge under California law and as mitigation by the DEIR. The level of testing completed thus far is appropriate for analysis of impacts under CEQA, and additional testing will be required for approval of WDRs. Please see Master Response 8 – Mine Waste Characterization. Mining waste regulations applicable in California are described on pages 4.8-28 through -30 of the DEIR.

Section 4.4 of Appendix K.2 of the DEIR provides geochemical testwork conducted on tailings and barren rock samples from the project site. Testwork included Acid Based Accounting (ABA), Total Metals, and California Waste Extraction Testing (WET). The Waste Extraction Test (WET) should be used to determine the amount of extractable substance in waste rock (CCR Title 22 Division 4.5, Chapter 11, Article 5, Appendix II). The overall purpose of the barren rock and tailings sampling and laboratory analysis was to identify the general characteristics of that specific material type. Given that the objective was to understand the general character, the number of samples or the length of the samples compared to the total linear feet of core drilled for mineral exploration has no relevance. As such, the results of the barren rock testing provide reliable and representative results for consideration in the DEIR and for assessment of the potential effects of the use of that material for engineered fill and cemented paste backfill.

Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and received an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). As described in Chapter 3 of the DEIR, underground exploration would take place after mine dewatering is complete and throughout the life of the mine. Exploration would be done primarily with diamond core drilling throughout the mine area. Exploration would produce core samples that would be brought to the surface for analysis to determine future mining areas.

Response to Comment Grp 7-177

The commenter asserts that the discussion in the Project Description, Section 3.7 of the DEIR, regarding water treatment does not include adequate discussion of treatment methods, constituents of concern and water quality standards for the discharge. However, section 3 of the DEIR presents the Project Description; it is not intended to provide any engineering design details, analysis of project effects, or data that supports the analysis of potential effects. The water quality discharge standards are disclosed in the EIR, in Table 4.8-2 on page 4.8-44. The narrative on pages 4.8-42 through 4.8-45 of the EIR discusses the treatment requirements and summarizes

the treatment methods to be used along with permitting requirements for the discharge. Appendix K.4 of the DEIR contains the Water Treatment Plant Design Report.

Mitigation Measure 4.8-1(a) requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. The NOI shall include evaluation of potential constituents of concern and demonstrate that water treatment plant (WTP) design shall successfully treat mine water to meet the water quality standards and treatment goals. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 7-178

The commenter states that a monitoring plan should be required. A mitigation monitoring and reporting program will be required to enforce all mitigation measures imposed in the DEIR. With regard to water quality mitigation, Mitigation Measure 4.8-1(a) requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be received before initial mine dewatering can begin. The NOI will include water monitoring requirements for the permitted discharge. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 7-179

The commenter asserts that the information provided in the Project Description is insufficient regarding impacts from cemented paste backfill; however, Section 3 of the DEIR presents the Project Description; it is not intended to provide any engineering design details, analysis of project effects, or data that supports the analysis of potential effects. Discussion of the placement of CPB and the potential impacts of its use are provided in Chapter 4.8 of the DEIR, on pages 4.8-46 through 48-49. Section 4.4.2 of Appendix K.2 discusses and presents the results of DI-WET leach testing and acid-based accounting performed on four tailings samples (from which the mine backfill would be derived) for the project and Section 4.4.3 discusses the use of Portland cement in cemented paste backfill. Portland cement use of 25 tons per day (5% cement content in cemented paste fill) is assumed for the project as disclosed on page 295 of Appendix E.1. The grind size of the tailing's samples tested ranged from 80% passing 75 microns to 300 microns as discussed in Appendix H of Appendix K.2. The historic grind of ~80% passing 190 micron is assumed for the geotechnical study presented in Section 5.1.1 of Appendix H.1.

The "Desktop Study of Cemented Paste Backfill, ITASCA Denver, Inc. February 24, 2020." discusses in detail the tests on leaching characteristics performed for the project and concludes: "Based on the testing results described herein, Idaho-Maryland Mine flotation tailings have low sulfide content, are net acid-neutralizing, have solid-phase metals contents that are comparable to the average crustal abundances, and have leachate concentrations from WET-DI tests that meet all California primary MCLs. Thus, it is likely that the CPB used in the Idaho-Maryland Mine will have very low solute release rates and will be generally environmentally benign.

Response to Comment Grp 7-180

The commenter asserts that the DEIR does not include adequate sampling of rock to analyze water quality impacts from engineered fill placement, as compared to international standards. Please see Response to Comment Grp 7-177 and see Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 7-181

The commenter asserts that there is not sufficient engineering detail to ensure the engineered fill pads will be stable. However, engineering level detail is not required in an EIR. (Dry Creek Citizens Coalition v. County of Tulare (1999) 70 Cal.App.4th 20, 26.) The geotechnical engineering reports (Appendix H.1 and H.4 of the DEIR) provide specific grading recommendations for placement of mine waste as engineered fill in thin, horizontal lifts (layers). The new mine waste will not be placed on old mine waste or other existing fill unless the existing mine waste and fill is first reworked as engineered fill pursuant to the geotechnical engineering recommendations. The commenter may have misinterpreted the diagonal hatch pattern in the Rise drawings as represented end-dump layers. The hatch pattern does not represent the placement method and has nothing to do with the technical specifications for construction of engineered fill. The engineered fill is to be placed and compacted in thin horizontal lifts pursuant to the geotechnical engineering reports.

Response to Comment Grp 7-182

The commenter asserts that the seismic reports are not up to date and are inadequate because mine waste facilities need to withstand larger seismic events because of the long-expected life of the water facilities. The engineered fill will be composed of barren rock and dewatered tailings. No tailings ponds or "water facilities" for storage of mine waste are proposed. NV5 evaluated seismic risk and states on page 12 of Appendix H.1, "Based on our site observations, the geology of the region and our experience in the area, our opinion is that the risk of seismically induced hazards such as slope instability, liquefaction, and surface rupture are remote at the subject site."

The commenter also asserts that the description of the tailings in the geotechnical report for the Centennial site is inadequate. As stated on page 12 of Appendix H.1, the gradation similar to historic tailings gradation was assumed for analysis in the geotechnical report. The historic grind of ~80% passing 190 micron is shown to result in high gold recovery (97.2%) in metallurgical testwork provided in Appendix H of Appendix K.2. This assumption is representative of the tailings that will be placed as part of engineered fill.

Response to Comment Grp 7-183

The commenter asserts that the DEIR does not explain how tailings and waste rock will be blended to create engineered fill pads. However, NV5 provides recommendations for blending of rock and tailings on page 14 of appendix H.1 to the DEIR.

Response to Comment Grp 7-184

The commenter asserts that the likelihood of selling rock and tailings as construction aggregate is low because of potential sulfide contamination and liability issues. As explained in Section 4.4.1 of Appendix K.2, Sample MAA-1, which is the sample cited by the commenter as having 1.78% sulfide, is altered meta-andesite and this type of rock is expected to be a minor component of all materials produced (12 tons per day). Most of the underground work that would occur as part of the project would be tunneling to access the ore deposit and to provide access routes to move material and provide ventilation. These workings would be almost exclusively within barren meta-andesite rock that has low sulfide. As shown in Table 4-8 of Appendix K.2, samples MA-1, MA-1, MA-3 represent the unaltered meta-andesite rock where most tunneling would take place. For these unaltered meta-andesite samples, Sulphur HNO3 ranged from 0.02% to 0.27%. Tailings samples F-1 through F-4 ranged from 0.04% to 0.06%. As such, most of the rock produced by the project would not have significant sulfide content and would be suitable for use as construction aggregate.

Response to Comment Grp 7-185

As described in Section 3.0 of the DEIR, after full placement of fill at the Centennial and Brunswick Industrial sites to the pad design elevations hauling of engineered fill (barren rock and sand tailings) would shift entirely to be utilized in local and regional construction markets. With regard to storage of fill material on-site, please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets. No stockpiles of fill material are proposed on-site.

Response to Comment Grp 7-186

As discussed on page of Appendix K.2 of the DEIR, the restoration of the post-mining discharge through the drains would be comparable to existing conditions and, thus, not an impact under CEQA. However, once the mine discharge from the drains resumed, compliance measures may be required by RWQCB to address the Basin Plan, antidegradation, and other water quality standards. These measures might include sealing off areas of the underground workings that are the primary source of arsenic in the existing drain water, sealing the underground workings sufficiently to prevent seepage of water from the connected mine workings, obtaining an Individual NPDES permit upon closure, or treating of the mine water seeps after closure.

Mine water discharge is not part of the reclamation plan requirements of the California Surface Mining and Reclamation Act (SMARA); however, there will be water quality specific financial assurances for closure and post-closure maintenance of mining units as required by Title 27 section 22510. This may include the need for long-term water treatment of mine-related discharges. This issue will be addressed in the approval of the WDRs required by Mitigation Measure 4.8-1(d) and 4.8-1(e)).

Response to Comment Grp 7-187

The commenter asserts that the Union Hill Mine may have hydraulic connection to the Idaho-Maryland Mine and flooding may result. The Union Hill mine is discussed in Section 3.3.3.4 of Appendix K.2 of the DEIR. The Union Hill mine is a smaller mine than the others in the project area. It was closed in 1918 and has been flooded with water since that time. The Union Hill mine is not connected to any of the other underground mine workings in the area but is in close proximity to the workings of the Brunswick Mine. On April 17, 2019, the water level in the Union Hill shaft was 165 feet higher than the water level in the New Brunswick shaft. The Union Hill mine workings are within 95 feet to 180 feet of workings of the Brunswick Mine at three to four different levels. The Brunswick mine tunnels in proximity of Union Hill were constructed around 1950. During the post WWII period, the combined Idaho-Maryland Mine workings were completely dewatered. In 1956, the water level at the Union Hill Mine was reported to be within 20 feet of the top of the shaft, suggesting that the complete dewatering of the adjacent mine workings resulted in no more than 10 to 20 feet of water level decline in the Union Hill Mine.

A “conduit” has not formed between the mines in the previous 70 years, which included active mine operations, as evidenced by the different observed water levels. The proposed mine pumping and treatment system, with a maximum capacity of 2,500 gpm has significant excess capacity over maintain dewatering needs. Any necessary safety procedures or measures relating to flood risk would be regulated by the Mine Safety and Health and Administration (MSHA).

Response to Comment Grp 7-188

The commenter asserts that the drill hole intervals were not included in the DEIR’s analysis. However, the drill hole intervals and locations where this material is derived are shown on Sheets 5-7 of Appendix K.2 to the DEIR.

Response to Comment Grp 7-189

Section 4.4.2 of Appendix K.2 discusses and presents the results of DI-WET leach testing on four tailings samples for the project. The grind size of the tailing's samples tested ranged from 80% passing 75 microns (Sample F-1) to 300 microns Sample (F-2) as discussed in Appendix H of Appendix K.2. The historic grind of ~80% passing 190 micron is provided in Section 5.1.1 of Appendix H.1 and shown to result in high gold recovery (97.2%) in metallurgical testwork provided in Appendix H of Appendix K.2. The DI-WET leaching results as shown in Table 4-7 of Appendix K.2 shows that metal leaching from tailings samples is low for all grind sizes including for Sample F-1 which was ground significantly finer than the historic grind size.

Engineering level detail is not required in an DEIR. (Dry Creek Citizens Coalition v. County of Tulare (1999) 70 Cal.App.4th 20, 26.) Even without that detail, the DEIR concludes that the effect of the proposed actions on water quality could be significant. The mitigation measures identify the steps that must be taken to reduce the potential impacts to less than significant. The engineering details described in this comment would be developed through the mitigation measures.

Response to Comment Grp 7-190

The commenter states that a different leach testing method should have been used on the tailings and waste rock samples. As discussed below, the method of testing the rock was appropriate under California standards.

The California Waste Extraction Testing (WET) method was used to determine the amount of extractable substance in waste rock (CCR Title 22 Division 4.5, Chapter 11, Article 5, Appendix II).

The Central Valley Regional Water Quality Control Board (CVRWQCB) has prepared the guidance document: The Designated Level Methodology for Waste Classification and Cleanup Level Determination, Updated June 1989. https://www.waterboards.ca.gov/centralvalley/plans_policies/guidance/dlm.pdf

Page 24 of the guidance document states that the results of the acid-base accounting would indicate which extraction solution should be used in the WET. The citrate buffer is appropriate for any waste which has an ANP to AGP ratio of less than 3:1. Deionized water could be substituted for the citrate buffer for wastes having an ANP to AGP ratio of 3:1 or greater.

As shown in Table 4-8 of Appendix K.2, the ANP to AGP ratios for all samples except for MAA-1 are greater than 3:1 and the use of distilled water is appropriate under the guidelines. A citrate buffer should have been used for sample MAA-1. However, this is a minor component of the barren rock and further testing will be required in the RoWD/WDR process.

Section 3.3.4 of the Designated Level Methodology Guidelines defines the Soluble Designated Level (SDL) for a constituent of a solid waste, expressed in milligrams of constituent per liter of extract from the Waste Extraction Test (mg/l of WET extract) is equal to: Water Quality Goal (mg/l) x Environmental Attenuation Factor ÷ 10. The technical report, Appendix K.2 of the DEIR compares the WET result directly to water quality goals in its discussions are therefore implies the assumption of 10 for the environmental attenuation factor. This is likely a conservative assumption as a "generic" environmental attenuation factor of 100 would more typically be assumed to make a preliminary assessment of how waste will be classified. (See page 32 of the Designated Level Methodology Guidelines)

Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and received an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). The waste characterization and required testwork may include using kinetic testing. Please see Master Response 8 – Mine Waste Characterization.

As the commenter notes, WET results for aluminum presented in Table 4-7 are generally higher than the screening levels and low threat discharge permit limits presented in Table 4-10 of Appendix K.2. The total content of aluminum in the samples are not unusual and range from 421 to 41,300 mg/kg. This is significantly lower than the average crustal abundance of aluminum of 83,600 mg/kg (See Table 3 of Itasca Desktop Study of Cemented Paste Backfill). As discussed above, the potential impact of aluminum to water quality would be thoroughly investigated during the RoWD/WDR process required by Mitigation Measures 4.8-1(d) and 4.8-1(e). Any monitoring requirements would be specified in the approved WDR.

Response to Comment Grp 7-191

The commenter asserts that antimony should be monitored in the mine discharge water. WET results for antinomy presented in Table 4-7 are higher in samples MAA-1 and MS-1 than the screening levels and low threat discharge permit limits presented in Table 4-10 of Appendix K.2. The total content of antimony in these samples is also elevated. However, the lithologies represented by these samples are expected to be a minor proportion of barren rock (15 tons per day) produced by the project as explained in Section 4.4.1 of Appendix K.2. Any monitoring requirements, including monitoring for antimony, would be specified in the approved WDRs.

Response to Comment Grp 7-192

WET results for arsenic presented in Table 4-7 are higher in sample MAA-1 and MS-1 than the screening levels and low threat discharge permit limits presented in Table 4-10 of Appendix K.2. The total content of arsenic in these samples is also elevated. However, the lithologies represented by these samples are expected to be a minor proportion of barren rock (15 tons per day) produced by the project as explained in Section 4.4.1 of Appendix K.2 to the DEIR. Any monitoring requirements, including for arsenic, would be specified in the approved WDRs.

Response to Comment Grp 7-193

WET results for copper presented in Table 4-7 are higher in tailings samples F-3 and F-4 than the screening levels and low threat discharge permit limits presented in Table 4-10 of Appendix K.2. The total content of copper in the samples tested are not unusual and range from 27 to 141 mg/kg. This is similar to the average crustal abundance of copper of 68 mg/kg (See Table 3 of Itasca Desktop Study of Cemented Past Backfill). Any monitoring requirements, including for copper, would be specified in the approved WDRs.

Response to Comment Grp 7-194

As discussed on page 116 of Appendix K.2, water currently within the flooded mine workings has low dissolved oxygen (DO) levels, creating reducing conditions (low or no dissolved oxygen present and negative oxygen reducing potential). The low oxygen levels and reducing conditions prevent the oxidation of sulfide minerals, such as pyrite, that are exposed within the surfaces of the underground workings.

Please see Response to Comment Grp 7-190 regarding the use of deionized water in WET testing.

Any monitoring requirements, including for iron and manganese, would be specified in the approved WDRs.

Response to Comment Grp 7-195

The commenter states that nitrate will be higher than expected in mine water discharge. As discussed on page 4.8-48 of the DEIR, the primary residual components of the ammonium nitrate-fuel oil (ANFO) used for blasting, ammonia and nitrate, are very soluble and mobile in water. This means that any blasting residuals would be continually removed from the mine over time through the dewatering system. The proposed WTP is designed to treat ammonia and other blasting residuals that might occur due to incomplete detonation. Thus, when the mine is allowed to flood again following the completion of mining, there is no reasonable potential that residuals from former blasting activities would cause a violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. As stated on page 4-5 of Appendix K.4, low concentrations of NH3 may occur as a result of explosives used during periods of active mining and will be removed by the aeration process. If required, the efficiency of this aeration can be enhanced by increasing the pH. This will generate more of the gaseous form of NH3 which can be stripped from the water. Therefore, as a contingency component for Fe (and Fe/As), Mn, and ammonia treatment, sodium hydroxide (NaOH) will be included in the permitting efforts for pH adjustments should it become necessary to add alkalinity to the water for Fe (along with Fe/As) and Mn treatment, or to treat NH3 more efficiently or in higher concentrations than have been previously detected. In regard to ammonia treatment, this may occur as a result of explosives used during periods of active mining. Also see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 7-196

The commenter states that sulfate will be higher than expected in mine water discharge, but does not provide any evidence of that statement. Monitoring requirements for sulfate would be specified in the approved WDRs.

Response to Comment Grp 7-197

The commenter states that sulfide-sulphur is not reported on a per-sample basis. The purpose of the acid-base accounting (ABA) analyses is to identify the total acid generation potential and the total acid neutralization potential. However, the presence of individual sulfur forms for each sample analyzed is shown in Table 4-8 of Appendix K.2.

Response to Comment Grp 7-198

Mitigation Measures 4.8-1(d) and 4.8-1(e) requires submittal of a RoWD and approval of WDRs, which will address monitoring requirements and identify constituents of concern. The CVRWQCB will select the appropriate continents that require monitoring, which may include antimony, copper and nitrate as requested by the commenter.

Response to Comment Grp 7-199

The commenter states that leach tests for cement paste backfill need to be completed. The "Desktop Study of Cemented Paste Backfill, ITASCA Denver, Inc. February 24, 2020" discusses in detail the tests on leaching characteristics performed for the project and concludes: "Based on the testing results described herein, Idaho-Maryland Mine flotation tailings have low sulfide

content, are net acid-neutralizing, have solid-phase metals contents that are comparable to the average crustal abundances, and have leachate concentrations from WET-DI tests that meet all California primary MCLs. Thus, it is likely that the CPB used in the Idaho-Maryland Mine will have very low solute release rates and will be generally environmentally benign."

Mitigation Measure 4.8-1(d) requires the applicant to submit a Report of Waste Discharge (RoWD) and received an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill, so additional testing will be done as requested by the commenter.

Response to Comment Grp 7-200

The Commenter asserts that the DEIR has a fundamental lack of information on the economic viability of the mine, and potential environmental impacts related to geochemistry and water quality. Geochemistry and water quality are addressed in detail in Chapter 4.7, Hydrology and Water Quality, of the DEIR, and the accompanying technical reports, namely Appendix K.2 of the DEIR. The economic viability of the mine is outside the scope of CEQA.

Based on the Commenter's above summarized assertion, he states the DEIR should analyze an alternative that provides for dewatering and underground exploration without allowing for mining. This proposed alternative is not economically feasible because there is significant cost with dewatering the mine, including construction of a water treatment plant, installation of a potable water pipeline to provide water to affected well owners, and underground access and safety improvements necessary to complete the suggested exploration phase. The proposed alternative would be economically infeasible because all the above costs would be incurred without the ability to produce any valuable minerals to offset that cost. Additionally, the proposed alternative would not meet the first project objective, which is "Construct a commercially viable, financeable, major underground gold mine operation that will produce 1,000 tons per day (365,000 tons per year) of gold mineralization." As the proposed alternative does not meet the first project objective and would be financially infeasible, the alternative is rejected from further consideration.

Group Letter 8

Community Environmental Advocates FOUNDATION
PO Box 972, Cedar Ridge, CA 95924-0972
www.cea-nc.org / email: info@cea-nc.org

March 30, 2022

To: Matt Kelley, Senior Planner
Nevada County Planning Department Staff
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
Email: matt.kelley@co.nevada.ca.us
DEIR Comment Email: idaho.mmeir@co.nevada.ca.us

Re: Comments on the Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine Project (Project, Mine)

Note documents cited and submitted under separate cover:

- Baseline Environmental Consultant Report, Feb 15, 2022 (Baseline).
- Salter Report, March 9, 2022 (Salter).
- Comments on the Draft EIR for the Idaho-Maryland Mine Project - 16Mar22, Center for Science in Public Participation (CSP2).

Grp 8-1

Our review of the DEIR has identified significant issues regarding the adequacy, completeness, and conclusions of the report.

Aesthetics

Grp 8-2

Images of the facilities presented in the DEIR are not a fair representation of the actual visual character of the project; consequently, the DEIR understates the Project's visual impacts. The perspectives reduce the perceived size of the structures, and the viewpoints are often restrictive in terms of providing a full view. To provide an accurate representation of the project, the revised DEIR must provide better viewpoints that preserve a 1:1 accuracy with the true width to height ratios of the structures.

Grp 8-3

The use of an "erosion control seed mix" for reclamation of the mine waste piles will create the image of a dead zone, especially during the dry seasons. Native vegetation including deciduous and evergreen bushes and trees should be required as a mitigation to reduce the stark contrast between the disturbed site and the normal (current) vegetation.

Air Quality

The DEIR provides no evidence that the project's long-term NOx, ROG, and PM10 emissions will be mitigated to a less-than-significant level.

Grp 8-4 The DEIR fails to adequately mitigate the Project's air quality impacts. It relies on a bare minimum of mitigation measures recommended by the Northern Sierra Air Quality Management District (NSAQMD) to address air quality impacts, and these measures only address emissions during a one year period of construction. As we explain below, construction will certainly last longer than one year. In addition, the mitigation measures do not address the long-term emissions that will result from 80-years of mining operations associated with the Project. As a result, there is no evidence that the Project's long term emissions have been mitigated to a less-than-significant level, as concluded by Baseline Engineering Consultants (Baseline).

The revised DEIR must identify feasible and effective mitigation measures that address emissions from 80-years of mining to ensure that emissions are kept at less-than-significant levels. Otherwise, the EIR must identify these long term impacts as significant and unavoidable.

Mine exhaust moisture creates potential air quality, hazard, and aesthetics impacts.

The DEIR provides no information about the potential obstruction of the airspace surrounding the airport. (See also, "MineExhaustMoisture, attached as a reference to this letter). The Loma Rica Drive Industrial Area Plan states:

Grp 8-5 "Any proposed object or structure which would penetrate any imaginary surface is considered by the FAA to be an obstruction to air navigation and requires an FAA aeronautical study to determine whether a potential obstruction will have a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft." (Loma Rica Drive Industrial Area Plan, May 27, 2008, p38-39)

Although the DEIR does not disclose it, the mine ventilation system would discharge 200,000 cfm of saturated air at 68F degrees from the top of the headframe with an upward velocity of 7.7ft/sec. (DEIR Appendix E.1_AQ-GHG Report (p371 of 1938)) The headframe is located within the Loma Rica Airport Safety Zone 5. Under some weather conditions, the large volume of air exhaust may form a persistent cloud plume or fog. In addition, the large mass of air moving upwards may create turbulence, also a potential hazard. These are potentially significant and unavoidable impacts..

Grp 8-6

Grp 8-7 This plume and associated fog as well as the tall headframe will also result in potentially significant visual impacts in this rural area where this type of view is not expected.

Grp 8-8 The revised DEIR must evaluate the following relative to the headframe and moisture emissions:

- When will these conditions be present and to what extent?
- What are the aesthetic and aircraft hazard impacts?

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Air Quality

Management of safeguard controls for asbestos is inadequate.

(See "ASUR Plan Analysis.pdf", attached as a reference to this letter. Portions of that document are summarized here.)

Grp 8-9 The plan described in the DEIR for managing asbestos-laden mined materials is inadequate. Asbestos is likely to be released during underground blasting, crushing, and ore processing. It also is released during material handling, on-road transport, placement grading and compaction. The DEIR states that the Asbestos Management Plan would ensure that average mined material and engineered fill contains less than 0.01% asbestos. (DEIR 3-20) Testing the asbestos content, however, does not control the amount of asbestos in the actual material mined. To control the average amount of asbestos in output materials (and to avoid significant impacts related to asbestos exposure), the DEIR must ensure that asbestos levels do not exceed this threshold. Currently, the DEIR does not include any evidence that asbestos levels will not exceed this threshold.

Grp 8-10 The testing process may require up to two weeks before the results are known, yet the Project calls for daily mining activity to continue during this time. This daily mined material would have to be stockpiled while awaiting the test results, which could expose workers to dangerous levels of asbestos. The DEIR does not disclose this fact nor does it analyze the associated impacts.

Grp 8-11 In addition, if the running average of asbestos in the daily mined material exceeds the required threshold, batches containing higher asbestos levels would have to be stockpiled in order to be later paired up with batches having lower asbestos levels. The DEIR does not disclose this fact nor does it analyze the associated impacts or recommend mitigation measures.

Grp 8-12 The mineral processing described in the DEIR does not address the need for stockpiling materials or address the likely impacts of such efforts. The Asbestos Management Plan provided in the revised DEIR must detail all of the steps necessary to carry out the correct management of this hazardous waste, including the location and organization of stockpiled materials, and adequate safeguards to avoid fugitive dust emissions and potentially hazardous conditions.

These deficiencies point to potentially significant and unavoidable impacts and must be analyzed in the DEIR.

The management of fugitive dust after it leaves the mining facilities is inadequate.

Grp 8-13 In 1986, asbestos was identified by the California Air Resources Board (CARB) as a TAC. CARB also determined that there is not enough scientific evidence to identify an asbestos threshold level below which no significant adverse health effects are anticipated (17 CCR 93000,Implementation Guidance Document 2017, CARB pg 1) (See Health Risk Assessment Critique (HRA Critique), attached as a reference to this document.)

As a TAC, asbestos, as well as respirable crystalline silica, fall under the non-criteria air pollutant category because they lack an identified safe "threshold level below which no significant adverse health effects are anticipated." There are no established limits for monitoring emissions of non-criteria

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air pollutants, silica and asbestos, into the ambient environment. The Health Risk Assessment is based on 30 years of exposure, so the cumulative effects from 80 years have not been addressed. Both silica and asbestos are inert substances not subject to environmental degradation that will have potential impacts beyond the 80-year project permit (HRA Critique).

The revised DEIR should establish asbestos mitigation protocols and robust monitoring systems of waste rock during transport and disposal to ensure the protection of workers and the public from the adverse health effects associated with the TACs, asbestos, and respirable crystalline silica. Without identifying clear and achievable mitigation measures, the DEIR must identify this as a significant and unavoidable impact.

The DEIR Health Risk Assessment used invalid meteorological data to determine emissions and should be redone.

Grp 8-14

Toxic Air Contaminants (TAC) are toxins which may cause or contribute to an increase in death or serious illness from cancer and other acute or long-term diseases. TACs may cause health damage even at extremely low levels, and are found in, among other items, vehicles, off-road equipment, blasting emissions, and fugitive dust sources. (HRA Critique)

TAC ingredients include particulate matter from diesel emissions, asbestos dust, silica dust, heavy metals, ammonium nitrate fuel oil, hexavalent chromium, and radon – all of which will be produced by mining activity, and which can become airborne, traveling on wind currents toward population centers around Nevada County.

Many establishments are located within a two mile radius of the mine including the hospital, assisted living facilities, health centers, physicians' offices, non-profit organizations, business parks, county offices, shopping centers, apartment complexes, and hundreds of private residences. TAC releases from the mine have the potential to adversely impact these receptors.

In Nevada County, the mortality rate from Chronic Lung Disease is already – without the added toxic emissions from the mine – double the statewide rate. Nevada County also has higher-than-state-average levels of air pollutants, ozone and particulate matter, radon, chronic disease, an aging population, and poverty. Given the extent of health risk to so many and so wide a range of people, the DEIR's health risk assessment is completely inadequate.

The HRA relies on questionable assumptions. The model relies on meteorologic input data, with the quality, quantity, speed, and direction of travel of the air toxins dependent on these meteorological factors. Yet the meteorological data input used by Rise comes from a Blue Canyon site - not from a Grass Valley site - an area with a significantly different meteorological profile than that of Grass Valley.

Blue Canyon, located on Highway 80, bears little meteorologic resemblance to Grass Valley: it notably deviates from Grass Valley in elevation, temperature, rainfall, snowfall, wind speed, and wind

direction. Using Blue Canyon's meteorologic data will not correlate with Grass Valley meteorologic data under any circumstance, making any TAC statistic invalid.

Therefore, the DEIR's Health Risk Assessment must be revised using valid meteorological data, in order to accurately assess the potential health impacts of the mine's toxic air. Once the HRA is revised, the DEIR must also be revised and recirculated for public review and comment.

Radon levels need adequate assessment.

Grp 8-15

The DEIR does not disclose the background radon level of all homes and properties near the project. The DEIR also does not disclose the effect that dewatering or mining operations including blasting will have on radon levels. Nor does it describe the effect that mining operations will have on radon levels.

It also does not explain whether blasting operations will increase radon and, if so, the environmental impacts of increased radon levels. The revised DEIR must provide a comprehensive analysis of radon-related impacts.

Biological Resources

Proposed mine dewatering activities have the potential to have asignificant impact on dependent biological resources.

Grp 8-16

The DEIR fails to adequately address biological and aquatic resources, and hydrological impacts to those resources.

The DEIR's biological surveys exclude an entire reach of South Fork Wolf Creek (SFWC). Species of special concern are inadequately considered and qualitative data for benthic macro-invertebrates (BMI) is missing. (Wolf Creek Community Alliance (WCCA), Benthic Macroinvertebrate Analysis, 2007)

Aquatic resources are excluded through an inaccurate hydrological assessment of the full length of SFWC, ignoring the connectivity of the creek upstream and downstream of the culvert on the Mine property, thus failing to consider the movement of trout and other aquatic species.

Grp 8-17

Hydrological impacts due to mine dewatering into SFWC are inadequately studied, mischaracterized, or not considered. The initial dewatering rate of 2500 gallons per minute (gpm) would be followed by 80 years of subsequent operational dewatering at 850 gpm and as much as 2500 gpm. The DEIR fails to adequately consider this long-term higher rate of discharge. Nor does the DEIR consider the seasonality of stream flow, loss of streambed or streambank habitat, changes in temperature, differences in Specific Conductance (EC), and habitat for BMI. Drawdown of the water table due to dewatering is also underestimated and its impacts to meadow, wetland, and forest habitats are not considered. Further, the DEIR fails to consider chronic and cumulative impacts to BMI, trout, and other aquatic species, including special concern amphibians. (WCCA)

Overall, because the DEIR does not adequately address biological and aquatic resources or sufficiently analyze hydrological impacts, this document must be revised.

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Centennial Site - Biology

Grp 8-18

Removal of flora, fauna, topsoil, wetlands and overburden down to bedrock to prepare the Centennial site for mine waste dumping represents a significant impact.

The Project calls for the removal of flora, fauna, topsoil, wetlands and overburden down to bedrock to prepare the Centennial site for mine waste dumping. The DEIR fails to adequately address impacts to these resources. It must be revised to provide this analysis.

Baseline vegetation conditions are unknown.

Grp 8-19

The DEIR is required to identify all special status species within 5 mi of the site. Note that the 5 mile radius map on Appendix F.3, page 33, is located in the wrong spot, approximately ½ mile from the site. The 5 mile zone must be corrected to include the correct area, and any additional species within that area must be identified.

The Draft RAP is still under review by the Department of Toxic Substances Control (DTSC) and thus the baseline conditions for the evaluation of biological and other impacts are based upon speculation. For example, the following statements are provided:

Grp 8-20

- Biological, vegetation communities: "...because it cannot be precisely established for the baseline condition given that the baseline has been adjusted to account for the separate remediation efforts that will be conducted..." (DEIR 4.4-3).
- Biological, aquatic resources: "...the exact acreages of each aquatic resource type cannot be precisely established for the baseline condition given that the baseline has been adjusted to account for the planned remediation efforts that will be..." (DEIR 4.4-10).

Grp 8-21

Approval of the Draft RAP by DTSC is uncertain. Consequently, the revised DEIR must use a baseline of "existing conditions."

Wetlands will be unnecessarily destroyed.

Grp 8-22

The Centennial RAP remediation requires placement of four feet of topsoil as cover material over the treated areas. The areas will then be revegetated. This is a temporary fix. Later, the topsoil will be removed and engineered fill from the mine operations will be placed on this area, forming the new mining operation's tailings pile.

As stated in the RAP draft, the topsoil for the RAP remediation will be coming from onsite "borrow" areas, and to obtain it, wetlands will be destroyed, a significant impact. However, the destruction of the wetlands could be substantially reduced by not removing the soil from those "borrow" areas. This is a feasible mitigation which must be discussed in the revised DEIR.

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In addition, the DEIR fails to identify where the cover soil will be placed after the remediation is completed in order to begin placement of mine waste from the Project operations.

Grp 8-23

- Will it be stored on site? Where?
- Will it be hauled off site? Where?

The revised DEIR must disclose this information and must analyze the associated direct and indirect environmental impacts.

Pine Hill flannelbush is not adequately protected.

Grp 8-24 The planned work to physically close the South Idaho Shaft and Tunnels on the Centennial site and the DEIR does not adequately document its phasing. This work is planned to take place before mine waste is dumped on the Centennial site and could conceivably be implemented prior to the DTSC Cleanup on that site. The DEIR fails to map the location of the shaft, tunnels, and all related work on the shaft as it relates to the Pine Hill flannelbush. The revised DEIR must analyze impacts to Pine Hill flannelbush caused by this phase of construction. Given the possibility that South Idaho work could proceed independently, and that the DTSC work could conceivably take place in conjunction with that work or be impacted by that work, the revised DEIR must include a clear work phasing plan to guarantee adequate protection of the flannelbush.

Grp 8-25 Within the DEIR's "Appendix F.3_The Centennial Impact Tech Memo" and Appendix F.4_Centennial HMP Pine Hill flannelbush.pdf", and others, the phrase "should be avoided" is used repeatedly as a guidance for protecting biological resources. The word "should" is unenforceable. It must be corrected to "shall" or "must".

Grp 8-26 The DEIR's Habitat Management Plan for Pine Hill flannelbush proposes to remove 18 plants. It also indicates that four plants are located within 30 feet of the edge of the engineered fill and could be impacted. The DEIR does not disclose why these 18 plants must be removed. The DEIR's mitigation should be revised to eliminate the need to remove these plants.

Grp 8-27 The DEIR must also include information on the relocated re-establishment time required for transplanted plants, and site activity phasing must be provided to ensure that the re-establishment time is included.

Grp 8-28 Impacts to the Pine Hill flannelbush as the DEIR is currently written are significant and unavoidable. The DEIR must be revised to evaluate these impacts and provide feasible and effective mitigation.

Centennial Site

Grp 8-29 **The DEIR does not adequately define the Mine Project to include the Centennial site and accordingly, fails to identify all potential impacts.**

The DEIR fails to adequately address impacts associated with the Centennial Industrial Site (Centennial). This site is the location of hazardous waste left over from past Idaho Maryland Mine operations. The DEIR assumes that the Centennial site will be cleaned up before the use of the site for

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deposition of new mine waste. Yet the significant work which is needed to accomplish this clean-up is not disclosed nor evaluated in the DEIR. Rather, the DEIR assumes that the clean-up has already been accomplished, and uses the post clean-up conditions as the baseline for some of its environmental impact assessments.

The DEIR does not describe the current physical conditions of the Centennial site or include the necessary clean up of the existing contamination at that site as part of the Project because it assumes that Centennial will be cleaned up prior to the start of construction. As discussed above, the clean up for Centennial has not been approved by DTSC and it is unclear when DTSC might approve the clean up. Consequently, it cannot be excluded from this DEIR. As a result, any assumptions about baseline conditions for purposes of assessing impacts to the Mine Project are speculative at best, and at worst, significantly underestimate the actual impacts of the Project.

Grp 8-29

The current conditions of the Centennial site must be used as the DEIR baseline in order to meet the CEQA requirements for a full analysis of the impacts of the Mine Project. Moreover, the Centennial clean up should be included as part of the Project to address the whole of the action under CEQA. In order to accurately assess impacts, the existing conditions, or baseline, of the Project must be the current state of the Centennial site, not a speculative future condition.

The DEIR states that Rise intends to complete the site cleanup independently of the mine, but no final plans have been provided. Currently a Draft Remedial Action Plan (RAP) for the cleanup of the Centennial Site is being reviewed by the DTSC.

The assertion that Rise intends to complete the cleanup regardless of the status of the mine project is not credible. This statement was made to avoid addressing the impacts of the cleanup within the DEIR. It is clear that the RAP and the IMM Project are integrally related:

- The Draft RAP states that the site is being prepared for mine waste.
- The Draft RAP calls for preparing the site for mine waste, including removal of vegetation, removal of soil down to solid base to create a solid base for planned mine waste dumping.

Cumulative impacts to groundwater will result from Centennial site cleanup.

Grp 8-30

Groundwater recharge will be reduced by the proposed Centennial cleanup project as described in the Draft RAP. This is due to plans to move contaminated materials into the east portion of the site and cover with a cement and small aggregate (spread onsite and rotary mixed) impermeable layer of materials. In addition, the project would require that wetlands be removed. The DEIR fails to disclose that wetlands and marsh-like vegetation slow the surface flows and allow more water to percolate into the ground. The revised DEIR must take this into account when determining the project's effect on groundwater recharge combined with groundwater impacts from the remainder of the project.

Grp 8-31

Preparations for mine waste dumping is proposed to take place up to the boundaries for protected species, wetlands, and riparian setbacks. It is difficult for heavy equipment operators to perform tasks in close proximity to boundaries, and if excavation is involved, even hand work can create impacts. For example, on the Centennial site, the removal of top soil down to bedrock for mine waste dumping may involve pulling away of the supporting soil for protected areas. Soil can collapse from beyond the boundary, roots can be damaged, etc. The DEIR fails to analyze any of these impacts. The revised

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DEIR must provide this analysis and identify feasible mitigation for these impacts. Mitigation must include, at a minimum, the establishment of an additional buffer zone between a protected area boundary and an allowed work area, with consideration of the particular activities governing the amount of buffering that is appropriate. This buffer zone must be mapped.

Nor does the DEIR disclose whether the soil, the vegetation, and the vegetation roots within the boundaries of the protected areas would be protected during excavation. It is imperative that excavation not cause soil loss or damage.

Economic and Housing Impacts

Grp 8-32

The mine will bring new employees, many of whom will likely be renters in the low and moderate income wage levels, worsening the already impacted housing market. Physical impacts can result from a tighter housing market: For instance, the numbers of middle and low income workers commuting into Grass Valley will increase. Also, the project may cause a trickle down effect of increased homelessness and a corresponding increase in homeless encampments in impacted wildland areas.

These issues and associated mitigation must be discussed in the DEIR. For example, mitigation should be identified to ensure that sufficient affordable housing is provided nearby for the project's employees.

Hazards and Hazardous Materials

Drawdown of groundwater within the mine workings may increase the potential for settlement or collapse of shallow workings which will affect individual property owners directly.

When the water level in the mine workings is located near the ground surface, the drawdown of groundwater within the mine workings may increase the potential for settlement or collapse of shallow workings that were not formally closed. These issues are discussed in "DEIR Appendix H.6_Geotech Review of Near-Surface Features.pdf"

Grp 8-33

The building at 125 Spring Hill Drive sits on top of the Eureka Shaft. Though it was studied in 1985 and design recommendations for closing the shaft were produced, the actual method of closure is unknown. The DEIR provides no documentation or explanation about how these shaft closures will be carried out. Mine water is 35 feet down at the 125 Spring Hill Drive site. Though the DEIR states that the water is "likely in bedrock", it is not verified and dewatering could cause settlement or other damage.

The DEIR states that the mine applicant will "assist" businesses that sit atop mine works which may be affected by mine operations but the DEIR does not identify a financial assurance mechanism to compensate the landowners (including 125 Spring Hill Drive) if the dewatering causes damage or loss.

The Eureka Vertical Shaft is under the sidewalk and pavement at Spring Hill Dr and IM Rd. The water level is 17' below this location. Again, the DEIR does not identify any assurance that the City and/or land owner would be compensated if the dewatering causes damage or loss.

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Grp 8-34

There is potential for sinkholes to occur where undocumented mine features may exist, particularly in areas where current mine water levels are closer to the surface. One example was some settlement caused by an unknown feature that was observed approximately 5 years ago approximately 100' South of the Idaho Pump Shaft (DEIR H.6, pg5)

Grp 8-35

The DEIR makes no clear statement of liability about what happens if historic mine works settle around the near surface features as a result of dewatering. This leaves private business and local government vulnerable to assume the costs from failed mine infrastructure. This is a potentially significant and unmitigated impact. The revised DEIR must provide a full analysis of these impacts and identify feasible and effective mitigation.

Grp 8-36

The DEIR inadequately describes potentially hazardous waste rock and mine tailings management.

As pointed out by Baseline Engineering Consultants (Baseline), the legacy contamination from prior mining indicates that the types of rock historically mined at the site contain heavy metals and, when excavated, these waste rock and mine tailings have been found to contain contaminants that pose a potential risk to people and the environment.

"Neither the DEIR Project Description nor the Hazards and Hazardous Materials section adequately describes how future waste rock and mine tailings generated by the proposed project would be managed to ensure that they do not pose a health hazard to people or the environment (as the placement of similar waste materials from the same mine did in the past)" (Baseline).

The revised DEIR must provide adequate information about the potential risks of the waste rock tailings and all potential impacts.

Grp 8-37

Probabilities of collapse hazards are not adequately addressed.

In evaluating the potential risks due to existing near surface features, the DEIR makes the following claim and is used as the basis for the scope of the report:

"In addition, the underground mine workings focused on removal of quartz vein materials that are generally narrow, so the collapse of a deep (e.g., 100 feet bgs) mine feature is not likely to be expressed at the ground surface."(DEIR Appendix H.6, pg 2).

Note that "not likely" is an ambiguous metric that can be satisfied by a less than 50% chance of occurrence. This is not the same as "there is No Potential for collapse". The DEIR does not disclose the following:

- The estimated likelihood of occurrence: Is it greater than zero?
- Whether the mine workings would be confined to narrow quartz veins.
- Mine works include voids due to tunneling, stoping, etc. Given that the mine works were in a fractured rock geology and may contain additional mine features such as stopes near surface but below 100', what is the justification for this 100' determination?

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Grp 8-38

In addition, the DEIR fails to analyze the potential for collapse from all existing mine features. It also fails to evaluate the effects upon legacy mine works due to combined destabilizing activities such as dewatering, earthquakes, and use of explosives. The revised DEIR must provide these analyses.

The DEIR's evaluation of seismic hazards due to faults and mining is inadequate.

Grp 8-39

The mine project would target potential ore bodies that are more or less bounded by the Morehouse fault, the 6-3 fault (Weimar), and the Idaho fault, as well as numerous lesser faults. While the faults in this area are designated as being in a type C fault zone, with low seismicity and a low rate of recurrence, the DEIR does not analyze the effect that a seismic event would have on the mine or workers in the mine. (See FaultingHazards, attached as a reference to this document.)

Throughout the 80 year life of the proposed project, expansion of mine works will remove 30 million tons of rock mass, and change the overall competency of the surrounding bedrock. In addition, several million tons of mine waste will be positioned over or near the faults. Finally, at the end of mine operations, the mine will re-flood, leading to an additional potential increase in seismic activity due to the re-introduction of hydrostatic pressures (FaultingHazards).

Grp 8-40

The seismic reports discussed in the Geology section of the DEIR are not up to date and, even if updated, would not meet the requirements for a probabilistic seismic site analysis. (CSP2, p7)

The revised DEIR must include a complete and comprehensive analysis of the potential hazards due to seismic activity as a result of the Mine Project.

Potential mine flooding and worker safety from groundwater occurrence in mine workings.

Grp 8-41

In the DEIR's discussion of the Union Hill Mine, it is noted, "The Union Hill Mine workings are within 95 feet to 180 feet of workings of the Brunswick Mine at three to four different levels. During the post WWII period, the combined Idaho-Maryland Mine workings were completely dewatered. In 1956, the water level at the Union Hill Mine was reported to be within 20 feet of the top of the shaft, suggesting that the complete dewatering of the adjacent mine workings resulted in no more than 10 to 20 feet of water level decline in the Union Hill Mine."

There are two important points to note in this discussion, (1) the Union Hill Mine is very close to the Idaho-Maryland at several levels; and, (2) there has been a possible weak hydraulic connection between the two mines, which is only logical.

There is no discussion in the DEIR of the potential impacts for the Idaho-Maryland Mine if flooding were to occur during mining. According to ITASCA's report (DEIR Appendix K.3, Figure 2-3), there are extensive abandoned mine workings above and adjacent to the Idaho-Maryland Mine that would remain flooded after the Idaho-Maryland is dewatered. If a conduit between these two mines were to open, for instance due to the widening of a fracture related to blasting vibrations or a seismic event, the flood of water into the Idaho-Maryland could be rapid and catastrophic for anyone working in the mine.

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The DEIR must be revised to evaluate the potential risks of flooding during mining operations, including potential risks to mine workers. (CSP2)

Greenhouse Gas Emissions

The DEIR relies on an arbitrary threshold for greenhouse gas emissions.

Grp 8-42

The DEIR states greenhouse gas (GHG) emissions from mine operations would be just under 10,000 metric tons (MT) of GHG carbon dioxide equivalent (CO2e) per year. This number was chosen as a bright line threshold based on other air districts in California that included Placer County, Sacramento Metropolitan Area, the Bay Area and Southern California. Neither the Northern Sierra Air Quality Management District (NSAQMD) nor the County have adopted numerical thresholds of significance for GHG emissions that would apply to the Project. The DEIR does not discuss the justification provided by each air district for adopting the 10,000 MT CO2e per year threshold, nor does it provide substantial evidence for applying this threshold to the project to demonstrate how it will achieve a fair share of the statewide GHG reductions goals for 2030 and beyond.

The DEIR must be revised to identify and provide justification for a GHG threshold of significance that will achieve the statewide GHG reductions goals for 2030 and beyond over the proposed 80 year lifetime of the mining permit. (Baseline)

The DEIR underestimates GHG emissions from haul trucks.

Grp 8-43

The DEIR states that the Centennial Industrial Site will be used for mine waste dumping to form "engineered fill" during the first 5 years of mine operations. The DEIR's analysis assumes that the Centennial Site remediation to remove toxic mine waste would be completed before the mine opens. However, since the remediation of the Centennial Site is not included in the DEIR analysis and, as indicated in the Project Description, may not be completed in any specified timeframe, "...it is speculative at best to assume that the Centennial Industrial Site will be available for fill placement." (Baseline)

To accurately account for the Project's GHG emissions, the DEIR should have assumed an additional five years of off site hauling at the beginning of operations. This additional hauling would generate significantly more emissions than disclosed in the DEIR. This also holds true for criteria air pollutants as well.

The GHG emission should be updated in the revised DEIR to include the prospect of the Centennial Site being unavailable for mine waste dumping.

Mining energy requirements would eliminate gains attained through the Nevada County Energy Action Plan.

Grp 8-44

The Nevada County Energy Action Plan calls for a 51% reduction in GHG emissions for electricity use by 2035, which is in close alignment with state goals. The Plan calls for residential energy reduction savings from building efficiency of 42 million kilowatt hours per year (kWh/Yr).

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The DEIR states the amount of electricity required to operate the mine would be approximately 49 million kWh/Yr (DEIR p. 4.3-59), which would erase any residential electricity savings attained by the Plan.

The total non-residential electricity use of the county in 2017 was 53 million kWh/Yr. So, GHG emissions from this one mining project alone would almost equal all other non-residential electricity use in the County and wipe out the projected 9 million kWhYr non-residential building efficiency savings.

Asking residents and business owners to cut down on their use of electricity while allowing the GHG emissions from the mine would be highly counter-productive and unfair. The DEIR must explain how the project intends to comply with the emission goals of the Nevada County Climate Action Plan.

The California Air Resources Board 2017 Climate Change Scoping Plan stated: "Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development." Given these facts, the DEIR must establish a net zero threshold for new GHG emissions from the Project and declare the project has significant and unavoidable impacts.

Cement manufacturing is not included in the DEIR's GHG analysis.

Cement manufacturing is a significant GHG source. The DEIR does not provide adequate information about the amount of cement that will be used for the cement paste backfill (CPB). Nor does it include GHG emissions from CPB. Based upon the number of cement truck trips, (468 trips/year, DEIR 4.3-53) and an 8 cubic yard payload of 9.2 metric tons, the emissions can be estimated.

Grp 8-45

The national weighted average carbon intensity for cement production is estimated at 0.97 metric ton CO_2/ton cement. Thus, each cement truck would contain cement that released about 8.3 metric tons of CO_2 when it was produced. Operationally, 468 truck trips would mean 3,884 metric tons of CO_2 were released in a year of cement production for the mine.

Therefore, the amount of cement manufacturing needed to create the CPB with 500 tons of rock waste per day constitutes a major GHG source contributing emissions on the order of 3800 metric tons per year of GHG CO_2e. The energy and environmental impacts of cement production used in the project should have been included in the DEIR.

The revised DEIR should provide adequate information to quantify these GHG emissions.

Grp 8-46

In addition, following initial onsite ore processing using sulfide flotation, the resulting gold concentrate would be shipped off site for further processing to extract the gold. The full energy and environmental impacts of further offsite transport and gold processing are not part of the DEIR and should have been included.

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Hazardous Materials

Provisions for temporary storage of explosives on the surface are inadequate.

Grp 8-47 Several years of construction activities will require explosives prior to the construction of the longer term explosive storage facilities underground. Explosives will be needed for the construction of the new access shaft, reclamation of existing mine works, and development of storage areas and waste rock processing areas. The revised DEIR must identify the quantity, type and management of early phase explosives during construction.

The DEIR's emergency evacuation analysis is inadequate because it only discusses the haul trucks but not trips associated with the mine's employees.

The DEIR's analysis (Section 4.7-4) of emergency evacuation impacts is inadequate. For example, it focuses on haul trucks but fails to analyze the effect the evacuation of mine employees would have on the emergency evacuation of area residents.

Grp 8-48 The DEIR, Table 3.8, "Operations Workforce", shows there will be 111 employees per shift adding roughly an equivalent number of vehicles exiting on Brunswick Road during an emergency evacuation.

The DEIR states that, "According to the Table 4.1 of the Circulation Element of the General Plan, Brunswick Road is considered a Minor Arterial, and thus, is not a primary evacuation route for the County." The DEIR neither addresses the safety plan for mine workers nor provides any mitigation if additional vehicles must use a minor arterial during an emergency evacuation.
Having to use a minor arterial for evacuations could result in a potentially significant emergency evacuation impact. The DEIR must be revised to provide a thorough analysis of these impacts. It must also fully mitigate for the Project's emergency evacuation impacts.

The DEIR provides no details about the transport and storage of any other explosive materials besides Ammonium Nitrate, specifically detonators, explosive magazines, and detonating cords.

Grp 8-49 The DEIR states the mine will use 257 detonators a day. Table 4.7-1, "Explosives Proposed to be Used at Project" lists nine different types of detonators. However none of these are listed on the Hazardous Materials Inventory Statement Form and there is no information about how detonators or detonating cords would be stored. Nor does the DEIR provide information about how many and often these explosive materials would be transported through Grass Valley. Only ammonium nitrate is included in the 28,000 pounds of explosives shown on the "The Brunswick Industrial Site Nevada County Department of Environmental Health Hazardous Materials Inventory Statement Form" submitted by Rise Grass Valley.

Without this information, it is not possible to evaluate the environmental impacts associated with the transport and use of explosive materials. The revised DEIR must specify the transport and management of all explosive materials used in mining operations, in addition to Ammonium Nitrate.

Curing of mass concrete can generate significant heat and needs to be managed.

The project would dispose of 500 tons/day of sand tailings back into the mine by using Cement Paste Backfill (CPB). The quantities of cement to be used in this process are not specified in the Cemented Backfill Study written by the consultant Itasca that was submitted by the applicant. The DEIR should provide a range of expected cement usage as a basis for determining the impacts of the CPB process.

No analysis of heat generated by CPB is provided in the DEIR. For example, using a standard 6:1 ratio of tailings material to cement would require 83 tons of cement per day. The curing of cement (hydration) is an exothermic reaction with heat emissions exceeding 230kJ/kg, depending upon the cement Type. Using a conservative value, the heat from curing 83 tons of cement/day would add over 17 million KJ/day* to the environment. The revised DEIR must address the thermal impacts of CPB, including the following:

Grp 8-50

- How much cement would be used daily?
- How much heat would the curing cement produce? Over what area?
- What would be the maximum temperature of the curing CPB?
- Would it exceed 158 degrees F?
- What would be the resultant average and maximum temperatures in the backfill areas over time due to the daily additions of CPB and the resultant heat generated by the curing of the CPB?
- What heat management mitigations would be put in place to avoid undesirable rapid curing conditions which could create long term problems in terms of chemical stability, permeability, and strength?
- What mitigations would be established to protect workers from excessive heat?

**[Heat of curing is dependent upon the cement Type. Here, we use Portland Type IV: Heat 55cal/g (note 1 cal/g == 4.184kJ/kg , 55cal/g * 4.184kJ/kg//cal/g == 230kJ/kg) (230kJ/kg x 907kg/ton == 208,610kJ/metric ton)*

Dewatering hazards are not discussed.

Upon initial dewatering, the physically sealed mine shafts such as the one under the Spring Hill Drive business will potentially experience a negative air pressure as the water level drops. The revised DEIR must address the structural impacts on existing infrastructure resulting from dewatering.

Grp 8-51

- How fast will the water level drop, and what volume of replacement air per hour would be necessary to equalize with atmospheric pressure within these sealed mine features?
- How will air enter the shafts as the water drops?
- How will this impact potential surface structures?
- Were the additional net load forces upon the sides and top of the shafts taken into consideration?

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The DEIR does not address potential riparian and surface water impacts from physical closure of the East Eureka Shaft.

Grp 8-52

East Eureka Shaft and the East Eureka Drain are located under an existing building near Wolf Creek. Will work to physically close the Shaft precede the dewatering? If so, will construction be conducted underwater and/or below Wolf Creek top of bank?

When the water level in the mine workings is located near the ground surface, the drawdown of groundwater within the mine workings may increase the potential for settlement or collapse of shallow workings that were not formally closed. These issues are discussed in "DEIR Appendix H.6_Geotech Review of Near-Surface Features.pdf".

Potential impacts from dewatering could affect five mine shafts or mine features that are listed to be investigated and closed before dewatering begins: the East Eureka Shaft and the East Eureka Drain at 815 Idaho-Maryland Rd, the Idaho Drain Tunnel, the Idaho Pump Shaft, and the Idaho Shaft at 865 Idaho-Maryland Rd. These closures would affect businesses located above or near these mine features. The work at 815 Idaho-Maryland must take place under the Navo & Sons business building. The mine feature at 865 Idaho-Maryland Rd is in the middle of an operations yard.

Grp 8-53

The mine water levels at the five identified mine features are near the top grade and close to Wolf Creek. The DEIR fails to adequately describe the phasing of this repair work and does not disclose whether this work would impact water quality within Wolf Creek or its habitat. For example, in order to work on repairing, lining, and capping the East Eureka Shaft under the Navo & Sons building, either the work must be done underwater or the mine would have to be partially drained. Per DEIR Appendix H.6, "*The likely course of action will be to over-excavate surface soil in the areas of these features to determine where competent, native soil/rock is located and attempt to identify the trend of any subsurface mining-related structures (i.e. tunnel, shaft, drift, etc.).*"'

The mine water level is only slightly above Wolf Creek's normal flow levels and the mine drain is below the top of the bank. Some or all of the work is within the high water level of Wolf Creek. These conditions could result in environmental impacts but the DEIR provides too little information to understand the severity and extent of these impacts. The revised DEIR must provide the following information:

- Would the work be done before any dewatering of the mine and hence be underwater?
- Much of this work would be below the level of Wolf Creek. If work is done before partially dewatering the mine, how would concrete placement be achieved without interaction with the mine water discharge into the creek?

Grp 8-54

- If the work is done after partial dewatering of the mine, how would the risk of subsidence be mitigated, given that the repairs are prescribed to take place before dewatering in order to prevent subsidence.

Grp 8-55

- What are the required permits for work within a watercourse? None are listed.

Grp 8-56

A revised DEIR must specify how repair of the East Eureka Shaft (and the other near surface mine features listed) would proceed and include mitigation measures to protect Wolf Creek and the properties near to the proposed repairs.

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Hydrology

Water quality related to cement backfill toxic discharge in mine water is not discussed.

Grp 8-57

The project plans to dispose of 500 tons/day of sand tailings back into the mine using Cement Paste Backfill (CPB). The use of cement and CPB could have serious effects on water quality, yet the DEIR does not analyze these impacts. Long term potential effects from CPB and leaching must be analyzed. The DEIR fails to identify the quantities of cement, or ratio of cement to sand tailings and fails to evaluate the potential short term and long term impacts on water quality.

Cement can contain hexavalent chromium, which is a toxic and carcinogenic substance that has been known to leach from cement in concrete, causing groundwater pollution. Safeguards to prevent the use of cement containing hexavalent chromium must be provided. How will this be accomplished?

The DEIR must be revised to provide a comprehensive analysis of the environmental impacts associated with the use of cement and CPB.

Assessments of the current mine water chemistry are inadequate.

The Hydrology Report (DEIR Appendix K.2, Table 4-10, p120) uses discharge screening limits and data from the New Brunswick shaft to define water treatment criteria. However, a more accurate sampling of mine water would be from the drains located along Wolf Creek rather than from the New Brunswick shaft, as described in the analysis of mine water flow (see DEIR Figure 4.8-7), which shows water entering the New Brunswick shaft then flowing downward through the extant mineworks to exit the drains at Wolf Creek (Eureka drain, East Eureka drain, etc.). Only a few samples taken from the drains were reported, but these samples are much more representative of the mine water chemistry and indicate higher levels of Iron, Manganese, Arsenic, Aluminum, and Zinc than the New Brunswick shaft samples (DEIR K.2 Tables 3-6).

Grp 8-58

In order to get an accurate assessment of the contaminants flowing out of the mine under varying conditions, regular testing must be conducted over time at the Mine drains. The testing must also be conducted seasonally during differing rates of outflow. Moreover, in order to provide the public with a conservative estimate of potential impacts, the DEIR should use the results from the drain samples rather than the New Brunswick shaft, which would show potential water quality impacts from higher level of metals, arsenic and zinc.

Additionally, because the water flowing out of the drains probably only comes into contact with a small portion of the 72 miles of mine tunnels, current drain water does not likely represent the chemistry of the mine water that will be pumped out once dewatering begins. The DEIR should be revised to provide a comprehensive evaluation of the current mine's water chemistry. As part of this analysis, the following questions/issues must be addressed.

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Grp 8-59

- Are there potential impacts from existing timbers and shoring on mine water quality?
- Were treated or rot resistant wood products used in the mine at any time?
- How has existing water quality been affected from the miles of pipelines, ore carts, rails, wiring, equipment, spilled oil products, chemicals and other miscellaneous materials which may have been left in the mine works?

Grp 8-60

A list of expected materials based upon historical records should be provided, and an assessment of risk, potential for contamination of the mine water, and a plan for their disposal provided.

- If detected, how will oil products be removed from mine water?
- If detected, how will Mercury and other contaminants be removed?
- Will the treatment facility have to be modified for any of the potential contaminants?

Grp 8-61

In previous operations up until the mine closed in 1956, a significant volume of mine waste or tailings was disposed of by backfilling the mine stopes. Water contained in backfilled stopes needs careful analysis due to potential leaching of contaminants when dewatering takes place. The amount of water is approximately 25 million cubic feet, or about half of the total mine water volume. This is a significant possible source of water contamination. The finely ground materials have been subject to oxidation already, they have been submerged for 75 years, and now would be subject to oxidation again as water levels drop, creating an increased potential for leaching of metals and metalloids. In addition, residues from ore processing such as mercury may be present. As the mine is dewatered, frequent regular testing of discharge must be done. The revised DEIR must provide the following information in order to evaluate the project's impacts:

- What plans are in place to test mine water as it is pumped out?
- How often will tests be conducted?
- What is the policy for ceasing or modification of pumping operations in the event of unexpected issues with water quality?

Additional analysis of the issues described above must be conducted to ensure an adequate understanding of these impacts which are potentially significant and unavoidable.

Grp 8-62

Most of the samples that were tested to determine potential water quality impacts are unreliable.

As detailed in "Sample QC Review", attached as a reference to this document, the environmental sampling data that was collected for determining potential water quality impacts fails to meet quality assurance standards, rendering the results unreliable. Most samples were received past hold times, and various samples were mishandled, mis-dated, submitted with temperatures exceeding the guidelines, and/or in too small a quantity to be measured. As a result, the consigned laboratories have denied certification of the data in several critical categories. In spite of this, the inadequate and often uncertified data was used in multiple consulting reports without any notation as to the validity of the compromised data.

For example all of the rock, tailings, soil, etc. samples that were used for the metals analyses were beyond their 6 months hold times, seemingly by at least 9 months, but records are inadequate. All 47

samples submitted to ACZ Laboratories were notated as "samples were received and analyzed past hold time." The bulk of the results were not offered for certification.

Grp 8-63

Findings regarding water quality, air quality, and hazards that are based upon this data are unreliable. Conclusions based upon this data must be reassessed based upon reliable sampling and analysis.

Drill core testing for water quality impacts is inadequate.

Given the size and scope of the proposed Project, there was an insufficient quantity of drill core rock analyzed to determine the mine's true impact on water quality.

By way of illustration, between 2017 and 2019, the applicant drilled for, and extracted, a total of 67,500 feet of rock core. But of these 67,500 feet of drill core, only 0.68% were submitted for analysis. And of the few samples that were submitted for analyses, a dearth of information is provided regarding the sample materials' true weight, volume, particle size, and sampling technique. Nor are the drill logs for these core samples available for review, so the actual dates, precise locations, drift angles, widths, final depths, etc. are unknown. Several times the DEIR refers the reader to a "separate report" which will explain some of these omissions, but no such report is found in the document or its appendices.

Grp 8-64

In addition to the limited sample size and the inadequate sampling details, four different labs were employed to carry out the analyses of the submitted samples, but the samples did not have a proper chain of custodies (COC) processes. The COC is a process that tracks the movement of samples through their collection, safeguarding, and analysis lifecycle between the mine applicant and the labs, but the COCs do not reflect the written account found in the DEIR.

The revised DEIR must provide an explanation for the discrepancies in the chains of custodies for the samples submitted to labs and provide evidence that the samples are scientifically reliable

This insufficient and unreliable data affects the accuracy of any analysis based on this data, such as an analysis of the metal leachate content of rock. Since metal leachate from mine rock affects water quality, analyzing metal leachate is one of the key concerns regarding the rock tailings produced by the Project. The limited amount of core material sampled and the imprecise manner in which the details of the core samples are reported makes the metal leachate analysis unreliable and leads the DEIR to underestimate potential impacts.

The revised DEIR should include a full set of data and drill logs that can be reliably analyzed by the public.

Drill core testing for airborne contaminants is inadequate.

Grp 8-65

As documented in "Sampling Procedures" (Sampling) (attached as a reference to this letter), TACs silica and asbestos are insufficiently described in the DEIR. Even though several hundred tons of rock would be mined and surface-stored each day, none of the core samples taken from the exploratory drill cores were tested for the contaminant silica. It also appears that when the original core samples were taken, drilling was stopped when serpentinite, an asbestos bearing rock, was encountered and, since drill logs are not available for review, the depth and width of the asbestos-containing serpentinite deposits encountered cannot be determined.

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The rock types identified in the mineralized zone contain substantial amounts of silica (silicon dioxide, quartz), and the tailings would contain fine particles of respirable crystalline silica, a TAC. The laboratory that the applicant used for all metals analyses, ACZ Laboratories, is certified to perform both silica and silicon dioxide tests yet not a single sample was analyzed for these parameters (Sampling).

The revised DEIR should provide a full set of data about the samples analyzed for silica and asbestos. To the extent this data set fails to analyze silica and asbestos, further analysis and revisions of the DEIR are required to adequately identify impacts.

The hydrology study incorrectly assesses the potential for long term acid mine type drainage.

The Empire Mine, adjacent to the Idaho-Maryland Mine, provides clear evidence of the potential for contaminants that could be discharged from the Mine and from tailings and mine waste intended to be deposited on the surface or back within the Mine as backfill. Mine water discharged from the Empire Mine has excessive levels of arsenic, iron, and manganese.

The EMKO hydrology study used in the DEIR dismisses the potential for acid drainage which could affect water quality in Wolf Creek. Instead, the DEIR claims "Any acid generated during the oxidation would be quickly neutralized by the carbonate minerals in the host rock" and cites neutral or high (non acid) pH values. (DEIR 4.8-49, 50) However, the short term method used by EMKO is not a reliable method for predicting the long term potential for contaminants to be discharged from mine waste. Results would be more reliable using long term tests, on the order of months rather than hours or days.

Grp 8-66

The waste rock's potential to produce poor quality effluent should be thoroughly characterized using appropriate tests to the satisfaction of the Water Board (e.g., ASTM D 5744) over a sufficient period, also to the satisfaction of the Water Board (e.g., 40 weeks).

Accordingly, more extensive testing of mine waste rock and tailings must be conducted to assess the potential for contaminant leaching from mine waste. Long term dynamic testing must be conducted to accurately identify potential impacts to water quality. Due to variations in geology as mining progresses, repeated testing of the mine waste must be done.

The revised DEIR must specify how long-term monitoring of acid mine type drainage would be accomplished and identify mitigation measures capable of ensuring that any unanticipated contaminants do not adversely affect water quality. Without providing such testing and identifying feasible and effective mitigation measures, the impact must be identified as significant and unavoidable.

It is not adequate to defer analysis of mine waste, a potential hazard, to some future date without providing substantial evidence that the proposed actions will not result in environmental impacts.

Grp 8-67

The mine waste has not been adequately tested and one must conservatively conclude that it has a high potential for causing water quality impacts, given that similar local historic mining activities resulted in

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the detrimental environmental impacts that persist today. The DEIR fails to conduct the necessary impact analysis. Instead the document asserts that impacts will be remedied by obtaining an expedited General Order permit from the Water Board (DEIR section 4.8 page 50). As Baseline points out, this process is insufficient:

"It is not adequate to state that the project will get permits without providing substantial evidence that the proposed action will not result in environmental impacts, particularly when very similar historic actions have been demonstrated to result in environmental impacts that have persisted for decades." (Baseline)

The revised DEIR must provide a valid and reliable analysis of the mine's waste products and identify specific and achievable mitigation measures to assure these water quality impacts are reduced to less than significant levels. Alternatively the revised DEIR must identify such impacts as significant and unavoidable.

No provisions were made with respect to treatment of mine effluent beyond the 80 year project operations.

Water treatment would need to continue in perpetuity after the mine stops. Current discharges have exceedances in Arsenic, Iron, and Manganese that would likely continue in perpetuity The DEIR must address potential water quality impacts and how water treatment would be accomplished after the mining operations cease.

Grp 8-68

The natural outflow is at Wolf Creek at an elevation of about 2650 feet elevation. Natural mine water level at Brunswick site is approximately 250 ft below the surface. Treating the water at the Brunswick site and discharging into SFWC requires at least a 250 foot lift.

- After mining operations cease what would be the provisions for long term treatment?
- What would be the long term energy demands?
- Where would the treatment facility be located after mining operations cease?
- What will be the biological and hydrological impacts from the changes in mine water discharge upon ceased operations?

In order to fully evaluate the Project's water impacts, these questions must be answered.

Hydrology - Groundwater

The proposed project would intentionally affect local groundwater resources.

Grp 8-69

The proposed Project would significantly affect local groundwater resources by dewatering the mine, lowering groundwater levels. The dewatered groundwater resources would be converted to surface water that is discharged into existing creek channels and quickly conveyed out of the area. The applicant's consultants have prepared a numerical groundwater model to attempt to predict how this proposed long term dewatering effort would affect overlying and surrounding groundwater levels.

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An incorrect assumption was made in the groundwater model used to predict dewatering impacts, which led the DEIR to significantly underestimate groundwater drawdown, both in magnitude and areal extent. The groundwater model was calibrated based on pumping rates from the historical Idaho Brunswick Mine and only one water level measurement collected from the flooded (i.e., inactive) Union Hill shaft in 1956. Using only one water level measurement from 64 years ago to calibrate a complex bedrock aquifer system over a large region is inappropriate and introduces a significant amount of uncertainty to the model. (Baseline)

The revised DEIR must rely on a corrected groundwater model in order to accurately predict the extent of the well drawdown caused by the predicted 80 years of mine-dewatering and dewatered maintenance. Based on existing reports, the Project is likely to impact significantly more wells than the number of wells identified in the DEIR. (see "Safeguards for Well Owners and the Idaho-Maryland Mine", CEA Foundation) This is a significant impact that will affect hundreds of Grass Valley residents and must be addressed in a revised DEIR.

The basic constructs of the DEIR's groundwater model have significant errors and omissions, making them unreliable.

The basic data needed to build a valid groundwater hydrological model are missing. The document "Review of the Idaho-Maryland Mine DEIR Groundwater Model" (Model Review) by Silberstein examines deficiencies in the model, as summarized here.

Grp 8-70

The mine water drains from several locations along Wolf Creek near Centennial Drive, and the DEIR provides only rough approximations of the mine water outflow rates from these areas. What's more, these outflow data are contradicted by more reliable records from previous studies which indicate ten times more outflow than the amount the DEIR discloses. (Model Review) Similarly, mine water inflow analysis is based on sparse mine water level data from the New Brunswick shaft. Only 12 water level measurements were taken at random times of the year between 2003-2007, and just 3 measurements in 2018-19). In addition, the utility of these measurements is incorrectly interpreted. The water level reaches a limit when it exceeds the level of the drains from which the mine water flows and doesn't reflect what could be substantial inflow. Without a measurement of the outflow, the amount of inflow cannot be determined by the water level in the New Brunswick shaft. Essentially, no water balance assessment is provided.

Furthermore, data from private wells within the area is old and limited to just a few years. No usage data is provided, so seasonal variations in water levels are of limited use.

Critical data such as reduction in groundwater recharge from precipitation are also incorrectly calculated, failing to include the 75 acres of low-permeable mine waste to be dumped on the two sites.

Moreover, the groundwater model does not include the new access shaft, which would create a local area of groundwater drawdown. In fact, it appears that numerous existing mine features that are within a few hundred feet of the surface were also not evaluated in the ground water model. These mine features would contribute to the downward transmission of ground water from the near surface fractured rock areas.

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These are all elements that are critical for constructing a reliable groundwater model to identify dewatering impacts.

Grp 8-71

In addition, there are three major faults and numerous minor faults in the mineral rights area. These impact the transmission of water and introduce a high level of uncertainty in the accuracy of a model which, as stated in the Groundwater Model report (DEIR Appendix K.3), assumes the geology is homogeneous. Common assumptions such as the correct anisotropic ratio for the groundwater transmission calculations may not be accurate.(Model Review, 3.g.)

Taken together, the groundwater model is seriously deficient with respect to data reliability, initial conditions, and modeling assumptions, calling into question its ability to accurately depict the Project's impacts.

Grp 8-72

Finally, use of modeling in a fractured rock system has limited value. Modeling that relies upon uniform rock, which is consistent from place to place, behaves in a more predictable fashion than rock that is in bedrock systems having multiple faults and irregularities. It is critical to provide for long term monitoring and extended protections due to the challenges inherent in modeling groundwater in this complex hydrogeologic setting.

The revised DEIR must provide accurate and adequate information and comprehensive analysis to determine the extent and the severity of the impacts upon groundwater resources and wells. Without this analysis, the revised DEIR must identify such impacts as significant and unavoidable.

The DEIR inappropriately defers the collection of additional water monitoring data to the future.

Grp 8-73

The DEIR acknowledges that more groundwater level data is needed to assess the potential impacts of the proposed Project on groundwater levels. Mitigation Measure 4.8-2(a)(4) (DEIR section 4.8 page 67) states that this needed water assessment be conducted "once dewatering of the underground mine workings commences." This is internally inconsistent and would not be achievable. Once dewatering begins, it will be impossible to measure baseline levels. Consequently, this mitigation measure is impossible to implement. Mitigation measures under CEQA must be achievable, enforceable, and must be capable of actually reducing the Project's impacts.

The DEIR inappropriately defers the collection of additional data (via a Groundwater Monitoring Plan) to the future. CEQA does not allow the deferral of important studies necessary to characterize impacts because it denies decision-makers the information they need to make well-reasoned decisions regarding the viability and impacts of a Project.

Groundwater monitoring networks will need to be established in advance of the Project, and the resulting data will need to be included in the revised DEIR. The consequences of not committing to full compliance with General Plan Policy 2.17 are dire for local property owners who rely on groundwater. (Baseline)

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Hydrology Modeling

Hydology Model Initial Condition Issues

Dr. June Oberdorfer, Certified Hydrogeologist and Professional Geologist, reviewed the Ground Water Model and related hydrology documents for the Project. (See "Comments on Itasca GW Modeling Oberdorfer.pdf", attached as a reference to this letter.) Several key assumptions were identified in the model which minimized the groundwater drawdown results. For example, an incorrect assumption was made for the initial water levels for the model. As described,

Grp 8-74

"Rather than taking present day water levels as the starting point for predicting the effects of mining for 25 years starting in 2019, they chose to use the water levels at the end of mining in 1956 (Sec. 5.1). Those water levels don't reflect the fact that there's no current dewatering, but rather reflect dewatering at a rate of 700 gpm."

As a result, Dr. Oberdorfer concludes:
"This incorrect assumption minimizes both the magnitude of drawdown shown on the Figure 5-7 and the extent of the area affected. In addition to underestimating the number of domestic water supply wells impacted and requiring mitigation, this assumption also underestimates the extent of the area requiring groundwater monitoring (Itasca, 2020b). That area needs to be expanded."

The revised DEIR must re-evaluate the area of potential groundwater impacts.

Inflow and Transmissivity

The groundwater model was created to simulate potential impacts to wells and groundwater levels. One of the key factors in modeling the groundwater is a determination of how readily water is transmitted from the surface into the mine. An analysis of water levels in the New Brunswick Shaft and possible correlations between precipitation was undertaken but it is flawed in several ways, further calling into question the basis for the groundwater model.

Grp 8-75

The analysis failed to consider that the level of the water in the New Brunswick Shaft had an upper limit because the water was flowing out of the drain, thus hiding potential increases in mine water inflow. Sparse data and poor granularity of data further undermine the utility of the New Brunswick Shaft water levels and corresponding precipitation amounts.

In addition, well monitoring was conducted in 1995-2001, 2003-07 (DEIR Appendix pg 4.8-11). Well log records show seasonal variability but no data is provided that shows how much of the well water level changes is due to irrigation season water usage and how much is a reflection of the actual lowering of the ground water level overall. No recent well monitoring was conducted during drought years, and no assessment was made on the long term predicted impacts of climate change. These impacts include warmer weather, changing rainfall amounts, shifting of rainfall periods, as well as consideration of water usage changes by property owners due to drought

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The following minimal steps are necessary to accurately model the Project's groundwater impacts:

- Year-round logging of mine water levels and outflow should be collected. Data should be collected for several years, including at least one year with normal rainfall and one year each with low and high rainfall, in order to establish a baseline for groundwater modeling and impact assessment.

Grp 8-76

- The data from the outflow and the data showing changes in mine water level should then be compared with granular rainfall data to assess the amount of seasonal variation in mine water inflows. The data could then be used to provide an estimate of transmissivity from the surface.
- Adequate wells data should be collected. The wells data is old, limited to a few years, and lacks information about well water consumption. A comprehensive well monitoring program including water level and water comsumption must be established.

Grp 8-77

- If the mine is approved, monitoring must continue throughout mining operations and at least 5 years after the mine is closed and reflooded.

Groundwater Model Elements

A new access shaft is proposed close to the creek, but a cone of depression of groundwater levels like the one indicated at the New Brunswick Shaft is not shown in the DEIR. The failure to show this brings into question whether the new shaft is actually included in the DEIR groundwater model and subsequent analyses. The revised DEIR should provide the following information:

Grp 8-78

- Was the new access shaft included in the Itasca groundwater model? If so, what is its precise location? The shaft should be located on all maps.
- How far is it from South Fork Wolf Creek, a perennial stream? Is it within 100 ft?
- Was there analysis of the impact of the groundwater caused by the significant 50 ft deep excavation needed to build a permanent access shaft? If so, which specific pages of the DEIR provide this analysis?
- Will the new access shaft lead to more drawdown of near surface groundwater?
- How will the creation of a large excavation and a new access shaft impact the near surface ground waters that feed SFWC?

Grp 8-79

The model assumes that the areas to be mined will be confined to very limited areas at depths greater than 1000' (DEIR Appendix K.2, pg x, xi). However, the mineral rights provide no restriction to mining anywhere within the 2585 acres and to within 200' of the surface. No conditions are imposed to guarantee that the mine applicant doesn't drill, excavate, or mine above 1000 ft from the surface, which would invalidate the assumptions of the groundwater model.

Grp 8-80

The model simulations were constructed based on an assumption that mining would occur for only 25 years. From page 23 of "Appendix K.3_Groundwater Model Report" by Itasca: "The predictive numerical simulations were conducted to assess the potential inflows to the mine workings, the effect on nearby domestic wells, and the potential effects on the creeks in the Mine area during mine development and production between the assumed years of 2020 and 2045 (Year 1 to Year 25), which is the current mine plan." The model was subsequently extended to simulate an additional 40 years, providing a 65 year total run time. The model was not run for the full 80 year term of the proposed Project Use Permit.

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All computer models that attempt to simulate real world conditions are based upon assumptions. Even minor differences between input data and actual real world conditions can result in errors that increase exponentially over time. The longer the computer model is run, the greater the potential for deviation from actual outcomes.

The DEIR should justify the additional run times of the groundwater model, along with an analysis of the reliability of the model over such an extended period of time.

All of these issues must be resolved in the revised DEIR.

Wells and Well Mitigations

Relying on fifteen monitoring wells to estimate the impacts on all water supply wells around the mine area is inadequate.

Grp 8-81

The DEIR relies on fifteen monitoring wells to estimate impacts on water supply wells but it does not explain how it arrived at this number of wells or their location. In complex fractured bedrock spread out over thousands of acres, monitoring water levels at fifteen locations could not possibly provide the needed data to ensure that groundwater impacts to hundreds of existing water supply wells in the Project vicinity are immediately identified and mitigated. (Baseline,p12)

The revised DEIR must provide reliable data regarding the Project's monitoring regime in order to provide an accurate accounting of groundwater impacts.

Potential impacts to wells are underestimated and proposed mitigations are inadequate.

The DEIR relies on a Well Mitigation Plan to allegedly protect wells from mining impacts. The Nevada County General Plan (Policy 17.12) item 1) states that:

"*In approving mining projects which* ***according to expert opinion*** *may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses:*

Grp 8-82

1) The County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water. "

In contrast to the opinion of the DEIR consultant EMKO (DEIR Appendix K.9, p1), numerous experts have stated that there is the potential for a significant threat to water supply for wells in the area beyond those identified in the DEIR. Notably, Baseline Engineering unambiguously states that, "*...it is Baseline's expert opinion that the project may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses in a much wider area than is indicated in the DEIR.*" (Baseline)

The DEIR relies on a Well Mitigation Plan to purportedly protect wells from potential mining impacts. Yet, the Well Monitoring Plan does not demonstrate that impacts would be mitigated. The Well Mitigation Plan is an aspect of the DEIR which designates protections for wells from potential mining impacts. The Nevada County General Plan states that if expert opinion indicates that there may be a

threat to the quality or quantity of water that supplies domestic wells, then the mine operator must provided an immediate and comparable supply of water, and will be held accountable for all expenses incurred unless the operator can prove that they are not at fault.

The Well Mitigation Plan asserts that, "*Expert opinion has determined that there is no threat to water quality to domestic water wells...*" and that, "*Domestic wells outside [the E. Bennett Road] area will not be impacted.*"

By stating such, the mine applicant is downplaying the Project's impacts on area wells so that he can avoid having to comply with most of the County's Well Mitigation requirements.

Outside experts have determined that the DEIR's hydrology model is unreliable because there were so few well-monitoring measurements collected and because the quantity of data-input was insufficient to calibrate any reliable conclusion. As one expert noted,

"*Even a well-calibrated model has a large uncertainty in its predictions. It turns out that this model [Rise'] is not well calibrated, so the uncertainties are almost certainly larger [than the norm].*"

Grp 8-82

Six of the experts who have assessed the potential threat to local wells from mining activity repeatedly emphasized the uncertainty of the predictability of the mine's impact to domestic wells.

Given the opinion of outside experts, it is imperative that well owners both within and beyond the area of mineral rights owned by the mine applicant be guaranteed an equivalent, uninterrupted, permanent, quality of water, supplied and paid for by the company in advance of any mining operations.

The DEIR must be revised to provide an adequate analysis of impacts to wells. Once this analysis is provided, the applicant and the County will be in a better position to identify feasible and effective mitigation for these impacts. As a first step, the revised DEIR must accurately define the area of potential impact to domestic wells. The revised analysis must provide the quality and quantity of data needed so that the hydrological model can calibrate a more reliable prediction of threat. The data collected must cover all the seasons (over an extended period of time), and include a large enough quantity of representative wells - over a long enough period of time – to establish a baseline usage of the wells in all the neighborhoods whose wells could be threatened by mining activities. The monitoring should be managed by a qualified and independent third party.

Then a fair and accurate domestic well monitoring program must be designed and implemented. This well monitoring program must include full financial assurances covering all well owners in the area that addresses bonding, warranties for NID services, damage reimbursements, etc. Additionally, a community relations program should be established to handle any problems that might emerge over the eighty year permit being requested.

Hydrology - Surface waters

Grp 8-83

Mine water discharge will overheat the South Fork Wolf Creek.

Mine water temperature ranges between 14 and 15 degrees Celsius. The Project must not change the temperature of water discharged into the South Fork Wolf Creek by more than 5 degrees Fahrenheit (2.8C) per NPDES requirements. (DEIR Appendix K.2, p108) Water from the mine will be pumped into the seven acre treatment pond. From there it will be run through the treatment facility and discharged into the creek. The DEIR's Hydrology study provides only a few data points (April and August of 2019 and Jan 2020) to determine the range of values for the creek flow and temperature, reporting lows of 9 deg F in the winter to 15 deg F in late summer (DEIR Appendix K.2, pg 108).

However, over 15 years of monitoring by (WCCA) provides data indicating that the temperature of the creek often falls substantially below 10C, and that these temperatures commonly occur during low flow times.

The revised DEIR must include studies that reliably predict the mine water's outflow temperatures from the treatment pond into SFWC. To do this, the EIR must include thermal modeling of the treatment pond, including the temperature impacts due to the treatment processing plant, flow through rates, cooling under different weather conditions, solar gain, evaporation, precipitation, etc. In order to avoid impacts to the SFWC and the species that inhabit the Creek, the revised DEIR must demonstrate that the discharge temperature and flow rates, combined with the temperature and flow rates of the stream over a range of conditions would not result in temperature changes in the stream in excess of 2.8C (5F) degrees.

Grp 8-84

The Hydrology report states that:
"*During the winter and early spring, the temperature of the water in the mine would be more than 2.8 degrees C warmer than the creek. However, after being pumped from the mine, the water would be stored within a surface pond before treatment and discharge. During the winter and early spring,* ***the ambient temperature should cool the water in the pond****. In addition, the rate of discharge would be less than the typical flow rates in South Fork Wolf Creek during the winter and early spring, such that the discharge* ***should not alter the temperature in the creek by more than 2.8 degrees C****. Therefore, the discharge would comply with the temperature criteria in the NPDES permit.*" (DEIR Appendix K.2, pg 108)

The section of the Hydrology report addressing creek temperatures is speculative because it is based on incomplete data. It is not sufficient to say "the ambient temperature should cool the water" and "the discharge should not alter the temperature of the creek by more than 2.8 degrees C." Advisory language such as this does nothing to ensure that resources will be protected.

Grp 8-85

The low flow periods of the stream in the fall and early winter often have low temperatures and would be potentially the worst case for temperature impacts due to mixing. This is not adequately assessed in the DEIR. The revised DEIR must address the following:

- What are the predicted high and low temperatures of the discharge from the treatment pond in all seasons of the year, and considering varying weather conditions?
- Which specific temperature scenarios were considered in the DEIR?
- What are the corresponding flow rates of the stream and what would be the resultant temperature change of the mixed waters?

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Grp 8-86

To accurately predict the outflow temperatures, the revised DEIR must conduct thermal modeling of the treatment pond, including the temperature impacts due to the treatment processing plant, flow through rates, cooling under different weather conditions, solar gain, evaporation, precipitation, etc. The document must then undertake calculations to demonstrate that the discharge temperature and flow rates, combined with the temperature and flow rates of the stream over a range of conditions would not result in temperature changes in the stream in excess of 5 degrees F.

Hydrology - Surface Waters

Impacts from using the 7 acre freshwater pond for treating minewater are not adequately assessed.

Grp 8-87

The 7 acre pond will be filled with untreated mine water. The outflow of the pond is to South Fork Wolf Creek. It has been modified to increase capacity. Currently it provides habitat for abundant waterfowl and is surrounded by riparian vegetation.

The proposed treatment process will cause Iron and Manganese to precipitate via oxidation in the pond. These oxides will accumulate. Also Arsenic and other contaminants will accumulate. Concentrations of contaminants will exceed the contaminant levels from the discharged mine water due to additional oxidation, mine water recirculation, evaporation, and treatment plant residues from backflushing. What is currently a healthy freshwater pond with good water quality and abundant wildlife will become contaminated. The revised DEIR must address these impacts:

- What will be the impact of the contaminated water on waterfowl and surrounding riparian habitat?
- What mitigation will be provided to replace the habitat and to protect wildlife from exposure to the contaminated water?

Grp 8-88

- Water for mining operations will be recirculated into the mine. How will the concentrations of contaminants in the pond be monitored to prevent addition of metal to the mine waste stream?
- Will mine workers be protected from exposure? How?

Grp 8-89

- Will water be tested to assure it will not increase the risk of future groundwater contamination when it is used in the cement paste backfill?

Grp 8-90

- What impacts will the contaminated mine water have when used for dust suppression and Asbestos management?

Grp 8-91

- Aeration of water in the treatment pond can cause odors and toxic substances to become airborne. What are the air quality impacts?

Grp 8-92

There will also be potential leaching of contaminants from mine waste that will be exported as engineered fill or sold offsite. Untreated water that may be used to control fugitive dust emissions and/or increase water content in "engineered fill" may increase those contaminants. The revised DEIR must address the following:

- What safeguards will be used to prevent additional contaminants present in the untreated water from increasing the total levels of contaminants present in the exported materials?
- How often will the water used on exported materials be tested?

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- In the event that the total level of contaminants in material destined for export exceeds the thresholds for toxic contaminants, how will the material be managed? Where will it be placed?

Periodic removal of treatment pond precipitants.

Grp 8-93

The treatment pond would be used to remove some or all of the Iron, Manganese, and other contaminants in the mine water by oxidation. Periodically, the pond must be drained and the accumulated precipitants must be removed. There are number of impacts from this process that are unaddressed in the DEIR:

What are the impacts on the surface waters from draining the 40 acre foot treatment pond?
How will the dewatering maintenance process be managed during this operation?
Will testing be conducted on the precipitants?
How will the precipitants be classified, and where will they be taken?

These impacts must be addressed in the revised DEIR.

Land Use, Zoning, Population and Housing

A variance for proximity to geological faults is not supported.

Industrial development must be located at least 200 feet from any fault line. The DEIR fails to provide a map showing the location of all of the faults and the 200 foot setbacks along with the locations of the proposed industrial buildings. A drawing showing these relative locations is necessary in order to evaluate the potential impacts of the fault (See map, DEIR Appendix H.2, Figure 1 and 2).

Grp 8-94

There seems to be an attempt to obfuscate the issue of variances by noting the location of the existing New Brunswick Shaft within the 200 foot setback. As an existing structure, a variance for use of it as a secondary access to the mine is a lessor potential impact than a variance for proposed new industrial buildings.

Pg 5 states: "Because the proposed Project includes development of industrial facilities associated with underground mining operations utilizing the New Brunswick shaft, construction within the building setback fault zone is necessary and unavoidable. There is no alternatively feasible location that would have less impact on the Site and surrounding areas."

This statement is not valid. First, the site of the historic Idaho-Maryland Mine main access and processing facilities was at the Centennial site on Idaho-Maryland Road. This would be a suitable site for the industrial facilities. In fact, it is a more suitable due to the nature of adjacent land use and fewer impacted residential properties. To further support this point, note that in 2008 Emgold Mining Corp. submitted an application to open the mine at the Centennial site, including all of the processing facilities. The Brunswick site and the Round Hole site were to be for additional access, ventilation and emergency access. Having multiple access points from different parts of the mine works also provides better emergency access and ventilation. The current proposal by Rise Gold has all of the access to the

entire mine works located at two shafts within a short distance of each other, which lacks those benefits.

Thus, the statement that "There is no alternatively feasible location that would have less impact on the Site and surrounding areas…" has not been established as valid. At the very least, evidence should be provided supporting this claim.

Grp 8-95 Furthermore, as noted in FaultingHazards, the impacts of mining will change the mass balances on either side of the faults with the potential to induce seismic activity.

Grp 8-96 This variance should be denied.

Alternative Land Uses are not adequately discussed.

Grp 8-97 The DEIR Alternatives chapter discusses only an alternative use that would result in an industrial project on the Brunswick site at maximum buildout potential. It is then dismissed for evaluation because impacts were concluded to be greater than the mine project. This is a severe inadequacy in the DEIR.

In order to adequately address project alternatives, the DEIR must discuss an alternative use that would be more likely at this site - such as a project consistent with the site zoning, not requiring a use permit, and of a scale which is designed to avoid significant mine project impacts. An alternative industrial use appropriately scaled at this site would be more likely to meet the community character and aesthetic related policies in the General Plan and result in reduced impacts compared to the mine project in virtually every impact area including visual, traffic, air quality, and noise/vibration.

Grp 8-98 The DEIR is also deficient in not mentioning or analyzing the mine project's inconsistencies with the Grass Valley General Plan. The mine project is within the Grass Valley Sphere of Influence. The Centennial site is within Grass Valley's first phase annexation area. A portion of the Centennial site is also zoned by Grass Valley for Urban Medium Density housing. The Nevada County General Plan requires the county to designate lands within the cities' Spheres of Influence consistent with the city land use designations. The county has not done this; thus the Industrial designation and the mine project's operations are clearly inconsistent with its own General Plan and the Grass Valley General Plan. Physical land use compatibility impacts (industrial uses next to medium density housing) will also result. In addition, the DEIR should evaluate the City's and the County's General Plan land use policy text and zoning texts for consistency. These are potentially significant impacts which must be discussed in the DEIR.

Grp 8-99 The revised DEIR must also determine whether the dumping of mine waste is a heavy industrial activity.

Grp 8-100 **Maps and Plans**

The Brunswick site shows a 100 ft building setback and an NID spill easement on an open creek, South Fork Wolf Creek. The map also shows a fault line. The map is dated 1987. Apparently this perennial stream was buried in a culvert since 1987, based upon the map's date.

- Was the burial of SFWC done under an authorized permit?
- What is the status of the NID spill easement?
- Have the 100 ft setback and NID spill easement been waived or reconveyed to the land owner?

Any existing easements or setbacks which may be encroached by the Project must be waived or modified by the consent of the entitled party.

Grp 8-101

What is presumably the Weimar fault, also known as the 6-3 Fault, (See https://www.risegoldcorp.com/uploads/content/I-M_Tech_Report.pdf) runs through the project site, although, surprisingly, the DEIR does not actually refer to it by name. The site map showing the Fault Line and Setback Zone (DEIR Appendix H.2, Figure 1) for this is inadequate. None of the proposed structures for the Project are shown.

Grp 8-102

A map with South Idaho Shaft precisely located and with the Pine Hill flannelbush locations shown must be provided to safeguard inadvertent intrusion into the flannelbush protection areas

Grp 8-103

A map showing the mineral rights zone and all the parcels identified by address must be provided to adequately inform the public regarding the location of residences and businesses in the area with respect to the mine.

Noise and Vibration

Nighttime noise impact is not adequately addressed.

Grp 8-104

The analysis "Acoustical Comments on Draft Environmental Impact Report, Salter Project 22-0039" (Salter) provides comments on the DEIR's analysis of the noise and vibrations for the Project.

Salter determined that nighttime noise is not adequately addressed in the DEIR. The DEIR outright dismisses the potential for noise impacts due to sleep disturbance and inappropriately excludes this consideration from the DEIR analysis. The combination of nighttime industrial activities amongst a community that currently enjoys low ambient noise levels represents a significant risk for Project noise to impact the community, annoy residents, and cause sleep disturbance.

A revised DEIR should provide a comprehensive analysis of nighttime noise impacts, identify these as potentially significant impacts, and identify appropriate mitigation, including limitations on nighttime noise, to protect nearby residents (Salter).

Engineered fill operation noise is underestimated.

Grp 8-105

The DEIR underestimates operational noise from the Project's engineered fill operations (Impact 4.10-2). This 5 to 6-year long activity could generate noise levels at least 10 to 18 dB higher than predicted in the DEIR. This is a significant deficiency in the impact analysis. As such, the project's noise levels could be 20 to 35 dB louder than current median/background ambient noise levels, causing a severe

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impact. In addition, in several instances, the DEIR fails to adequately address impacts to sensitive receptors located farther away from existing roadways that currently have a lower background noise (Salter).

These are potentially significant impacts. The DEIR must be revised to correct these deficiencies and omissions.

Blasting vibration impact is not adequately addressed.

Grp 8-106

The DEIR fails to adequately evaluate blasting vibration impacts (see Impact 4.10-4). Blasting operations have the potential to subject nearby residents to "strongly perceptible" and borderline "unpleasant" vibration on a regular basis for the rest of their lives. These perceptible and unpleasant vibrations must be considered a significant impact in the DEIR.

In particular, the DEIR fails to include crucial guidance from the U.S. Office of Surface Mining Reclamation and Enforcement Blasting Guidance Manual restricting blasting vibration during evening and nighttime hours. If blasting must be allowed at these sensitive times, the DEIR must incorporate adequate mitigation with a notably stricter limit at all sensitive receptors (Salter).

Stoping and the new access shaft construction requires noise and vibrations analysis.

Grp 8-107

In addition to the vibrations of the blasts, the DEIR fails to analyze impacts associated with long hole slope blasting, i.e. the landing impact shock from long hole stope rock falling. Long hole slope blasting has the potential to create significant shock waves.

Grp 8-108

The DEIR fails to evaluate the vibrations from the rock falls during the construction of the new access shaft. The top 60 feet of the shaft will be built from above by excavating and forming a concrete structure. The remainder of the shaft will be excavated by tunneling from below. The analysis of the construction noise for this shaft did not include blasting from below, and shock waves from that near surface blasting, and the shock waves when volumes of rock drop vertically up to 1000 feet.

Grp 8-109

The shaft excavation which is proposed to be constructed from below cannot begin until the mine has been dewatered to over 1000 feet and mine works have been restored from the New Brunswick shaft entrance to the location of the bottom of the new access shaft. In light of this information, the revised DEIR must answer the following questions:

- What is the total time that the new access shaft will be under construction?
- How long after the initiation of the site construction will this new access shaft excavation phase begin?
- How long after the initial dewatering of the Mine will the construction of the new access shaft begin?

Grp 8-110

The DEIR's Appendix M_Blasting Report.pdf recommends that "...IMM hire a blast consultant to assist with the development of a 95% confidence level equation for the site-specific ground vibration. This consultant would take the data acquired by the seismographs set-up on the mine, run a linear regression and log-log confidence model to develop an equation that the mine can use to modify blasting, as needed, to ensure vibration levels remain at acceptable levels." (DEIR 7.2, p28)

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In order to mitigate the risks of vibration impacts, this must be a requirement, not a recommendation. In addition, in order to protect the public from vibration impacts, the revised DEIR must add as a requirement or a condition of approval that the applicant cease operations if vibrations are in excess of 0.5 in/sec. Absent these additions, the impact must be considered significant and unavoidable.

Other Issues

The DEIR has not demonstrated that mine waste disposal by off site sales would be viable.

Grp 8-111

The DEIR indicates that the applicant (Rise) plans to sell waste rock on the open market if it is still being produced after the two proposed waste rock piles reach capacity (DEIR Project Description). The Regional Water Board has jurisdiction over the disposal location requirements for mine waste rock. Although the DEIR does not disclose this, the concept of selling waste rock is an unrealistic and infeasible proposal unless the Water Board has determined that such discharges would not pose a threat to water quality. Accordingly, the Project should not rely on this concept and the DEIR should identify all impacts associated with alternative disposal methods.

Even if the mine waste can be sold, the market for aggregates varies significantly by season. During rainy seasons, it may be necessary to stockpile the aggregate onsite, but there are no provisions for onsite storage in the DEIR or an assessment of impacts related to such storage. As reported by the Center for Science in Public Participation (CSP2), dispersing waste rock and other mine waste over large areas without containment often results in contamination (e.g., Calcine mercury mine tailings used for road construction in San Luis Obispo County).

Grp 8-112

The absence of provisions for temporary waste rock storage (and the associated analysis of its impact) creates strict operational constraints and potentially significant impacts on all phases of processing have not been addressed in the DEIR. The DEIR should be revised to include an analysis of these impacts.

Construction time estimates are inadequate and affect noise, traffic, air, and other impact areas.

Construction time estimates in the DEIR are contradictory and inadequate. For example, the DEIR states in several instances that the Project is estimated to have a twelve month construction phase, but also states that the construction of the water treatment facility alone would take eighteen months.

Grp 8-113

Furthermore, neither of these estimates - twelve or eighteen months - is sufficient to capture all phases of construction. As just one example, the applicant would have to complete significant grading and underground development before initiating the eighteen month construction of the water treatment facility. Similarly, the water treatment facility would have to be completed before dewatering of the mine could begin. Dewatering is a six month process. After dewatering has been completed, the new shaft for ventilation and emergency access would have to be constructed to the 1000' depth by working upwards from below. Then, before beginning any actual new mining, the tunnels would need to be restored sufficiently to allow for construction of the underground rock crushing facility. All of these activities must happen sequentially, not in parallel. Therefore, a more reasonable estimate of

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construction length for the Project would be four to six years, clearly resulting in significantly different annual and cumulative impacts than the ones identified in the DEIR.

The DEIR should be revised to provide an accurate description of each construction project, including its intended duration. This revised description must also include the sequencing of construction projects. Until this information is provided, the DEIR preparers will be unable to properly assess the annual and cumulative impacts on air, noise, traffic, aesthetics, and other resource areas.

Permits

Grp 8-114 Construction phase repairs to the 7 acre pond on the Brunswick site will require draining the pond, repairing the pond berm, and lining the pond with a membrane. Impacts to surface waters and the wet meadow below the pond must be assessed.

Grp 8-115 The Project includes a 165' tall headframe which requires a height variance. Several other buildings are over the county limit for building height as well. Consideration should be given for putting a substantial portion of those structures underground to reduce the visual impacts and mitigate the excessive height.

Conclusion

Grp 8-116 As documented throughout this letter, the DEIR lacks critical information necessary to identify all potentially significant impacts associated with a large underground mining project close to a populated area. The Adocument lacks he DEIR lacks an accurate project description, relies on an incomplete baseline for evaluating the project's environmental impacts, lacks data and analyses needed to make informed determinations, underestimates or omits impacts and fails to provide effective and feasible mitigation measures. For these reasons, the document is inadequate under CEQA. The DEIR must be revised accordingly and recirculated.

**This document was produced by the contribution of the CEA Foundation Research Team, including Barbara Rivenes, Bill Lawrence, Dianna Suarez, Don Rivenes, Gary Griffith, Gary Pierazzi, Greg Thrush, Isabelle Langone, Jeanne Wilson, Jillian Blanchard, Jonathan Keehn, June Oberdorfer, Laurie Oberholtzer, Mike Shea, Pam Heard, Paul Schwartz, Ralph Silberstein, Ray Bryars, Rhea Williamson, Robert Hubbard, Suzanne Smith, William Clark, and others.

References

Grp 8-117 Documents attached as a reference to this letter:

- Review of the Idaho-Maryland Mine DEIR Groundwater Model.pdf
- Grp 8-118 Comments on Itasca GW Modeling Oberdorfer.pdf
- Grp 8-119 MineExhaustMoisture.pdf
- Grp 8-120 FaultingHazards.pdf
- Grp 8-121 ASUR Plan Analysis.pdf
- Grp 8-122 Health Risk Assessment Critique.pdf
- Grp 8-123 Sampling Procedures.pdf

Grp 8-124 Documents cited and submitted under separate cover:

- Baseline Environmental Consultant Report, Feb 15, 2022 (Baseline).

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Grp 8-125
Grp 8-126

- Salter Report, March 9, 2022 (Salter).
- Comments on the Idaho-Maryland Draft EIR - 16Mar22, Center for Science in Public Participation.

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June A. Oberdorfer, March 27, 2022

Comments on Groundwater Modeling, Idaho-Maryland Mine

Documents reviewed:

1) Itasca Denver, Inc., March 2020a, *Predictions of Groundwater Inflows to the Underground Mine Workings at the Idaho-Maryland Mine.*
2) EMKO Environmental, Inc., March 2020a, *Groundwater Hydrology and Water Quality Analysis for the Idaho-Maryland Mine Project, Nevada County, California.*
3) EMKO Environmental, Inc., March 2020b, *Appendices, Groundwater Hydrology and Water Quality Analysis for the Idaho-Maryland Mine Project, Nevada County, California.*
4) Itasca Denver, Inc., December 2020b, *Groundwater Monitoring Plan, Idaho-Maryland Mine Project.*

Concerns:

Grp 8-127

Simulations by Itasca (2020a) of the effects of mine-dewatering produced a map of predicted drawdowns after 25 years of dewatering (Figure 5-7). The contours of equal groundwater drawdown in this figure show a maximum drawdown of approximately ten feet and the extent of drawdown over one foot approximate the limits of Rise Gold's mineral rights. This figure was reproduced by EMKO (2020a) and served as the basis for determining which private wells would experience excessive drawdown and thus need to be mitigated with a supplemental water supply from the Nevada Irrigation District.

An incorrect assumption was made in the running of these future predictions of mining impacts which led to a significant underestimation of groundwater drawdown, both in magnitude and areal extent. This assumption needs to be corrected to get both a more accurate prediction of the extent of the well drawdown caused by the predicted 25 years of mine-dewatering and a more accurate determination of the number of wells needing to be mitigated with supplemental water supply.

The computer model was calibrated to match historic dewatering rates (700 gallons per minute [gpm] toward the end of historic mining in 1956) and one groundwater measurement taken from near the end of the historic mining period at the Union Hill Mine shaft (a small mine that had been inactive for many decades). These calibrations are reflected in Figure 4-7 (Itasca, 2020a). The lower part of this figure shows a hydrograph (water elevation versus time) for simulated water levels within the New Brunswick Mine for the 700-gpm dewatering rate. Simulated water levels in the mine were around 1,150 feet above mean sea level (ft amsl) at the end of historic mining and recovered rapidly to about 2,500 ft amsl after the cessation of mine-dewatering.

The top portion of Figure 4-7 (Itasca, 2020a) shows a hydrograph of the calibration to the historic water level measurement in the Union Hill Mine shaft at the end of mine-dewatering when the water level was approximately 20 feet lower than at present. In order to calibrate to this

one historic water level, Itasca had to insert a very low permeability barrier next to the Union Hill Mine into the model to create sufficient hydraulic isolation of the Union Hill Mine from the much lower water levels in the adjacent area. The hydraulic isolation of this Union Hill Mine area is supported by the fact that the current water levels in its shaft are about 165 feet higher than water levels in the New Brunswick Mine.

What is not known, other than at this one point in the Union Hill Mine, are the shallow groundwater levels in 1956. Itasca (2020a) does not present a map of groundwater drawdown for 1956 (as they do for the predictive modeling of 25 years into the future). Those simulated water levels in 1956 would provide important insights into what future water levels during mine dewatering would be and should be presented.

The water level in the Union Hill Mine shaft is shallow, and it is quite likely that the drawdown in 1956 in the shallow groundwater to the west (in the vicinity of the New Brunswick Mine) was significantly greater than the 20 feet observed at the Union Hill Mine, probably on the order of or greater than the 165-foot water level difference observed at present. Water levels to the west could have been on the order of 185 feet or more lower than present (20 feet plus 165 feet). It is a major shortcoming of Itasca's modeling report that they do not provide a drawdown map or hydrographs of the effects of historic mine-dewatering on the shallow aquifer.

Grp 8-128

The incorrect assumption that was made in the predictive modeling of future 25 years of mine-dewatering was in the initial condition (starting water levels) for that predictive simulation. Rather than taking present day water levels as the starting point for predicting the effects of mining for 25 years starting in 2019, they chose to use the water levels at the end of mining in 1956 (Sec. 5.1). Those water levels don't reflect the fact that there's no current dewatering, but rather reflect dewatering at a rate of 700 gpm. The incremental drawdown from increasing dewatering from 700 gpm to the future rate of 900 gpm is what is reflected in the map of impact (Figure 5-7, Itasca, 2020a) used to determine the area requiring mitigation by Rise Gold. Examining the predicted drawdown in Figure 5-7 in the vicinity of the Union Hill Mine, it would be expected to be greater than the historic drawdown measured of 20 feet if dewatering has increased over the historic rate. With drawdown being proportional to pumping rate, the drawdown would be expected to be on the order of 25 feet in the vicinity of the Union Hill Mine. Instead, drawdown in this area is on the order of a few feet (Fig. 5-7). Drawdowns further to the west in the vicinity of the New Brunswick Mine should be considerably greater than 20 feet, which they are not. This reduced drawdown compared to what was observed historically is the result of the incorrect assumption for the initial condition for predictive modeling.

Grp 8-129

This incorrect assumption minimizes both the magnitude of drawdown shown on the Figure 5-7 and the extent of the area affected. In addition to underestimating the number of domestic water supply wells impacted and requiring mitigation, this assumption also underestimates the extent of the area requiring groundwater monitoring (Itasca, 2020b). That area needs to be expanded. If the effects on dewatering on the discharge to nearby streams were calculated similarly to the effects on groundwater drawdown, then the amount of decrease in groundwater discharge to adjacent streams could be underestimated as well.



Grp 8-130

Itasca should clarify the results of their simulations by producing:

1) Both a groundwater drawdown contour map and a groundwater elevation contour map for the shallow aquifer immediately before the cessation of dewatering in 1956.

Grp 8-131

2) Hydrographs for simulated heads in the shallow aquifer for the historic period 1920 to 2020 plus continuation for the 25 years of predictive modeling for future mining. The hydrographs should be for groundwater elevation in ft amsl versus time for the 125 years and represent the heads in the shallow aquifer near wells labeled WS95, WS216, WS201, WS80, WS 91, and WS85 on Itasca Figure 2-6.

Grp 8-132

3) Model water budget (all volumetric water inputs and outputs) for the general area of the mineral rights boundary over the 125 years simulated, preferably in plot rather than tabular format, using the one-month time increment used in the modeling.

Grp 8-133

4) The model should be run using the 2019 water levels as the initial conditions for the predictive simulations. Contour maps, hydrographs, and water budgets should be provided for these revised predictive runs.



Figures Cited

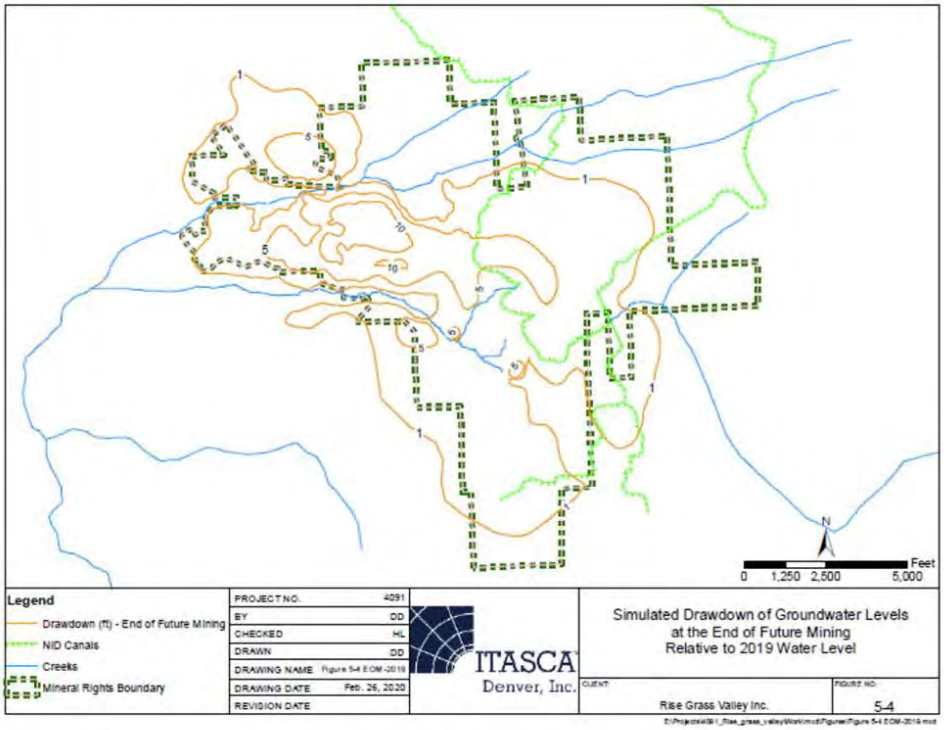
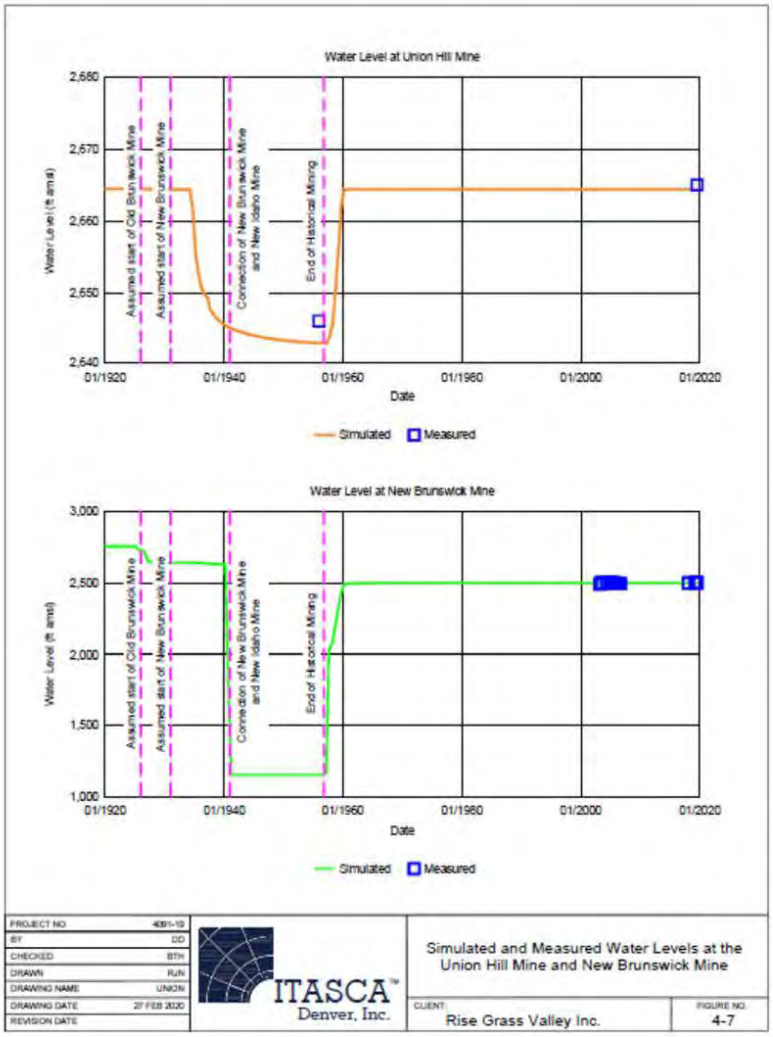


Figure also reproduced as Figure 4-1 in EMKO (2020a) as basis for extent of area of significant impact to shallow domestic wells requiring mitigation.


Water Level at Union Hill Mine
Water Level (ft amsl)
2,680
2,670
2,660
2,650
2,640
01/1920
01/1940
01/1960
01/1980
01/2000
01/2020
Date
Assumed start of Old Brunswick Mine
Assumed start of New Brunswick Mine
Connection of New Brunswick Mine and New Idaho Mine
End of Historical Mining
Simulated
Measured
Water Level at New Brunswick Mine
Water Level (ft amsl)
3,000
2,500
2,000
1,500
1,000
01/1920
01/1940
01/1960
01/1980
01/2000
01/2020
Date
Assumed start of Old Brunswick Mine
Assumed start of New Brunswick Mine
Connection of New Brunswick Mine and New Idaho Mine
End of Historical Mining
Simulated
Measured
PROJECT NO 4091-10
BY DD
CHECKED BTH
DRAWN RJN
DRAWING NAME UNION
DRAWING DATE 27 FEB 2020
REVISION DATE
ITASCA
Denver, Inc.
Simulated and Measured Water Levels at the Union Hill Mine and New Brunswick Mine
CLIENT
Rise Grass Valley Inc.
FIGURE NO.
4-7

Mar 25, 2022

To: Matt Kelley, Senior Planner

Nevada County Planning Department
950 Maidu Ave, Suite 170
Nevada City, CA
530-265-1423
Matt.Kelley@co.nevada.ca.us
Idaho.MMEIR@co.nevada.ca.us

Attn: Matt Kelley,

Please include these comments to the Idaho-Maryland Mine DEIR.

SAMPLE QUALITY CONTROL REVIEW

The EPA Hazardous Waste Test Methods SW-846 Compendium establishes guidelines for sampling and analyses such as sampling containers, preservation and recommended hold times for analytes.

Recommended holding times ensure that the sample is analyzed for the requested parameter prior to any bio-degradation, oxidation, precipitation, sorption, volatilization, and other physical and chemical processes that may occur that can affect the integrity of the sample.

All metals were digested using EPA Method 3050B. The results should be defined as the "Total acid soluble/recoverable metals" fraction since this method does not use hydrofluoric acid, thus it is unable to break down silicates. (EPA SW-846 Revision VI December 2018, Chapter 3, pg 4)

Grp 8-134

Chapter 3 of the SW-846 Revision VI December 2018, pp 21-22 has the following footnotes regarding preservation and hold times:

a These recommendations are intended as guidance only. The selection of sample and digestion volumes/mass and preservation and holding times should be made based on the nature of the sample, the intended end use of the data and the data quality objectives.

1 The exact sample extract, and standard storage temperature should be based on project-specific requirements and/or manufacturer's recommendations for standards. Alternative temperatures may be appropriate based on demonstrated analyte stability within a matrix, provided the data quality objectives for a specific project are still attainable.

2 A longer holding time may be appropriate if it can be demonstrated that the reported analyte concentrations are not adversely affected by preservation, storage and analyses performed outside the recommended holding times.

SEE ATTACHED FILE: SW846 Metals

And while these guidelines are only "recommended" by the EPA, the context of data usage must be considered. The metals analyses data are being used in toxic metals leachate analyses and toxic air contaminant emissions. Also, heavy metals concentrations are known to potentiate the effects of asbestos toxicity. Since **the intended end use of the data** directly impacts public health, data quality is of utmost importance.

1

Grp 8-135

The recommended EPA holding times have been missed in both aqueous and solid sample categories.

SOLIDS-HOLD TIMES

Pages 515-516 of the *Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO shows a list of 47 samples that were sent out for "gold determinations" to ALS Laboratories in Reno, NV (pg. 93, *Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO). These samples are listed as from drill cores I-18-02*, I-18-10, I-18-11, I-18-12 and I-19-13. DATE RECEIVED is noted as 02-20-2019.

NOTE: In Table 4-9 Barren Rock Crushed Core Sample Trace Metals Results (*Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO Pg 101)
The sample listed as I-18-02 in the Appendices (pg 515) is now labelled B-18-02. Sample depths of 948- 958 bgs correlate between I-18-02 and B-18-02 labelled samples.

This means that all of the rock, tailings, soil, etc. samples that were used for the metals analyses were beyond the 6 months hold time. How far beyond that window is currently unknown since exact sample dates for the individual drill cores are not available-but this date (02.20.2019) suggests expiration by at least 9 months. Where are the drill logs needed for confirmation?

ACZ Laboratories lists the sample dates as 03.05.2019 for all 47 "soil" samples for metals analyses. The laboratory received by date for all samples is 11.11.2019. Again, the samples may have been collected for shipment on 03.05.2019 but their actual sample dates were months prior.

Twenty samples were digested on 11.22.2019 and the remaining twenty-seven samples were digested on 11.26.2019. (The digestion dates would be used for endpoint hold time calculations). All data is notated that the "samples were received and analyzed past hold time". (*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO Inorganic Extended Qualifier Reports pp. 389-407 and 458-484, Appendix D)

The samples MA-1, MA-2, MA-3, MAA-1, MS-1 and S-1 were collected by Benchmark Resources on 10.29.2019 for the leachate studies. Samples "collected" were from I-18-10, I-18-11 and I-19-13 drill cores. (*Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO Pg 93)

ACZ Laboratories lists 10.29.2019 as the sample date for this study when again these samples were obtained prior to 02.20.2019. (*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO pp 495-500)

Mercury analysis has a 28-day hold time and requires storage between 0-6°C (pg. 316 Sample Receipt form states that the cooler temperature was 18.8 °C, criteria ≤ 6.0. Wet or gel ice not present). These results are notated "Sample was received above recommended temperature" and "Sample matrix is solid rock and a homogenous sample aliquot could not be created for Hg analysis prior to preparation and air drying. Hg analysis was performed on crushed, homogenized, and air dried (40C) sub sample. Some loss of Hg may have occurred. Residual moisture on the prepped sample fraction was used for data collection."

Sample Receipt form states: "Some parameters were received past hold time" when in fact, ALL PARAMETERS WERE RECEIVED PAST HOLD TIME.

In addition, sample L55806-02 (MA-2) was noted "sample container was broken, was placed in ziplock bag". The type of sample containers was not provided on any COC forms. If these samples were stored in glass, then all boron analyses are invalid since it may be leached from glass containers.

2

Some general chemistry parameters (Chloride-WET DI, Nitrate/Nitrite as N -WET DI, Nitrate as N-WET DI, Sulfate)-WET DI are notated: "Analysis is outside the intended scope of the method, which does not provide hold time information for soil extracts. No hold time is observed for collection to extraction. The referenced method hold time is observed for extraction-to-analysis". The Nitrate/Nitrite as N-WET DI and Nitrate as N-WET DI were also notated as "Sample was received above recommended temperature" and the Nitrate as N-WET DI had the additional notation of "Sample was received and analyzed past holding time". (*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO pp 297-314)

On page, ACZ Laboratories states that "The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ": Boron (WET DI), Solids (Percent), and Sulfate (WET DI)". ((*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO pp. 315,355 Certification Qualifiers)

ACZ Laboratories lists 10.29.2019 as the sample date for M-1, M-2, M-3, MAA-1, MS-1 and S-1 along with sample date of 11.04.2019 for F-1, F-2, F-3 and F-4 on the Acid-Base Accounting tests when again these samples were obtained prior to 02.20.2019 (*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO pp 501-504). F1-F4 samples are a composite of core tailings that were drilled prior to 02.20.2019. For some reason, these samples were not received by ACZ Laboratories until 01.29.2020.

On pp 510, (*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO), Certification Qualifiers have the following statements:

"The following parameters are not offered for certification or are not covered by NELAC certification #ACZ:

- Neutralization Potential as CCO3 M600/2-78-054 NV Modified Sobek Procedure
- pH, Saturated Paste EPA 600-2-78-054 section 3.2.2
- Sulfur HCl Extractable M600-2-78-054 3.2.4 & 3.2.6 NV Modified Sobek Procedure
- Sulfur HNO3 Extractable M600-2-78-054 3.2.4 & 3.2.6 NV Modified Sobek Procedure
- Sulfur Hot H2O Extractable M600-2-78-054 3.2.4 & 3.2.6 NV Modified Sobek Procedure
- Sulfur Residual M600-2-78-054 3.2.4 & 3.2.6 NV Modified Sobek Procedure
- Sulfur Total M600-2-78-054 3.2.4 & 3.2.6 NV Modified Sobek Procedure

These were the methods used for Acid-Base Potential determinations.

AQUEOUS SAMPLES

All coliform tests (E. coli, Fecal and Total) exceeded hold times (pg. 99, *Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*).

All pH tests exceeded hold times since this is a field test to be performed within 15 minutes.

Grp 8-136

D-1 sampled on 02.13.2018 exceeded hold times for BOD, MBAS, NO_3 and NO_2.

ED-1 sampled 02.13.2018 exceeded hold times for BOD, MBAS, NO_3 AND NO_2.

The data is notated as such in the Appendices, pp 83-89.

All samples in the Fish Bioassay study were notated:
"12/21/18 Only 1 10 Liter effluent sample was provided for the initiation and renewal therefore could only perform a 25% renewal on day 2." (*Appendices: Groundwater Hydrology and Water Quality Analysis Report for The Idaho-Maryland Mine Project*, EMKO pp 222-228)

3

Grp 8-137

Both Ben Mossman and Andrew Kopania received copies of all laboratory reports. The cover letter from ACZ states that: "This report shall be used or copied in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report."

However, the data from these analyses is used in multiple consulting reports without any notations as to the validity of the data.

Thank you,

Pam Heard RRT

Pam Heard RRT (Registered Respiratory Therapist)

11500 Brunswick Pines Road
Grass Valley CA 95945
pspheard@yahoo.com

4

TABLE 3-2

RECOMMENDED SAMPLE HOLDING TIMES, PRESERVATION, COLLECTION QUANTITIES, AND DIGESTION VOLUMES/MASS FOR SELECTED INORGANIC ANALYTE DETERMINATIONS IN AQUEOUS AND SOLID SAMPLES[a,b]

Analyte	Matrix	Fraction	Minimum Collection Volume/Mass	Preservation[1]	Digestion Volume	Holding Time[2]
Metals (except Hg and Cr^{6+})	Aqueous	Total/total recoverable	600 mL	HNO_3 to pH<2	100 mL	6 months
		Dissolved	600 mL	Filter on site; HNO_3 to pH<2	100 mL	6 months
		Suspended	600 mL	Filter on site;	100 mL	6 months
	Solid	Total	200 g	None	2 g	6 months
Hexavalent chromium	Aqueous		400 mL	≤6 °C	100 mL	24 hours
	Solid		100 g	≤6 °C		30 days to extraction
				≤6 °C	2.5 g	7 days from extraction to analysis
Mercury	Aqueous	Total	400 mL	HNO_3 to pH<2	100 mL	28 days
		Dissolved	400 mL	Filter; HNO_3 to pH<2	100 mL	28 days
	Solid	Total	200 g	≤6 °C	0.2 g	28 days
	Solid	Species	200 g	≤6 °C	0.2 g	5 days
Chloride	Aqueous		50 mL	≤6 °C	—	28 days
Cyanide	Aqueous		500 mL	≤6 °C; NaOH to pH>12	—	14 days
	Solid		100 g	≤6 °C	—	14 days
Fluoride	Aqueous		300 mL	≤6 °C	—	28 days
Nitrate	Aqueous		1000 mL	≤6 °C	—	28 days
Hexane Extractable Material (HEM; Oil & Grease)	Aqueous		1000 mL	≤6 °C HCl or H_2SO_4 to pH <2	—	28 days
	Solid		100 g	≤6 °C		28 days
				HCl or H_2SO_4 to pH <2		when practical

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GROUP LETTER 8: RALPH SILBERSTEIN, COMMUNITY ENVIRONMENTAL ADVOCATES FOUNDATION

Response to Comment Grp 8-1

This comment is introductory in nature, states that the DEIR is inadequate, but does not provide any specific comments on the DEIR. The commenter's specific comments are addressed below in Responses to Comments Grp 8-2 through Grp 8-137. In addition, responses to the referenced Baseline comments are provided in Responses to Comments Grp 21-107 to Grp 21-128; and responses to the referenced Salter comments are provided in Responses to Comments Grp 21-129 to Grp 21-145.

Response to Comment Grp 8-2

The commenter asserts that the images of the facilities provided in the DEIR are not a fair representation of the actual visual character of the project, which causes the DEIR to understate visual impacts. As discussed in Section 3.2 of Appendix D to the DEIR, photographs from each viewpoint were taken from approximately 5½ feet above ground level, the approximate eye level of an average standing human. The camera lens was adjusted to mimic the perspective of the human eye (approximately 55 millimeters). Panorama photographs were taken to include peripheral elements that a viewer would see and present the view of the project site in relation to the surrounding area or viewshed.

The DEIR has already determined the project's aesthetic impacts to be a significant and unavoidable. Therefore, further analysis with the different photography method suggested by the commentor would not impact the significance determination set forth in the DEIR.

Response to Comment Grp 8-3

The commenter states that the use of an erosion control seed mixture for reclamation of the engineered fill piles would cause a "dead zone" and implies that this will cause an aesthetic impact. The commenter then states that native vegetation including deciduous and evergreen bushes and trees should be required as mitigation. The engineered fill piles require use of an erosion control seed mixture to prevent erosion of the slopes due to precipitation. While native plants may start to naturally grow on the slopes after reclamation, use of evergreen bushes is not an adequate method to prevent erosion; therefore, the erosion control seed mixture is the preferred reclamation method. The commenter's suggested mitigation would lead to significant erosion impacts and is therefore not appropriate for the project. Furthermore, the forestation of slopes on engineered fill piles was examined as an alternative in Section 6 of the DEIR and, as discussed on page 6-15 of the DEIR, while the planting of trees along the slopes of the Centennial and Brunswick engineered fill piles would reduce the proposed project's aesthetic effects by adding screening, the substantial slopes would not be fully screened due to the required tree spacing, and the aesthetic impact would be anticipated to remain significant and unavoidable. Therefore, this alternative would not be anticipated to avoid or substantially lessen a significant impact identified for the project. Given the limited efficacy of this alternative, it was rejected from further consideration.

Response to Comment Grp 8-4

Please see response to referenced Baseline comment. Please see Response to Comment Grp 21-124.

Response to Comment Grp 8-5

The Brunswick site is not located in the Loma Rica Drive Industrial area and therefore not subject to the Loma Rica Drive Industrial Area Plan. The referenced language refers to FAA regulations governing buildings, radio towers and other structures that physically obstruct aircraft flight paths due to their height. The project does not propose any structures that would be tall enough to be considered an obstruction under FAA regulations in the applicable airport safety zone. The project will be reviewed by the Airport Land Use Commission as it would have a building floor area of 20,000 square feet or greater, would include more than 100 people on-site, and would include new development of buildings more than 100 feet tall in Zones D and E. (DEIR, p. 4.7-36.) However, airspace review is not required for the project because the tallest point of the project (the 165ft headframe) would be at 2,912 feet msl, while the threshold for airspace review is almost 300 feet higher at 3,207 feet msl. (DEIR, p. 4.7-36.) The commenter does not explain how mine exhaust would be considered an "object" subject to these regulations.

The project would not create a persistent cloud plume or fog, and the commenter provides no substantial evidence to support its claim that the mine exhaust would create turbulence. This comment is speculative, and CEQA does not require that an EIR analyze speculative impacts. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." Please see Response to Comment Grp 7-95 regarding mine exhaust moisture.

Response to Comment Grp 8-6

The commenter asserts that the mine exhaust could cause persistent fog and turbulence. However, the project would not create a persistent cloud plume or fog, or cause turbulence. Please see Response to Comment Grp 7-95.

Response to Comment Grp 8-7

Please see Response to Comment Grp 7-95 regarding mine exhaust moisture.

Response to Comment Grp 8-8

Please see Responses to Comments Grp 7-95 and Grp 8-5.

Response to Comment Grp 8-9

The commenter summarizes comments from Group Letter 7. Exploration and testing for asbestos is conducted before mining of materials. The DEIR includes asbestos testing requirements and mitigation measures to ensure asbestos exposure to the public and workers will be less than significant. Please see Responses to Comments Grp 7-6, Grp 7-7, and responses to the referenced ASUR Plan Analysis in Grp 7-103 through Grp 7-137. Please also refer to Master Response 22 - Conservatism of Asbestos Assumptions.

Response to Comment Grp 8-10

The commenter summarizes comments from Group Letter 7. No such stockpile is proposed for the project. Please see Responses to Comments Grp 7-6, Grp 7-7, and Grp 7-137.

Response to Comment Grp 8-11

The commenter summarizes comments from Group Letter 7. No such stockpile is proposed for the project. Please see Responses to Comments Grp 7-6, Grp 7-7, and Grp 7-137.

Response to Comment Grp 8-12

The commenter summarizes comments from Group Letter 7. No such stockpile is proposed for the project. Please see Responses to Comments Grp 7-6, Grp 7-7, and Grp 7-137.

Response to Comment Grp 8-13

The commenter states that asbestos and silica are toxic air contaminants with no identified safe exposure levels, and that the HRA should analyze 80 years of exposure. Further, the commenter states that the DEIR needs to identify clear and achievable mitigation measures with robust monitoring systems of waste rock during transport and disposal.

As stated on page 4.3-42 of the DEIR, the NSAQMD's cancer and noncancer thresholds to assess health risk significance of asbestos and silica exposure for CEQA are consistent with what are used for the AB 2588 risk assessment procedures. The threshold of significance for health risk is an increased cancer risk of >10 cases per million persons. The Health Risk Assessment prepared for the project concludes that the health risk to the most sensitive receptor, including silica and asbestos exposure, will be below this threshold. The Health Risk Assessment is based on conservative assumptions. Please see Master Response 22 – Conservatism of Asbestos Assumptions and Master Response 21 – Conservatism of Silica Assumptions.

While the commenter requests that the HRA analyze an exposure timeframe of 80 years, OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the maximum exposed individual resident (MEIR) in the Hot Spots Program. This exposure duration represents the time of residency for 90 to 95% of Californians at a single location and should provide adequate public health protection against individual risk. (Section 8.1 OEHHA 2015 Air Toxics Hot Spots Program Manual).

Nevertheless, the DEIR concludes that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring.

Response to Comment Grp 8-14

The commenter states that the use of Blue Canyon's meteorological data for the HRA is not valid and that the DEIR must use different data for its analysis. The dispersion model in the Health Risk Assessment used the most appropriate data for the HRA. Please see Master Response 17 - Meteorological Data Used in HRA.

Response to Comment Grp 8-15

The commenter asserts that the DEIR needs to analyze the impact of the project on radon levels, including data on existing background radon levels of all homes and properties near the project. Elevated radon gas levels in indoor air are a result of radon moving into buildings from the soil, either by diffusion or flow due to air pressure differences. The ultimate source of radon gas in buildings is the uranium naturally present in the rock, water, and soil. Some rocks types are known to contain more uranium than others. However, geology cannot be used to predict whether a

particular building will have a radon problem. (CDHS 1991).[1] Radon can also enter homes through their water systems when using domestic wells. The areas most likely to have problems with radon in groundwater are areas that have high levels of uranium in the underlying rocks. (USGS 1992).[2] According to maps prepared by the California Department of Health Services, there are no known rock formations with elevated uranium in western Nevada County (see figures 2-4, 10-13 of CDHS 1991). There are granitic rocks in Nevada County, which may have elevated uranium; however, there are no granitic rocks in the mineral claims area (see Sheet 4 of Appendix K.2).

Moreover, underground mining would not affect radon entry into buildings because the vibration levels are much lower than would be required to damage the foundation or structure (see Section 4.10-4 of the EIR). Radon levels in homes along E. Bennett Road who choose to use NID water may have reduced radon in their homes as water from groundwater wells can contribute to radon levels in indoor air. As such, the project may reduce existing radon levels, if any radon exists, in the 30 parcels proposed for connection to NID water. Because the mining activities will only lead to the drawdown of groundwater and thus not provide recharge to the domestic wells, the mining activities at the project site should not affect the water quality of the domestic wells. (Page 14 of Appendix K.8). Any naturally occurring radon currently in groundwater would be unchanged by the project.

Radon is not considered a toxic air contaminant by the OEHHA or CARB and does not have an associated reference exposure level. Further, the commenter provides no evidence that the project could cause impacts related to radon exposure, and simply speculates that impacts may result. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As this comment amounts to speculation, no analysis of radon related impacts is required.

Response to Comment Grp 8-16

The commenter asserts that the DEIR failed to analyze impacts relating to South Fork Wolf Creek, including benthic macro-invertebrates, trout and other aquatic species. The commenter further states that the DEIR fails to analyze impacts to "an entire reach of South Fork Wolf Creek." However, DEIR Chapter 4.4 and Chapter 4.8 analyzed potential project impacts to biological resources and hydrology and water quality affecting South Fork Wolf Creek, respectively, including the portion of the creek that the commenter claims was excluded. As outlined in Section 4.4.1 (Introduction) and included as Appendix F, eleven different technical studies were prepared documenting existing environmental conditions and analyzing potential biological impacts from the proposed project. This includes a specific biological assessment technical report analyzing treated project water discharge to South Fork Wolf Creek (see Appendix F.10). These technical reports were prepared by biologists with over 30 years of local expertise in the species and environment within the project site. These technical studies were then peer reviewed by the County and its independent environmental consultants. The peer review of biology reports was conducted by a biological firm with similar local experience that resulted in several rounds of review and revision prior to the County's acceptance of these reports for use in the DEIR. As a

[1] CDHS (California Department of Health Services. 1991. *Geologic Controls on the Distribution of Radon in California.* California. Available at: https://www.conservation.ca.gov/cgs/Documents/Melange/Geo_Controls_Dist_Radon.pdf.

[2] USGS (US Geological Survey. 1992. *The Geology of Radon.* United States. Available at: https://pubs.usgs.gov/gip/7000018/report.pdf.

result, numerous biological experts with local knowledge have analyzed and reviewed the characterization and analysis included in these biological technical reports prior to their use and incorporation into the DEIR. In addition, as summarized in Chapter 4.8, and included in appendix H and K, ten different technical reports and peer reviews related to hydrology and water quality were prepared documenting or confirming ground and surface water conditions at the site and potential impacts from the proposed project. Specifically, two technical reports (Appendix K.1 and K.2) analyzed treated water discharge from the project and its potential impact to South Wolf Creek. These technical documents were also peer reviewed by the County and their environmental consultant.

Special status species that may utilize South Wolf Creek were analyzed in Impact 4.4-2 including Foothill Yellow-Legged Frog (FYLF) and Western Pond Turtle. Analysis of the Olive-sided flycatcher, Willow flycatcher, Yellow-breasted chat, and Yellow warbler has been added to Section 4.4 in the Final EIR. No significant impacts to these species were identified. As discussed in Impact 4.4-2, VES method surveys were conducted for FYLF along South Fork Wolf Creek within the project site and portions that flow through public property within Empire Mine State Historic Park. FYLF were not identified during these surveys. Impact 4.4-2 summarizes site and hydrologic conditions in South Wolf Creek within the project site and offsite demonstrating marginal habitat for FYLF. In addition, Impact 4.4-2 addressed potential treated mine water discharge impacts to FYLF and benthic macroinvertebrates and concluded this impact would not be adverse. As explained in Impact 4.4-2, and detailed in Chapter 4.8 and Appendix K.1, the proposed project will discharge a maximum of 5.6 cubic feet per second (cfs) of treated mine water to South Fork Wolf Creek. Base flow in South Fork Wolf Creek may range from 0.17 cfs in the summer to 6.5 cfs in the winter between storm events. Sediment pebble count analysis (see Appendix K.1) indicates that the flow rate at which sediment within the channel may become mobilized ranges from 20 cfs to 90 cfs. With the addition of the maximum proposed discharge of 5.6 cfs and increasing measured baseflows by a 50 percent safety factor, post-project baseflows during nonstorm periods would be expected to range between approximately 5.8 cfs and 15 cfs. These estimates are less than 23 cfs, the threshold for bedload sediment mobility and well below flows that commonly exhibit significant work on the channel (with minimal bed sediment becoming mobilized and minimal or no bank erosion, bed scour, or channel avulsion). The DEIR therefore concludes potential downstream impacts to the stream channel and associated riparian zone along both sides of South Fork Wolf Creek from the additional discharge of 5.6 cfs would be minimal on sensitive biological resources, such as foothill yellow-legged frog, and do not represent a potential significant impact to the stream channel or associated riparian zone within South Fork Wolf Creek. Additionally, peak flows on the South Fork Wolf Creek are expected to be lower than pre-project conditions due to the stormwater detention basin being constructed on the project site as part of the project. Please see Master Response 33 - Groundwater Dependent Vegetation; Master Response 32 - Temperature of Mine Water Discharge; Master Response 34 - Resident Fish; Master Response 35 - Discharge to South Fork Wolf Creek; Master Response 36 - Flows in South Fork Wolf Creek and Wolf Creek; Master Response 37 - Birds and Raptors; and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 8-17

Regarding the comments pertaining to the rate treated water discharge into the South Fork Wolf Creek, please see Response to Comment Grp 7-32. Regarding the assertion that the DEIR does not consider seasonality of streamflow, loss of streambed or streambank habitat, differences in Specific Conductance, and habitat for BMI, please see Responses to Comments Grp 7-34 and Grp 31-35, as well as Master Response 36 - Flows in South Fork Wolf Creek; and Master Response 35 - Discharge to South Fork Wolf Creek.

Regarding concerns related to changes in water temperature, please see Response to Comment Grp 7-36 and Master Response 32 – Temperature of Mine Water Discharge.

Regarding drawdown of water table and impacts to various habitats, please see Master Response 33 – Groundwater Dependant Vegetation.

Regarding concerns regarding cumulative impacts to BMI, trout, and other aquatic species, please see Response to Comment Grp 7-35.

Response to Comment Grp 8-18

The commenter asserts that the DEIR failed to analyze impacts from preparation of the Centennial Site for the cleanup project and subsequent use for placement of engineered fill. Please see Master Response 4 – Cleanup Project is a Separate Project under CEQA.

Response to Comment Grp 8-19

The Centennial Biological Resources Assessment (Appendix F.2) and Centennial Impact Technical Memorandum (Appendix F.3) used the Brunswick site as the reference location for the 5-mile radius CNDDB report and figure. Updated CNDDB 5-mile radius figure has been provide below using both the Brunswick and Centennial Industrial Site as the reference location. As shown in these figures, no new species were identified that have a moderate or high potential to exist onsite. With respect to yellow-breasted chat shown on the figures, please see Master Response 37 – Birds and Raptors.

Response to Comment Grp 8-20

Please see Master Response 4 – Cleanup Project is a Separate Project under CEQA. In addition, please see Section 1.3 of the DEIR for a full explanation of the baseline approaches used for the project.

Response to Comment Grp 8-21

The commenter states that approval of the Draft RAP is uncertain; therefore, the DEIR must use a baseline of existing conditions for the Centennial Site. The commenter's suggested baseline would be misleading, because the project could not place any material on the Centennial Site until after the DTSC cleanup project is completed and in the case that the DTSC project did not proceed, the project would proceed without any use of, or impact on the Centennial Site. Please see Master Response 4 – Cleanup Project is a Separate Project under CEQA. In addition, please refer to Section 1.3 of the DEIR for a full explanation of the baseline approaches used for the project.

Response to Comment Grp 8-22

Please see Master Response 4 – Cleanup Project is a Separate Project under CEQA. In addition, please see Section 1.3 of the DEIR for a full explanation of the baseline approaches used for the project.

Response to Comment Grp 8-23

Soil storage locations are shown on Sheets 3 and 5 of the Reclamation Plan (Appendix C of the EIR). The movement of soil is included and accounted for in the air quality impact analysis.

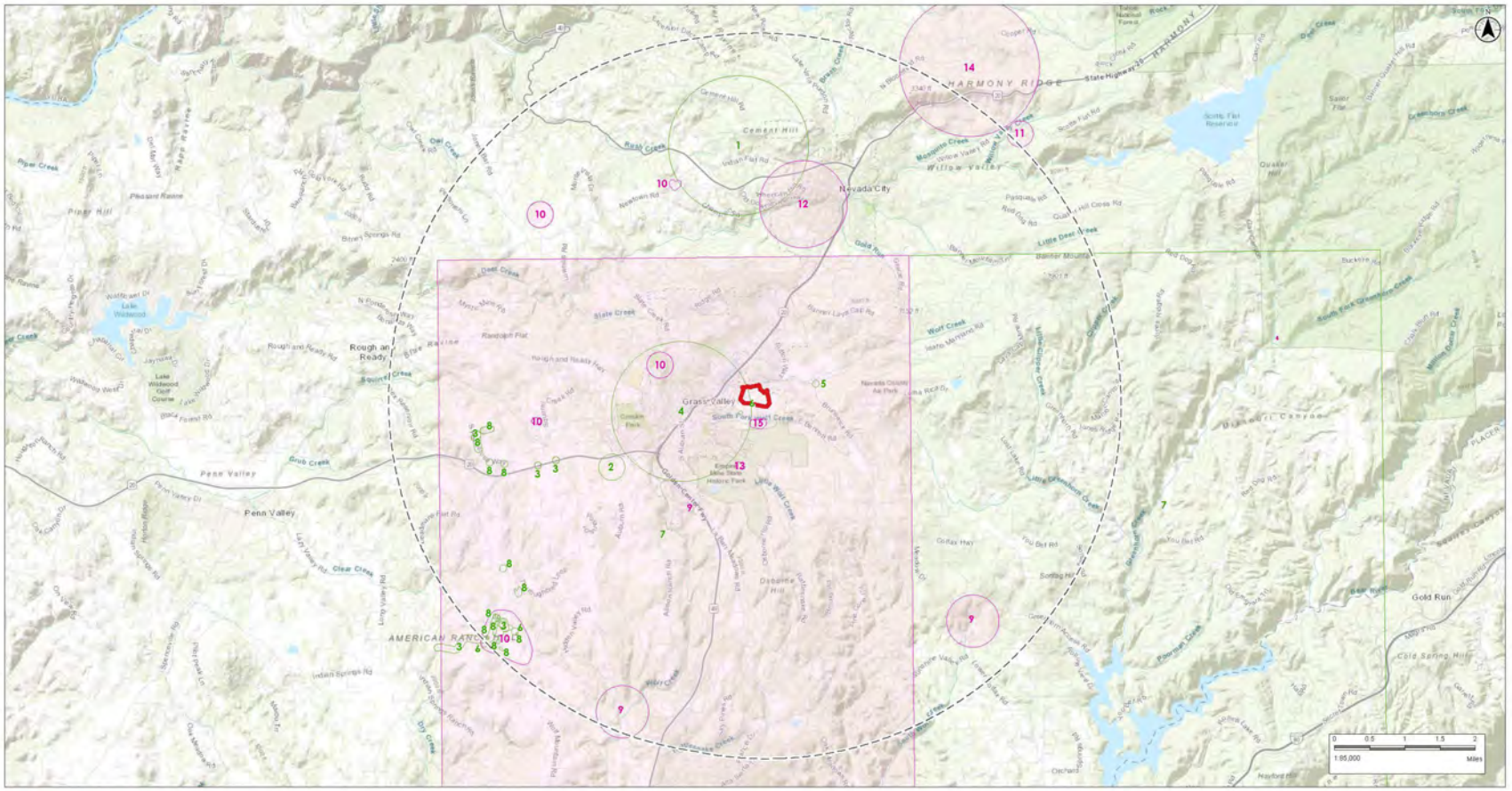


Figure 3. CNDDB and Critical Habitat Map

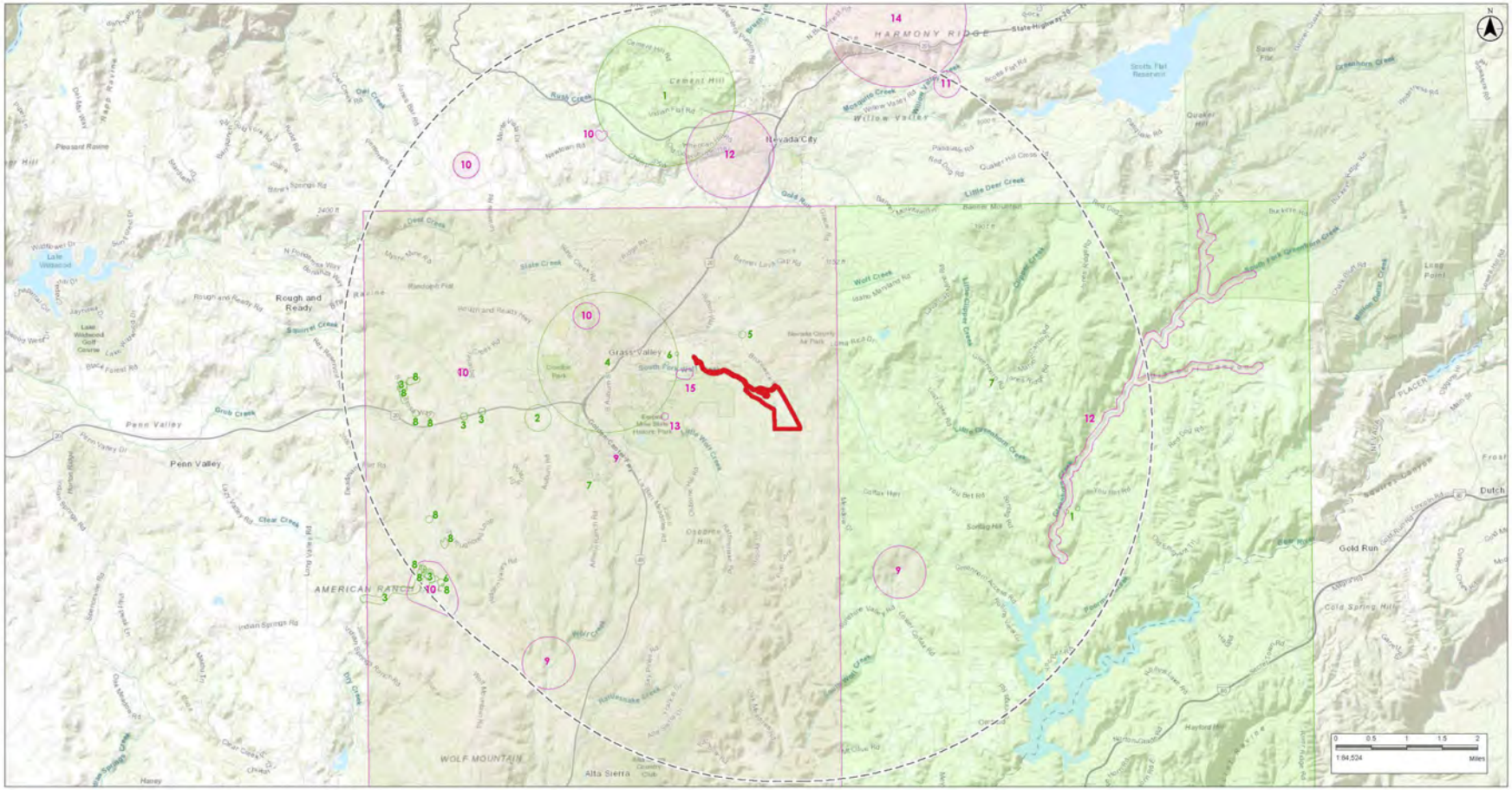
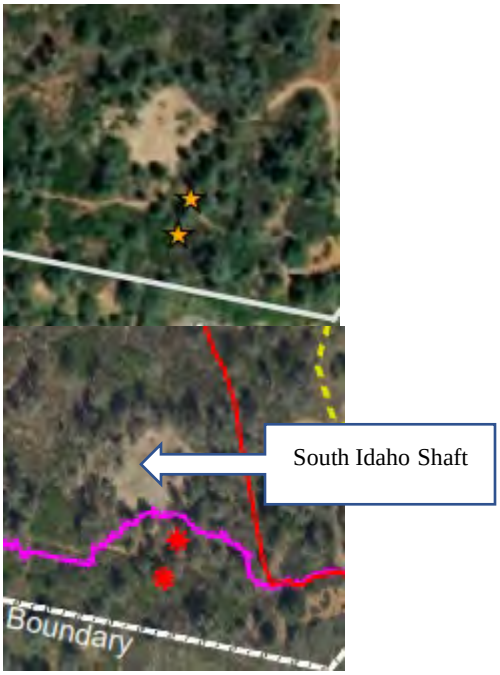


Figure 3. CNDDB and Critical Habitat Map

Response to Comment Grp 8-24

The South Idaho Shaft is inside the area of proposed placement of engineered fill at the Centennial site. Impacts to flannelbush plants have therefore already been analyzed in the DEIR. The location of the South Idaho Shaft is shown as a distinctive circular opening on the southeast portion of the Centennial Site on the Figure in Appendix D of Appendix F.4 of the DEIR. The South Idaho Shaft is outside of the DTSC cleanup disturbance area and inside of the Idaho-Maryland Mine Project disturbance area as shown in Figure B of Appendix F.4 of the DEIR. No flannelbush plants are located in the location of the South Idaho Shaft as can be seen on these figures.

Clips of figures referenced above from Appendix F.4 are shown below for clarity of the response.



Response to Comment Grp 8-25

Appendix F.3 and Appendix F.4 were technical reports prepared by an independent biologist with analysis of potential impacts and recommendations for protection measures. The County peer reviewed these documents, and as appropriate, incorporated the analysis and recommendations into the DEIR. The DEIR, which includes mitigation measures where appropriate, uses the terms "shall" or must" and therefore are enforceable. (See Mitigation Measure 4.4-1(a).) For example, Mitigation Measure 4.4-1(a) states "Prior to issuance of grading permits, the applicant shall record a Conservation Easement for the on-site Pine Hill flannelbush avoidance area, or use a similar land protection mechanism that runs with the land in perpetuity, to protect the Pine Hill flannelbush plants within the avoidance area." (Emphasis added.)

Response to Comment Grp 8-26

The commenter states that the DEIR's Habitat Management Plan (HMP) for Pine Hill flannelbush proposes to remove 18 plants and that 4 other plants could be impacted, but does not explain why the plants need to be removed. The commenter requests that the DEIR be amended to eliminate the need to remove the 18 plants. As explained in DEIR Impact 4.4-1:

> "The proposed placement of engineered fill at the Centennial Site would impact 18 Pine Hill flannelbush plants directly by requiring their removal as part of the Idaho-Maryland Mine Project. The remaining 42 individual Pine Hill flannelbush plants are located outside of the proposed engineered fill areas and therefore, they would not be directly impacted by the Idaho-Maryland Mine Project. However, four individual Pine Hill flannelbush plants would be located within 30 feet of the edge of the engineered fill material and could be subject to indirect effects from changes in topography, runoff, etc. that could occur as an edge effect on those individual plants."

As discussed above, the need to remove the 18 plants for placement of engineered fill and possible impact to 4 other plants due to the proximity to the engineered fill pile was already discussed in the DEIR in Impact 4.4-1. Further, as demonstrated above, impacts to Pine Hill flannelbush were addressed and considered potentially significant. A mitigation measure was identified requiring the preparation and implementation of a habitat management plan (see Mitigation Measure 4.4-1(a)) reducing this impact to a less than significant level.

Response to Comment Grp 8-27

Appendix F.4, Habitat Management Plan for the Pine Hill flannelbush, section 6.3 explains the transplantation and monitoring timing requirements for impacted Pine Hill flannelbush. The location of transplantation will be similar soil, hydrologic, vegetation type and aspect.

As explained in Appendix F.4, a maintenance and monitoring program is identified for transplanted Pine Hill flannellbush. Monitoring will occur every six months for the first two years. If transplantation does not meet success criteria, monitoring and maintenance will continue until those success criteria are achieved (see Appendix F.4, section 6.3.2). Irrigation is not prevented and could be utilized if determined necessary to ensure the success of transplantation. The monitoring and maintenance will continue until success criteria are achieved. If those success criteria cannot be achieved, Mitigation Measure 4.4-1(a)(5) and the draft management plan provides alternative maintenance transplantation measures to help achieve success criteria.

The commenter asks for detailed site activity phasing but CEQA does not require engineering level details. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.).

Response to Comment Grp 8-28

Please see Responses to Comments Grp 8-24 to Grp 8-27. The commenter does not provide environmental reasons why the conclusions of the DEIR are incorrect, and rather concludes that impacts are significant and unavoidable. The DEIR, specifically Impact 4.4-1 and Appendix F.4, provide substantial evidence the potential impacts to Pine Hill flannelbush have been appropriately analyzed and provides mitigation reducing the impact to a less than significant level. Further, the project's Pine Hill flannelbush impacts and the DEIR's proposed mitigation have been peer reviewed by the County's independent biologist.

Response to Comment Grp 8-29

Please see Master Response 4 – Cleanup Project is a Separate Project under CEQA. In addition, please see Section 1.3 of the DEIR for a full explanation of the baseline approaches used for the project.

Response to Comment Grp 8-30

Please see Master Response 4 – Cleanup Project is a Separate Project under CEQA. Please see Response to Comment Grp 7-78 regarding impacts to recharge caused by removal of the Centennial Site wetlands and subsequent placement of low permeability engineered fill.

Response to Comment Grp 8-31

The commenter states that preparations for waste dumping are proposed to take place up to the boundaries for protected species, wetland, and riparian setbacks but provides no information or specifies what boundaries are referenced. The description and analysis in Chapter 4.4 of the DEIR does not indicate any location where the boundaries of proposed engineered fill piles is adjacent to the boundary of a protected area (See Figure 4.4-10 and 4.4-9 of the DEIR). DEIR Impact 4.4-3 analyzed the project's potential to impact state or federally protected waters and wetlands and determined this impact was potentially significant. Surface disturbance on the Centennial Industrial Site has the potential to impact approximately 0.033-acre of ephemeral streams. Mitigation measures 4.4-3(a-d) were identified that reduce this impact to a less than significant level. Mitigation Measure 4.4-3(b) specifically requires the applicant to prepare a watercourse/wetlands/riparian area management plan a draft of which was included as Appendix F.5. The management plan includes best management practices and erosion control to prevent discharge to Wolf Creek. In addition, the project will be required to have a constructive SWPPP that will outline similar measures to reduce erosion and sedimentation from project construction. Chapter 4.4 of the DEIR provides a through analysis of protected species and proposed mitigation to reduce impacts to protected species to a less than significant level. Mitigation Measures 4-4-1(b) has been modified in the Final EIR to require that a qualified biologist shall be onsite during all vegetation and ground disturbing activities that are within the vicinity of special-status plants.

Response to Comment Grp 8-32

The commenter asserts that the DEIR failed to address the project's impacts to the housing market and increased homelessness, including homeless encampments in wildland areas. The commenter also states that mitigation should be provided to ensure sufficient affordable housing nearby for employees. Contrary to the commenter's assertion, the DEIR does analyze the project's impact on housing and concludes that "Nevada County has sufficient available housing stock to accommodate the entire estimated workforce for the project …." (DEIR, p. 4.9-28.) The commenter's assertion that the project could result in homelessness or encampments is speculative, as the commenter provides no evidence that the project, which would create job opportunities, could cause homelessness, or homeless encampments in wildland areas. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As the project will not result in housing shortages, the commenter's proposed mitigation is not required.

Response to Comment Grp 8-33

The commenter asserts that drawdown of groundwater within the underground mine may increase the potential for settlement or collapse of shallow workings. NV5 (Appendix H.6) found that the potential for geotechnical hazards associated with dewatering of the known near surface workings is low. No financial assurance mechanism is proposed, nor is required based on the low potential for any impact associated with the near surface workings. The DEIR analyzed the potential for collapse of the near surface workings in Impact 4.6-3 and concluded that the impact would be less than significant after incorporation of Mitigation Measure 4.6-3(c), which requires closure of



certain near surface mine features. The DEIR's conclusions were peer reviewed by the County's independent expert, who concurred with the conclusions. Mitigation Measure 4.6-3(c) provides clear and enforceable performance standards for closure of the near surface workings, but CEQA does not require engineering level details. (Dry Creek Citizens Coalition v. County of Tulare (1999) 70 Cal.App.4th 20, 26.) Please also see Master Response 29 - Near Surface Workings and Subsidence, and DEIR pages 4.6-12 to 4.6-15.

Response to Comment Grp 8-34

The commenter asserts that there is potential for sinkholes to occur where undocumented mine features exist. However, this statement relates to an existing baseline condition, not an impact of the project. Regarding the settlement previously observed 100 feet south of the mapped location of the Idaho Pump Shaft, NV5 (Appendix H.5) states "Further investigation and physical closure are recommended. Rise and the property owner have entered into a cooperation agreement to allow Rise to assist the property owner to close this feature before or at the commencement of dewatering."

Response to Comment Grp 8-35

The commenter asserts that the DEIR does not clarify liability if an unknown near surface mine working collapses as a result of dewatering. As discussed on page 4.6-44 of the DEIR, potential for collapse of existing near-surface mine features as a result of the proposed project was evaluated by NV5, whose report was independently peer reviewed by ECM. Mitigation Measure 4.6-3© requires the closure of six mine features. This impact was determined to be less than significant after mitigation. Please see Response to Comment Grp 8-33 and Master Response 29 – Near Surface Workings. As there is a low probability of settlement or collapse, the commenter's concern about liability for such collapse is speculation and is not required to be analyzed in an EIR. (See CEQA Guidelines Section 15384.)

Response to Comment Grp 8-36

Please see Master Response 9 - Historical Mine Waste at Centennial Site. Description of the waste rock and mine tailings, including the related analytical data, are presented in Chapter 4.8 of the DEIR and the analysis of air quality and health risk assessment is provided in Chapter 4.3 of the DEIR. Geochemical testwork of mine materials is presented in section 4.4 of Appendix K.2.

Response to Comment Grp 8-37

The commenter states that probability of mine collapse hazards have not been property addressed, because NV5 states that collapse of deep mine features is not likely to be expressed at the ground surface, but does not provide an exact percentage of occurrence. As stated on page 2 of Appendix H.6, near-surface mine features are generally more susceptible to subsidence and collapse than are deeper mine workings. NV5 (Appendix H.6) used professional judgment and experience to arrive at the conclusions presented in the document. Ultimately, the DEIR concluded that risk of collapse for deep mine workings is less than significant after mitigation. The County's independent expert peer reviewed the analysis and concurred with the conclusions.
Please see Master Response 29 – Near Surface Workings.

Response to Comment Grp 8-38

Please see Master Response 29 – Near Surface Workings, and Response to Comment Grp 7-96 regarding seismic activity concerns.

Response to Comment Grp 8-39
Please see the response to the referenced Faulting Hazard comment: Response to Comment Grp 7-96.

Response to Comment Grp 8-40
Please see the response to the referenced CSP2 comment: Response to Comment Grp 7-182.

Response to Comment Grp 8-41
Please see the response to the referenced CSP2 comment: Response to Comment Grp 7-187.

Response to Comment Grp 8-42
Please see Master Response 27 – Greenhouse Gas Thresholds.

Response to Comment 8-43
Please see response to referenced Baseline Comment. Response to Comment Grp 21-122.

Response to Comment Grp 8-44
As stated on page 4.3-89 of the DEIR, The Energy Action Plan (EAP) is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(D); therefore, no CEQA document can tier from the County EAP. Nevertheless, the compliance of the project with EAP strategies has been analyzed and found to be consistent with the EAP. Please see Master Response 25 - Nevada County Energy Action Plan.

Please also see Master Response 27 – Greenhouse Gas Thresholds.

Response to Comment Grp 8-45
The commenter suggests that GHGs associated with the manufacture of cement should have been included in the DEIR. This comment pertains to a “lifecycle” analysis, which is not required under CEQA. Please see Master Response 26 – Life Cycle GHG emissions.

Response to Comment Grp 8-46
The commenter suggests that GHGs associated with the refining of gold concentrates should have been included in the DEIR. This comment pertains to a “lifecycle” analysis, which is not required under CEQA. Please see Master Response 26 – Life Cycle GHG emissions.

Response to Comment Grp 8-47
As discussed on page 4.7-26 of the DEIR: A permanent underground explosive storage facility will require the completion of the Service Shaft, to provide two modes of exit from the mine, in accordance with 29 CFR 1926.904(d). Therefore, until the Service Shaft construction is completed, deliveries would be made to the Brunswick Shaft and would be limited to the quantity of explosives needed for less than one week’s use during construction. Explosives would be immediately transported underground once delivered to the site. Temporary auxiliary facilities used to store explosives near underground workplaces will be in compliance with 30 CFR 57.6161 and will be wooden box type containers equipped with covers or doors, or facilities constructed or mined-out, to provide equivalent impact resistance and confinement. The commenter does not identify any impacts not disclosed by the DEIR.

Response to Comment Grp 8-48

Please see Master Response 5 – Evacuation Zones.

Response to Comment Grp 8-49

The commenter asserts that the DEIR does not explain the transportation and storage of the various types of detonators and that the various detonators are not listed in the hazardous materials inventory statement form submitted to the County. Section 4.7-1 of the DEIR discusses detonators and detonating cord and the transport and storage of these explosive types in relation to Hazard Class and Compatibility Group. A hazardous materials business plan is required by Mitigation Measure 4.7-1(d), which will require submittal of a hazardous materials inventory statement listing all hazardous materials that will be stored onsite. As the project has not yet been approved and the various detonators discussed in the DEIR are not in use on the project site yet, the applicant is not yet required to submit a hazardous materials inventory statement that lists those detonators.

Response to Comment Grp 8-50

The commenter asserts that the DEIR needs to analyze the impact of heat generated by curing of concrete used by the project. However, the commenter's assertion that use of concrete in deep underground workings would create an environmental impact due to heat is speculative. The paste backfill method has been in use for about 40 years (see page 26 of Appendix H.7). The commenter provides no evidence or authority that any environmental impact or danger to workers could result. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." Portland cement use of 25 tons per day (5% cement content in cemented paste fill) is assumed for the project as disclosed on page 295 of Appendix E.1.

No "heat management mitigations" are required or proposed for the placement of cemented paste backfill, as there is no evidence that any evidence could result. As stated on page 4 of the Itasca Deskstop Study of Cemented Past Backfill, the final formulation of the CPB, including the precise binder amount, binder source, and water content, will ultimately be defined based on rheology and strength characterization testing. This testing program will ensure that the Idaho-Maryland Mine CPB is formulated to set properly and will have sufficient strength for the intended applications within the mine.

Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d)). This process would address "long term problems in terms of chemical stability" in relation to impacts to water quality.

The preparation of detailed "thermal impact" calculations from the curing of cement backfill is not required for the purposes of analysing environmental impacts in the DEIR. Any requirements to protect workers from excessive heat would be in accordance with Mine Safety and Health (MSHA) regulations.

Response to Comment Grp 8-51

The commenter asserts that impacts to sealed mine shafts due to dewatering were not properly addressed in the DEIR. However, near surface mine features and potential settlement/collapse due to dewatering are evaluated by NV5 in Appendix H.6 of the DEIR. Please see Response to Comment Grp 8-33.

As shown in Table 3-4 of Appendix K.2, the upper workings (Surface to 580 Level) have an estimated volume of water of 17,878,000 gallons. The water level in the New Brunswick shaft is approximately 257 feet below the top of the collar. The total water drop to 580 level is therefore approximately 323 feet. At the proposed pumping rate of 2,500 gpm, and conservatively assuming no groundwater inflow into the mine, the water in the mine would drop at approximately 2.7 feet per hour.

The water surface elevation in the mine features is expected to drop at a rate of approximately 2.7 feet per hour. This rate of drop is not expected to result in significant forces related to temporary air pressure fluctuation or increased seismicity, as further described by NV5 in Appendix P to the Final EIR.

Response to Comment Grp 8-52

The commenter asks whether the East Eureka Shaft and East Eureka Drain will be closed prior to dewatering of the mine, and also asks if construction will be conducted underwater and/or below the top of Wolf Creek's bank. As required by Mitigation Measure 4.6-3(c) the near surface mine features, except for the South Idaho Shaft, will be closed prior to initial mine dewatering.

As stated in the mitigation measure, the closure design shall include drainage piping for those near surface features that currently discharge groundwater. This reference is to the East Eureka Shaft which currently drains water from the currently flooded Idaho-Maryland Mine. Work will not be conducted underwater or within Wolf Creek. The shaft is under the Navo & Sons building and located approximately 50 feet from Wolf Creek. The building foundation is approximately 5 feet higher than Wolf Creek. Please see the NV5 Memo, provided as Appendix P to the Final EIR.

Response to Comment Grp 8-53

Please see Response to Comment Grp 8-52 and Response to Comment Grp 8-33.

Response to Comment Grp 8-54

As stated in Mitigation Measure 4.6-3(c), the closure design shall include drainage piping for those near surface features that currently discharge groundwater. No concrete would be poured into water, so no interaction with drain water will occur. Please see Response to Comment Grp 8-52.

Response to Comment Grp 8-55

As required by Mitigation Measure 4.6-3(c), the near surface mine features, except for the South Idaho Shaft, will be closed prior to initial mine dewatering. Please see Response to Comment Grp 8-33.

Response to Comment Grp 8-56

No work within a watercourse is proposed for closure of the near surface features.

Response to Comment Grp 8-57

The commenter asserts that water quality impacts related to cement paste backfill is not discussed in the DEIR; however, the commenter's statement is incorrect. The DEIR, at pages 4.8-46 through 4.8-49, discusses the use of CPB for backfill, describing the findings of applicant-submitted studies, third-party studies, and the peer review conducted by the County's EIR consultant team. As noted in the DEIR, "Use of CPB for the project is an environmentally favorable method for tailings disposal because it can significantly reduce any potential release of metals from the tailings and would minimize the area of surface disturbance needed for tailings disposal." (at page 4.8-47, 3rd paragraph). The DEIR also analyzes the potential for hexavalent chromium to be released from the CPB (at page 4.8-47, 4th paragraph). The DEIR concludes that, the use of CPB, along with other water management and treatment methods, and adherence to permit requirements, would avoid significant impacts to water quality. However, the DEIR considers the impacts to be significant prior to mitigation, and includes as mitigation the necessary regulatory requirements that would ensure that the project remains in compliance with water quality standards. These requirements are identified in Mitigation Measure 4.8-1(d), which are consistent with the requirements outlined in the comment letter from the Central Valley Regional Water Quality Control Board, dated April 4, 2022 (see Agency Letter 5). Mitigation Measure 4.8-1(d) requires testing of cement paste backfill for water quality impacts, and submittal of a report of waste discharge to the CVRWQCB at least 6 months prior to use of CPB, and issuance of waste discharge requirements prior to use.

The DEIR has already concluded that the use of CPB could result in a potentially significant impact related to water quality and has provided appropriate mitigation measures, consistent with the requirements of the Central Valley Regional Water Quality Control Board. Given that the DEIR already concludes that the impact could be potentially significant, and provides mitigation with regulatory oversight to ensure adherence to water quality standards, further analysis of the use of CPB is not warranted.

Response to Comment Grp 8-58

The commenter states that the DEIR's assessments of the current mine water chemistry are inadequate. Once mine dewatering commences the flow of water through the mine workings would be altered from its current condition with water pumped up the New Brunswick shaft rather than the current mine drains. Accordingly, the commenter's suggestion that water from the mine drains be used to represent the likely water quality during dewatering would not accurately represent the water quality when the flow is altered. The DEIR's analysis including the scope of water sampling and conclusions regarding water quality were prepared by water quality experts and then reviewed by the County's independent water quality experts, who concurred with the conclusions.

The proposed water treatment plant is designed to remove iron and manganese and arsenic if it were present. Please see Master Response 5 - Discharge to South Fork Wolf Creek. As shown in Table 3.6 of Appendix K.2, zinc in the mine drains ranged from <50 to 94 ug/L and aluminum ranged from <50 to 290 µg/L. Zinc and aluminum from the drains are already less than the low threat discharge permit limits shown in Table 4-10.

The DEIR has already concluded that the project may have a potentially significant impact on water quality and has identified Mitigation Measure 4.8-1(a) to address this potential impact. This mitigation measure requires the applicant to submit a Notice of Intent (NOI) to the Central Valley Regional Water Quality Control Board (RWQCB) and the Notice of Applicability (NOA) shall be

received before initial mine dewatering can begin. The NOI shall include evaluation of potential constituents of concern and demonstrate that the water treatment plant (WTP) design shall successfully treat mine water to meet the water quality standards and treatment goals.

Response to Comment Grp 8-59

The commenter asks how the water quality is impacted by existing timbers, whether treated wood products were used in historic mine works, and how water quality has been affected by infrastructure, equipment and spills of chemicals in the existing underground works. The items listed in bullets are related to existing conditions in the underground mine workings and, therefore, are part of the environmental baseline. The water samples collected from the New Brunswick shaft, and from Wolf Creek in 2018 were analyzed for a range of total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and mercury (See Table 3.6 of Appendix K.2). These analyses include the range of industrial chemicals described in the comment, and many others. Other than the occurrence of cis-1,2-dichloroethylene related to documented releases from the former Sierra Pacific Industries operations, there were no detections of any other organic chemicals or mercury. If future mining activity disturbs areas where some unknown residual chemicals currently reside, the monitoring required under the Central Valley Regional Water Quality Control Board WDR permits would detect any exceedances of water quality standards and the treatment systems would need to be modified accordingly to maintain compliance with discharge requirements (see Mitigation Measure 4.8-1(a)). Moreover, dewatering of the mine will allow removal of any equipment that was previously left in the underground mine, which could cause water quality impacts.

Response to Comment Grp 8-60

The items listed in bullets are related to existing conditions in the underground mine workings. No oil products or mercury has been detected by sampling of mine water present in the underground workings. Please see Response to Comment Grp 8-59. CEQA does not require that an EIR analyze speculative impacts. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence."

Response to Comment Grp 8-61

The commenter asserts that the mine water should be tested regularly as dewatering proceeds because of the possibility of contamination caused by oxidation of the underground rock or other contaminants such as mercury. The DEIR has already concluded that the project may have a potentially significant impact on water quality in connection with dewatering and has identified mitigation measures to address these potential impacts. As set forth in Mitigation Measure 4.8-1(a), the applicant is required to construct a water treatment plant to treat mine water to comply with applicable water quality standards prior to discharge into South Fork Wolf Creek. Moreover, the applicant is required to obtain coverage from the RWQCB for such discharge which will require testing and ongoing monitoring. Please see Master Response 5 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 8-62

Please see responses to the referenced "Sample QC Review". Responses to Comments Grp 8-134 through Grp 8-137.

Response to Comment Grp 8-63

Please see responses to the referenced "Sample QC Review". Responses to Comments Grp 8-134 through Grp 8-137.

Response to Comment Grp 8-64

Please see Response to Comment Grp 7-9, and Response to Comment Grp 7-164. Section 4.4 of Appendix K.2 of the DEIR provides geochemical testwork conducted on tailings and barren rock samples from the project. Testwork included Acid Based Accounting (ABA), Total Metals, and California Waste Extraction Testing (WET). The Waste Extraction Test (WET) should be used to determine the amount of extractable substance in waste rock (CCR Title 22 Division 4.5, Chapter 11, Article 5, Appendix II). The overall purpose of the barren rock and tailings sampling and laboratory analysis was to identify the general characteristics of that specific material type. Since the objective was to understand the general character, the number of samples or the length of the samples compared to the total linear feet of core drilled for mineral exploration has no relevance. As such, the results of the barren rock testing provide reliable and representative results for consideration in the DEIR and for assessment of the potential effects of the use of that material for engineered fill and cemented paste backfill.

The DEIR has already concluded that the project may have a potentially significant impact on water quality and has identified mitigation measures to address these potential impacts. Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). Please see Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 8-65

The assumed crystalline silica content and modelling of respirable silica is conservative and overestimates the relevant exposure in any situation. Therefore, sampling of materials for crystalline silica content is not required. Please see Master Response 21 – Conservatism of Silica Assumptions.

Please see responses to the referenced "Sampling Procedures". Responses to Comments Grp 7-155 through Grp 7-173.

Response to Comment Grp 8-66

The commenter asserts that the DEIR incorrectly assesses potential for acid rock drainage, and cites to the arsenic, iron and manganese present in water discharged from the Empire Mine. However, metal content in water from mine drains is a different issue than effluent from mine wastes, and the Empire Mine has different geology than the Idaho-Maryland Mine.

Section 4.4 of Appendix K.2 of the DEIR provides geochemical testwork conducted on tailings and barren rock samples from the project. Testwork included Acid Based Accounting (ABA), Total Metals, and California Waste Extraction Testing (WET). The overall purpose of the barren rock and tailings sampling and laboratory analysis was to identify the general characteristics of that specific material type. Kinetic testing (eg ATSM D 5744) was not conducted but may be done during the RoWD/WDR process. Please see Master Response 8 – Mine Waste Characterisation. However, given the high neutralization potential of the mine materials (see table 4-8 of Appendix



K.2), it is unlikely that kinetic testing would result in the generation of acid resulting in metal leaching.

The DEIR has already concluded that the project may have a potentially significant impact on water quality and has identified mitigation measures to address these potential impacts. Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRWQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). The waste characterization and required testwork may include using kinetic testing. Monitoring requirements will be included in the approved WDR. As such, the further testing that commenter requests will be completed as part of the RoWD process. Please see Master Response 8 – Mine Waste Characterization and Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 8-67

Please see response to referenced Baseline comment. Response to Comment Grp 21-109. Please see Master Response 8 - Mine Waste Characterization. The testwork performed on rock samples taken from the project site, and corresponding water quality analysis, was reviewed by the County's experts, who concurred with the DEIR's analysis and conclusions. Further, mitigation measures require further testing as part of subsequent CVRWQCB permitting. As such, the analysis and conclusions in the DEIR are supported by substantial evidence.

Response to Comment Grp 8-68

As discussed on page of Appendix K.2 of the DEIR, the restoration of the post-mining discharge through the drains would be comparable to existing conditions and, thus, not an impact under CEQA. However, once the mine discharge from the drains resumed, additional compliance measures may be required by RWQCB to address Basin Plan, antidegradation, and other water quality standards. These measures might include sealing off areas of the underground workings that are the primary source of arsenic in the existing drain water, sealing the underground workings sufficiently to prevent seepage of water from the connected mine workings, obtaining an Individual NPDES permit upon closure, or treating of the mine water seeps after closure.

Response to Comment Grp 8-69

Please see response to the referenced Baseline comment: Response to Comment Grp 21-112.

Response to Comment Grp 8-70

Please see responses to the referenced Model Review comments: Responses to Comments Grp 7-64 through Grp 7-94.

Response to Comment Grp 8-71

Please see responses to the referenced Model Review comments: Responses to Comments Grp 7-64 through Grp 7-94. In addition, please see Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 8-72

The groundwater model used for the DEIR is appropriate for the fractured rock system at the project site. Please see Master Response 14 – Adequacy of Groundwater Model. The DEIR already provides adequate information and comprehensive analysis to determine the extent and severity of impacts to groundwater resources and wells.

Response to Comment Grp 8-73

Please see response to referenced Baseline comment. Response to Comment Grp 21-110. The commenter mischaracterizes the DEIR's groundwater mitigation to imply that no data is collected or monitoring of groundwater is required until after dewatering commences; however, as required under Mitigation Measure 4.8-2(a) "Implementation of the GMP [groundwater monitoring plan] shall be initiated prior to the dewatering of the mine and on an ongoing basis." As such, the commenter is incorrect that groundwater monitoring and baseline data collection is deferred until after dewatering.

Response to Comment Grp 8-74

Please see responses to the referenced Oberdorfer comments: Responses to Comments Grp 8-127 through Grp 8-133. In addition, please refer to Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 8-75

The commenter states that the DEIR incorrectly assesses the transmissivity of the rock due to failure to consider the upper limit of the water level in the New Brunswick shaft. However, the observations presented in Section 3.3.3.3 of Appendix K.2 of the DEIR are not used as the basis for estimating transmissivity values used in the Groundwater Model. This section discusses the water level in the mine which remains relatively consistent with the elevations of the mine drains and is not correlated with rainfall. As the commenter mentions, and is discussed in Section 3.5.2 of the report, the water level in the mine is controlled by the elevation of the mine drains. Domestic wells, discussed in Section 3.3.2.2, show a seasonal fluctuation between wet and dry parts of the year that remained constant over many years. If a domestic well, where ground water levels are higher than the level of water in the mine, were directly connected to the mine workings, the groundwater level in the wells would be controlled by the water level in the mine. As described on page 81 of Appendix K2, the lack of a seasonal pattern in the mine water levels indicates that the mine workings are not directly connected to the wells by through-going fractures but are instead interconnected by a complex pattern of many fractures present throughout the bedrock.

Consumptive water uses from individual wells are not considered because of the lack of consumptive-use data and the fact that consumptive use is small relative to regional groundwater flow. In addition, much of the water pumped for domestic use would be recharged to groundwater by septic tanks/leach fields and landscape irrigation. Please see Itasca clarification memo attached to the Final EIR as Appendix O. In addition, please see Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 8-76

The commenter states that additional data must be collected before the County can accurately model the project's groundwater impacts. Please see Response to Comment Grp 7-23. In addition, please see Master Response 14 - Adequacy of Groundwater Model. The data used for the groundwater model and the conclusions of the groundwater model, as reflected in the DEIR, were peer-reviewed by the County's independent groundwater expert, who concurred with the conclusions of the DEIR. The water level in the mine which remains relatively constant with the elevations of the mine drains and is not correlated with rainfall. The current flow rate from the drains was not used for the preparation of the Groundwater Model and therefore additional measurements would not be relevant to the analysis.

Consumptive water uses from individual wells are not considered because of the lack of consumptive-use data and the fact that consumptive use is small relative to regional groundwater flow. In addition, much of the water pumped for domestic use would be recharged to groundwater by septic tanks/leach fields and landscape irrigation. Please see Itasca clarification memo attached to the Final EIR as Appendix O.

Response to Comment Grp 8-77

The commenter asserts that groundwater monitoring should continue for at least 5 years after the mine is closed and reflooded. However, the commenter does not identify any significant impacts that would be avoided by implementing the suggested mitigation. Monitoring is required on an ongoing basis as stated in Mitigation Measure 4.8-2(a). Therefore, monitoring would continue throughout operations and during mine closure and reclamation.

Once mining is completed, dewatering ceases, and the underground workings are allowed to flood with groundwater and are anticipated to refill over several years. No further impacts to water levels in domestic wells could occur during this period. As discussed on page 119 of Appendix K.2, after mining ceases, conditions would return to those that currently exist. The proposed new! mining activities would all occur at depths that are comparable to or much deeper than the historic! mine workings. Due to the substantial reduction in hydraulic conductivity at those depths,! compared to the depths of the domestic supply wells, it is highly unlikely that the proposed project! would affect water quality in the nearby much shallower groundwater wells. The arbitrary selection! of 5 years of monitoring after mine closure and reflooding is not supported by the analysis.! However, there will be water quality specific financial assurances for closure and post-closure! maintenance of mining units as required by Title 27 section 22510. This may include the need for! post closure water monitoring. This issue will be addressed in the approval of the WDR required! by Mitigation Measure 4.8-1(d) and 4.8-1(e).

Response to Comment Grp 8-78

Please see Response to Comment in Group Letter 7, Response to Comment Grp 7-80.

Response to Comment Grp 8-79

Please see Response to Comment in Group Letter 7, Response to Comment Grp 7-82.

Response to Comment Grp 8-80

Please see Response to Comment in Group Letter 7, Response to Comment Grp 7-83.

Response to Comment 8-81

Please see response to the referenced Baseline comment: Response to Comment Grp 21-119. In addition, please see Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 8-82

The commenter, in part, quotes a comment from Baseline Engineering in Group Letter 21, stating that the project's potential impacts to groundwater wells are underestimated and that the proposed mitigation is inadequate. Please see response to the referenced Baseline comment: Response to Comment Grp 21-118.

The DEIR already provides adequate information and comprehensive analysis to determine the extent and severity of impacts to groundwater resources and wells. An appropriate groundwater model was used to predict impacts to domestic water wells (See Master Response 14 – Adequacy

of Groundwater Model). However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies. A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). Ongoing groundwater monitoring would be required, and groundwater-level information shall be obtained from the project groundwater monitoring wells and collected on a quarterly basis and submitted in report form to Nevada County.

The commenter references County General Plan Policy 17.12, which requires a mine operator to guarantee a supply of replacement water when "according to expert opinion" the operation may threaten quality or quantity of water. Consistent with this General Plan Policy, Mitigation Measure 4.8-2(b) requires, if based on the GMP, it is determined that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the Project Applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted, and if necessary, providing an immediate water supply until the source of the problem is determined and rectified. The Well Monitoring Plan is designed to predict impacts to domestic water wells before they occur. Please see Master Response 15 – Adequacy of Groundwater Monitoring.

The commenter asserts that because "expert opinion" provided in comments on the DEIR disagree with the DEIR's conclusions and the conclusions of the County's independent water supply experts, that under the General Plan policy, the County must agree with the commenters and determine that the DEIR's groundwater model is flawed. However, where there is a disagreement among experts, the County has discretion to determine which expert opinion is most reliable in the context of an EIR. CEQA case law has been clear for decades that a disagreement among experts does not make an EIR inadequate. (See, e.g., *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1396; CEQA Guidelines § 15151.) As the California Supreme Court has explained, a reviewing court's task is not to weigh conflicting evidence and determine who has the better argument. (*Ebbetts Pass Forest Watch v. California Dept. of Forestry & Fire Prot'n.* (2008) 43 Cal.4th 936, 944.) Rather, a court "must resolve reasonable doubts in favor of the administrative finding and decision," even though other conclusions might be reached from the same body of evidence. (*Laurel Heights Improvement Assn., supra,* 47 Cal.3d at p. 422; see also *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564 [a court "may not set aside an agency's approval of an EIR on the ground that an opposite conclusion would have been equally or more reasonable"].)

As such, the County has determined that the groundwater supply analysis provided in the DEIR, and as peer-reviewed by its own independent experts is accurate, despite disagreement by commenters.

Response to Comment Grp 8-83

The commenter alleges that the project's discharge of water into South Fork Wolf Creek will overheat the creek. Please see Master Response 32 – Temperature of Mine Water Discharge.

Response to Comment Grp 8-84

Please see Master Response 32– Temperature of Mine Water Discharge.

Response to Comment Grp 8-85

Please see Master Response 32– Temperature of Mine Water Discharge.

Response to Comment Grp 8-86

Please see Master Response 32– Temperature of Mine Water Discharge.

Response to Comment Grp 8-87

The commenter asks what the impact of using the existing clay-lined pond for pumping of mine water will be on waterfowl, riparian habitat and whether mitigation will be provided. The commenter also states that there is currently outflow from the pond into South Fork Wolf Creek; however, there is no outflow from the clay lined pond at the Brunswick site to South Fork Wolf Creek. The referenced pond is not a natural water feature, but instead is an artificial pond constructed for previous sawmill operations at the site. As discussed in Section 5.4 of Appendix K.4, the quantity of Fe, and to a much lesser extent Mn, removed from the mine waters by aeration treatment and stored in (settled to the bottom of) the pond is relatively small. Periodic backwashes of the media vessels will release filtered and adsorbed solids. The backwashes will be directed to a mechanical solids removal system and stored in containers rather then directed back into the pond. The mass of solids removed during backwashing is small, estimated at 3 kg to 10 kg per day (page 44 of Appendix K.4). The purpose of the water treatment system is to improve the quality of mine water. Aeration in the pond will cause most iron to precipitate from its dissolved state in the water and settle towards the bottom of the pond. If arsenic is present it would precipitate with the iron. Manganese would primarily be removed in the water treatment plant and would not be backwashed into the pond. Therefore, water in the pond will have less iron, arsenic, and manganese than water from the mine.

As stated on page 4.4-15 of the DEIR: "*A man-made clay lined pond (PD-1) associated with previous saw milling operations does not have a direct outlet or connection to the South Fork Wolf Creek. PD-1 receives its water mainly from surface runoff and precipitation. PD-1 was used previously as a recycling pond for site runoff containment and log watering during mill operations. PD-1 is non-jurisdictional pursuant to federal Clean Water Act (CWA) regulations given it receives water from sheet flow within the Brunswick Industrial Site and does not connect directly or indirectly with South Fork Wolf Creek or any other 'waters of the U.S.'.*" As stated above, the water treatment pond is an artificial pond constructed for industrial uses. As such, the pond berms are not riparian areas and vegetation on the structure will be removed. Untreated water in the pond would not be released to the environment. No mitigation to replace habitat in the pond is proposed nor required. As discussed in Section 3.4.1.1 of Appendix K.2, the water in the mine contains only Iron and Manganese above water quality guidelines. In the case of Iron and Manganese, water quality guidelines are based on the secondary drinking water standards (taste and odor) and neither has maximum contaminant level (MCL) for aquatic life. Furthermore, acute toxicity test conducted on water from the New Brunswick shaft had a 100 percent survival rate for rainbow trout (see page 41 of Appendix K.2). Ammonia, from explosives use, could be present in mine water during operations but would be removed during water treatment by aeration in the water treatment pond (see page 4-5 of Appendix K.4).

Response to Comment Grp 8-88

Service water for the mine would be from the water treatment plant, and will therefore be treated water. The requirements for treatment of contaminants under the limited threat permit are equal to or better than drinking water standards. Regarding discharge of contaminants into the environment from the pond, see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 8-89

The commenter asks whether water will be tested before use in cemented paste backfill. Cemented paste backfill is non-draining and uses some water for cement hydration and retains the remaining water within its matrix (see page 2 of the Cemented Paste Backfill Study). Given that no water would drain from the cemented paste backfill, the water used in cemented paste backfill could not cause future groundwater contamination, and testing of process water is not required. Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d). This process would require that effluent from backfill meets water quality goals.

Response to Comment Grp 8-90

As discussed in the DEIR (page 4.11-36), water used for dust suppression would be treated water from the water treatment plant or water purchased from the Nevada Irrigation District. Untreated mine water would not be used for this purpose.

Response to Comment Grp 8-91

Odor from the water treatment pond has been analyzed and found to be less than significant (see page 56 of DEIR Appendix E.1). No air quality impacts are expected from the aeration process, and no evidence has been provided that any potential for impacts exist.

Response to Comment Grp 8-92

Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Quality Control Board (CVRQCB) prior to the placement of engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). The requirements for testing and materials management, to ensure water quality goals are achieved, will be specified in the approved WDR.

Water used for dust suppression would be treated water from the water treatment plant or water purchased from the Nevada Irrigation District. Untreated mine water would not be used for this purpose. Please see Master Response 1 - Engineered Fill Utilized in Local and Regional Construction Markets; and Master Response 8 - Mine Waste Characterization.

Response to Comment Grp 8-93

The commenter asserts that the water treatment pond will need to be drained and cleaned periodically to remove sediment; however, this is not correct. As discussed in Section 5.4 of Appendix K.4 to the DEIR, the removal of sludge from the water treatment pond can be achieved with slurry pumps. Therefore, the periodic removal of settled solids would not require the curtailment of mine dewatering or the draining of the water treatment pond.

As stated on page 5-3 of Appendix K.4 to the DEIR, the solids removed from the water treatment pond will be dewatered and hauled to an appropriate and approved off-site landfill. Testing will be conducted in accordance with the sampling requirements and acceptance criteria of the landfill.

Response to Comment Grp 8-94

The commenter asserts that the use of the New Brunswick Shaft is not proper because of the proximity to a known fault, and that the main processing and access facilities should instead be placed on the Centennial Site. As discussed in Section 4.5-1 of the DEIR, based upon substantial



evidence in the record, the project includes a request to amend the Final Map for Bet Acres recorded in February 1987 in Book 7 of Subdivision Maps at Page 75 to remove the "200' Building Setback From Fault", as shown on Sheet 4 of Final Map #85. The County's independent geotechnical consultant agreed that the removal of this setback is proper, given the lack of evidence to indicate an active fault at this location (see pages 4.6-3 to -5 of the DEIR).

In addition, a management plan was prepared pursuant to Nevada County LUDC Section L-II 4.3.8 to address potential seismic hazards associated with the previously-identified inferred fault alignment. It is NV5's professional opinion that the subject fault, identified on the property in Map 85-7, does not qualify as a seismically active area as defined by Nevada County LUDC Section L-II 4.3.8.B, and the proposed project development within the designated building setback fault zone is generally feasible from a geotechnical engineering standpoint.

While the analysis shows that an active fault likely does not exist, out of an abundance of caution, the County has concluded that a significant impact could occur without mitigation. Mitigation Measure 4.6-1 requires that prior to approval of Improvement Plans, the design recommendations from the Brunswick Industrial Site Geotechnical Report (November 18, 2019) shall be incorporated into the Plans to the satisfaction of the Nevada County Building Department.

The commenter also suggests that the County should consider placing the access shafts and processing facilities on the Centennial Site rather than the Brunswick Site because Emgold previously planned to do so and that multiple access points from different parts of the mine provides better emergency access and ventilation. A vertical shaft at the Centennial site is not a practical solution as it is far west of the area of mineralization at depth (See sheet 15 of Appendix K.2) and would intersect the serpentinite rock unit (see Sheets 5-7 of Appendix K.2), causing potential geotechnical issues. The 2008 Emgold DEIR[3] proposed to construct a decline tunnel from the Centennial site to access the underground mine and haul rock from underground to surface using trucks (See page 2-23 of ESA 2008). A decline tunnel must be at a gradient allowing wheeled trucks to haul materials to surface, typically 10% to 15% grade, and therefore is much longer than a vertical shaft which greatly increases the energy required to move materials to surface versus a shaft. Significantly more rock excavation volume would also be required for a decline tunnel versus a shaft. If the process plant were located at the Centennial site very little or no engineered fill could be placed at the Centennial site and all fill would be hauled and placed on the Brunswick site. The process plant would be further from residential properties. However, the DEIR has analyzed noise, air emissions, odor and other impacts associated with the currently proposed location of the process plant which are already less than significant after mitigation. Moreover, The commenter does not identify any significant impacts that would be avoided by adopting the suggested alternative and the proposed alternative would likely increase impacts; therefore, this proposed alternative is dismissed from further consideration.

Response to Comment Grp 8-95

Please see response to referenced faulting hazard comment: Response to Comment Grp 7-96.

Response to Comment Grp 8-96

The Commenter asserts that a variance should be denied relating to the building setback from a fault. However, the applicant is not requesting a variance from the setback requirement, but rather

[3] ESA (Environmental Science Associates). (2008). *Draft Idaho-Maryland Mine Project Environmental Impact Report* San Francisco, California.

is requesting that a note on the subdivision map referring to the setback be removed given the lack of evidence supporting the existence of an active fault at this location.

Response to Comment Grp 8-97

The commenter asserts that alternative land uses are not adequately discussed in the DEIR, and claims that a project consistent with the existing zoning would be more appropriate for the site. As stated on 6-13 of the DEIR, numerous industrial uses are already allowed on the Brunswick Site without the need for a use permit from the County, such as Auto Dismantling Yards and Wholesaling and Distribution Facilities. The DEIR discloses that these types of uses could cause substantial noise, traffic, aesthetic and air quality impacts without the need for further CEQA review or mitigation, as discretionary permits are not required for those uses. Given that the existing zoning allows uses that could likely be more intense and impactful than the project in numerous resource areas (e.g., noise, air quality, traffic), the County dismissed this Alternative from further consideration (DEIR p. 6-13.). Please also see Response to Comment Grp 21-104.

Response to Comment Grp 8-98

As stated on page 4.9-3 of the DEIR, "While the majority of the Sites are located in the City's sphere of influence and assigned General Plan land use designations by the City, the Sites are located within unincorporated Nevada County and are not proposed to be annexed to the City of Grass Valley." The County evaluated potential land use conflicts in Chapter 4.9 of the DEIR and concluded that potential land use conflicts were less than significant.

Response to Comment Grp 8-99

The commenter states that the DEIR must determine whether the dumping of mine waste is a heavy industrial activity. As stated on page 4.9-16 of the DEIR, Surface mining, including the production and disposal of mining waste, are allowed in the M1 (light industrial) district where the property is Zoned ME, subject to the approval of a Use Permit. The Brunswick site will be zoned M1-ME if the project is approved. The objective of the placement of engineered fill, over approximately 5 years, at Centennial site is to increase the usable land area at the Centennial site to allow its future use as industrial land (see page 3-12 of the DEIR) and no other activities are proposed for this site ;therefore, this is properly considered a construction activity allowed on the Centennial site. As stated in Section L-II 3.22 D.4.b of the Nevada County Land Use and Development Code, on-site excavation and on-site earthmoving activities which are an integral and necessary part of a construction project that are undertaken to prepare a site for construction of structures, landscaping, or other land improvements, including the related excavation, grading, compaction, or the creation of fills, road-cuts, and embankments are exempt from Section L-II 3.22 and the requirement for ME zoning.

Response to Comment Grp 8-100

The culvert present at the Brunswick site is part of the existing condition and prior permitting for construction is not relevant to the analysis for the DEIR.

Recorded easements on the Brunswick site have been plotted by a Licensed Land Surveyor. No project activities are proposed in the location of the 100-foot NID spill easement.

https://www.nevadacountyca.gov/DocumentCenter/View/30408/Brunswick-Site-Easements---NCE

Response to Comment Grp 8-101

The commenter asserts that the DEIR should analyze the "Weimar" fault and show the location of proposed structures in relation to this fault. As discussed in Section 4.5-1 of the DEIR, based upon substantial evidence in the record, the project includes a request to amend the Final Map for Bet Acres recorded in February 1987 in Book 7 of Subdivision Maps at Page 75 to remove the "200' Building Setback From Fault", as shown on Sheet 4 of Final Map #85. The County's independent geotechnical consultant agreed that the removal of this setback is proper, given the lack of evidence to indicate an active fault at this location (see page 4.6-4 of the DEIR).

In addition, a management plan was prepared pursuant to Nevada County LUDC Section L-II 4.3.8 to address potential seismic hazards associated with the previously-identified inferred fault alignment. It is NV5's professional opinion that the subject fault, identified on the property in Map 85-7, does not qualify as a seismically active area as defined by Nevada County LUDC Section L-II 4.3.8.B, and the proposed project development within the designated building setback fault zone is generally feasible from a geotechnical engineering standpoint.

While the analysis shows that an active fault likely does not exist, out of an abundance of caution, the County has concluded that a significant impact could occur without mitigation. Mitigation Measure 4.6-1 requires that prior to approval of Improvement Plans, the design recommendations from the Brunswick Industrial Site Geotechnical Report (November 18, 2019) shall be incorporated into the Plans to the satisfaction of the Nevada County Building Department.

Response to Comment Grp 8-102

The commenter states that a map with the South Idaho Shaft shown in relative location to Pine Hill flannelbush locations must be provided to protect these plants. The South Idaho Shaft is inside the area of proposed placement of engineered fill at the Centennial site, and a total of 18 plants will be transplanted under Mitigation Measure 4.4-1(a). Impacts to flannelbush plants have therefore already been analyzed in the DEIR, mitigation has been provided, and the DEIR concluded that impacts would be less than significant after mitigation (See DEIR, Impact 4.4-1). In addition, please see Response to Comment Grp 8-24.

Response to Comment Grp 8-103

A map showing the mineral rights area is included as Figure 3-2 to the DEIR. There is no requirement that a map identifying each parcel within that area be provided.

Response to Comment Grp 8-104

Please see response to referenced Salter comment. Response to Comment Grp 21-130.

Response to Comment Grp 8-105

Please see response to referenced Salter comment. Response to Comment Grp 21-131.

Response to Comment Grp 8-106

Please see response to referenced Salter comments. Responses to Comments Grp 21-142 through Grp 21-144.

Response to Comment Grp 8-107

The comment expresses concern with blasting vibrations and long-hole stope blasting, which was studied extensively in the DEIR. Note that the commentor incorrectly refers to stope blasting as "slope" blasting. Vibrations from long hole blasting are discussed extensively in Section 4.10-4 of

the DEIR and Appendix M of the DEIR and are determined to be less than significant. (DEIR pp. 4.10-26, 4.10-52, and Table 4.10-23.) As shown in Table 4.10-22 and Table 4.10-23, all groundborne vibrations calculated for blasting of both drift round and long-hole stopes, respectively, fall below the USBM recommendations and the levels at which structural damage to buildings is possible (see Table 4.10-9). Drift development blasts at the shallowest depth considered of 500 feet would be barely perceivable to the general population and undetectable by instrumentation below 900 feet in depth. Larger longhole stoping blasts at the shallowest depth considered of 500 feet would be 0.23 in/s, which is also well below the threshold level of vibration (0.4 in/s). (DEIR p. 4.10-54.)

The maximum potential noise and vibration caused by falling rock is trivial in comparison to what has already been analyzed in the EIR. Please see Response to Comment Grp 8-108.

Response to Comment Grp 8-108

This comment alleges that ground vibrations from falling rock in the new access shaft should be considered. As discussed on page 3-22 of the DEIR, the proposed service shaft excavation in rock would be constructed from the underground mine workings upward to the surface through a process called 'raising'. The raise excavation could be completed using either mechanical raise boring or Alimak raising. Raise boring is carried out using a raise bore machine located on the surface. A drill hole is made from the surface to the underground workings. After a cutting head is attached underground to the end of the drill pipe, the raise bore machine pulls the rotating cutting head upward to create a circular excavation in a continuous process. Alimak raising is carried out using drilling and blasting. The raise is blasted from the bottom upward. Rails are attached to the wall of the raise so that an Alimak raise climber can lift the miners to the working face. An Alimak raise is advanced with each blast in segments of approximately 10 feet.

Ground vibration from construction of the service shaft is analyzed in section 5.0 of DEIR Appendix M. The highest levels of ground vibration will be that produced from the breakthrough round, as this has the least amount of vertical distance between the blast and the surface. While this round will be 50 ft below surface it will be blasted to the surface. This is an extremely conservative estimate both in the magnitude of estimating the ground vibration and assuming there is no vertical relief. (DEIR p. 4.10-58.)

The ground vibration from this single shot would not be expected to cause damage to industrial structures adjacent to the raise breakthrough round or residences in the area. At maximum, the ground vibration at the nearest receptor is expected to be 0.13 in/s which is well below the 0.4 in/s recommendation for human perception. (DEIR p. 4.10-58; see also DEIR Table 4.10-9.)

Air overpressure from construction of the service shaft is analyzed in the Technical Blasting Report section 5.0 of DEIR Appendix M. The single breakthrough round from the shaft may produce air overpressure of 126 dB, which is approximately 50% of the U.S. Bureau of Mines recommendations. The U.S. Bureau of Mines and the Office of Surface Mining, Reclamation, and Enforcement (OSMRE) have both developed recommendations for ground vibration levels to prevent damage to residential structures. These recommendations will be strictly followed by the project. Regarding site-specific analysis and recommendations, Dr. Konya of Precision Blasting Services recommended a threshold level of 0.4 in/s PPV for the Idaho-Maryland Mine project. (DEIR p. 4.10-21; See also DEIR Table 4.10-9.)

During the construction of the Service Shaft, assuming it is constructed by Alimak raising, rock would fall up to 1,000 feet inside the excavation after blasting. Section 7 of the Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (September, 2018) provides guidance for evaluating noise and vibration during construction activities. (DEIR p. 4.10-20.) While it does not provide reference data for evaluating vibration levels for falling rock, it does provide data for impact-type pile drivers which is analogous to vibration levels from falling rock. Table 7-4 on page 184 of the FTA publication reports a maximum vibration level of 1.5 in/sec peak particle velocity for impact-type pile driving activities at a distance of 25 feet from the location where impact would occur. This level of vibration is trivial in comparison to the level of vibration already analyzed for the concurrent detonation of explosives. Assuming a charge weight of 42.1 pounds and the formula presented on page 6 of Appendix M of the DEIR, the PPV from the blast at 25 feet can be calculated at approximately 15 in/sec. The charge weight for a longhole blast is assumed at 133 pounds and PPV at 25 feet can be calculated as above at 28 in/sec. As seen from the foregoing, the maximum potential vibration caused by falling rock is trivial in comparison to what has already been analyzed in the DEIR. Noise from falling rock at the blasting area would also be far lower than noise from the explosive's detonation and noise from blasting at sensitive receptors on surface is less than significant (see page 4.10-44 of the DEIR). Therefore, noise from falling rock would also be less than significant.

Response to Comment Grp 8-109

The commenter asks how long the construction of the new access shaft will take, how long after initiation of site construction before the access shaft will be constructed, and how long after the initial dewatering of the mine the shaft will be constructed. The service shaft must be completed before production mining can commence in accordance with MSHA regulations. Construction of the access shaft is generally expected to take 12 months. However, the precise timing will be dependent upon the timing necessary to obtain other ancillary permits and approvals, which cannot be known precisely in advance. The exact timing of access shaft construction is not necessary for the analysis of environmental impacts in the DEIR.

Response to Comment Grp 8-110

The recommendation cited by the commenter was incorporated into Mitigation Measure 4.10-4 of the DEIR.

Response to Comment Grp 8-111

Please see Master Response 11 - Engineered Fill Utilized in Local and Regional Construction Markets.

Response to Comment Grp 8-112

As described in Section 3.0 of the DEIR, after full placement of fill at the Centennial and Brunswick Industrial sites to the pad design elevations, hauling of engineered fill (barren rock and sand tailings) would shift entirely to be utilized in local and regional construction markets. Please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets.

No large-scale temporary storage facilities are proposed for the project, and placement of such stockpiles would not be allowed under the project's conditional use permit. The project includes temporary storage of materials at the Brunswick Shaft, inside the process plant, and at the Brunswick and Centennial sites where material would be dropped by trucks and later graded and compacted during weekday daylight hours.

Response to Comment Grp 8-113

Please see Group Letter 7, Response to Comment Grp 7-3, and Master Response 24 - Project Construction Schedule.

Response to Comment Grp 8-114

The southwest portion of the water treatment pond berm would be excavated and rebuilt before dewatering commences; and the clay liner of the pond will be covered with a geomembrane liner to ensure no seepage from the pond occurs. (See page 3-17 of the DEIR). The impacts of the project construction to surface waters and wetlands have already been assessed in the DEIR and mitigation measures are required to reduce impacts to a less than significant level. (See Impact 4.4-3 of the DEIR.) The pond would be drained to allow the reconstruction of the berm and installation of the liner. If the water is discharged to South Fork Wolf Creek, it would be required to be in compliance with the approved Notice of Applicability (Please see Master Response 35 – Discharge to South Fork Wolf Creek). Alternately, the water drained from the pond may be discharged to land (and recharge into the ground) under the requirements of the Construction Stormwater Pollution Prevention Plan (C-SWPPP) required by Mitigation Measure 4.8-1(b) of the DEIR.

Response to Comment Grp 8-115

The headframe height is required to lift the rock skips high enough to drop hoisted rock into the existing shaft silo. The process plant height is required for the tailing dewatering sections where materials use gravity flow and sufficient height is needed for the various machinery. Placement of these structures below ground is not technically feasible, as the bottom of the structures need to be accessible at surface level to allow loading of trucks. As such, the suggested mitigation is not considered further due to infeasibility.

Response to Comment Grp 8-116

This comment summarizes the prior comments and generally asserts that the DEIR is inadequate and needs to be recirculated. The commenter's specific comments are addressed in Responses to Comments Grp 8-1 to Grp 8-117.

Response to Comment Grp 8-117

This comment appears to be referring to a similarly titled attachment to Group Letter 7. Please see Responses to Comments Grp 7-64 to Grp 7-94.

Response to Comment Grp 8-118

Please see responses to the referenced Oberdorfer comments: Responses to Comments Grp 8-125 through Grp 8-131.

Response to Comment Grp 8-119

Please see responses to the referenced Mine Exhaust Moisture comments: Response to Comment Grp 7-95.

Response to Comment Grp 8-120

Please see responses to the referenced Faulting Hazards comments: Responses to Comments Grp 7-96 to Grp 7-102.

Response to Comment Grp 8-121

Please see responses to the referenced ASUR Plan Analysis: Responses to Comments Grp 7-103 through Grp 7-137.

Response to Comment Grp 8-122

Please see responses to the referenced Health Risk Assessment Critique comments: Responses to Comments Grp 7-138 through Grp 7-154.

Response to Comment Grp 8-123

Please see responses to the referenced Sampling Procedures comments: Responses to Comments Grp 7-155 through Grp 7-172.

Response to Comment Grp 8-124

Please see responses to the referenced Baseline Environmental Consultant Report: Responses to Comments Grp 21-107 to Grp 21-128.

Response to Comment Grp 8-125

Please see responses to the referenced Salter Report comments: Responses to Comments Grp 21-129 to Grp 21-145.

Response to Comment Grp 8-126

Please see responses to the referenced Center for Science in Public Participation comments: Responses to Comments Grp 7-174 through Grp 7-201.

Response to Comment Grp 8-127

This comment is a summary of comments Grp 8-128 to Grp 8-133. Please see Responses to Comments Grp 8-128 through Grp 8-133. The commenter asserts that the groundwater model is flawed because it does not include shallow groundwater levels in 1956 towards the end of historic mining.

The commenter is confused on several main issues.

1) The commentor believes that drawdowns are shown relative to 1956 when the mine was dewatering. This is incorrect. The drawdowns are shown relative to 2019 (or current) ground water levels. The reason for using 2019 groundwater levels is because they are the equilibrium conditions under current landscape and hydrogeologic conditions. All water supplies of domestic wells are controlled by the current water levels not the 1956 water levels.
2) The commentor is confused between the level of water in the mine and the groundwater level. The groundwater level is influenced by the level of water in the mine (creating drawdown cones) but they are not the same. In most mining operations, the water level in the mine is below the mine working in order to maintain the dry working conditions. Because the rock has low hydraulic conductivity, there will be a large difference between the groundwater levels in the rock mass and groundwater level in the mine working. The lower the permeability is, the larger the resistance from groundwater in the surrounding rocks mass to flow to the mine workings is and, consequently, the larger difference between groundwater levels in the rock mass and mining working is.
3) The commenter is using a different definition of “initial condition” than is used by Itasca in the Groundwater Model Report. The commenter believes that “initial condition” is the

baseline for the measurement of project impacts. This is not correct. This point is explained in Bullet Item 1.

As the commenter is mistaken about the groundwater model that was used in the DEIR, the commenter's specific critique of the model is based on a misunderstanding. The groundwater model was calibrated by experts in groundwater modelling and peer-reviewed by the County's own groundwater experts and constitutes substantial evidence of the DEIR's conclusions.

Response to Comment Grp 8-128

The commenter states that the groundwater model is flawed because of the initial conditions assumed by the model; however, the commenter misunderstands how the groundwater model works and is therefore mistaken. As explained in Section 4.0 of Appendix K.3, the initial condition was modelled in the following general sequence:

1) Simulation of pre-historical mining conditions (before any mining had taken place). No groundwater levels are available for the model calibration of pre-historical-mining groundwater conditions. Itasca assumed that 2019 water levels outside of the Mine area are close to those of the pre-historical-mining condition after more than 60 years of recovery. This assumption is supported by the available hydrographs from domestic wells (Todd 2007), which show that groundwater levels were generally stable from 1994 to 2007 with seasonal variations. Therefore, it is reasonable to use these measured water levels for the calibration of the pre-historical groundwater levels-
2) Simulation of historical mining. Using the simulated groundwater levels of the pre-historical mining condition, Itasca calibrated the model using the known inflow rates and underground mine workings from two periods of mining. The Idaho mine in 1918 and the entire connected Idaho-Maryland-Brunswick mine in 1956. The model was also calibrated against the known level of water in the Union Hill mine in 1956. (Section 4.6 pages 21-22)
3) Recovery of groundwater level after the cessation of historical mining to present day. The drain nodes for the historical mine workings were turned off and mine voids were simulated with a zone of high K and the drains along Wolf Creek (which currently drain the mine) were added at their known elevation. (Please see Itasca Clarification Memo attached to the Final EIR as Appendix O). The simulated recovered water levels were then compared against the water levels measured in wells in the mine area from 1994 to 2007. Measured groundwater levels from the domestic wells are not available since 2007. However, it is reasonable to assume that these groundwater levels are somewhat stable with the exception of seasonal fluctuations, as no major pumping (stresses) has occurred since 2007. The model was found to be calibrated to the assumed current (2019) measured water levels. (Section 4.5 page 22).
4) The simulated 2019 (current condition) water levels are the baseline for measuring impacts from the proposed project. This baseline models the current situation of groundwater draining from the mine working into Wolf Creek and under the current hydrogeologic condition.
5) The simulated water levels after the mine is dewatered by the proposed project would be similar to the water levels in 1956 at the end of the historical mining. Therefore, it is reasonable to assume the predicted drawdown at the end of dewatering of the existing mining workings as proposed by the project will be similar to the drawdown at the end of the historical mining in 1956. Additional drawdown will occur due to the planned future mining of the project. Therefore, the simulated groundwater levels in 1956 are used as the

initial condition for predicting the effects of new mining proposed by the project. (Section 5.1 page 23)

The commenter refers to Figure 5-7, but it appears that reference is in error. Figure 5-7 of Appendix K.3 shows the change in baseflow rate in creeks over the life of the mine. Presumably the commenter is referring instead to Figure 5.4 which shows the simulated groundwater drawdown contours at the end of future mining (25 years) relative to the 2019 water level.

The commenter states "the incremental drawdown from increasing dewatering from 700 gpm to the future rate of 900 gpm is what is reflected in the map of impact." The commenter previously indicates that dewatering at a rate of 700 gpm = the water levels at the end of mining in 1956; however, the commenter is incorrect. As is explained in bullet 4 above, the baseline used is the 2019 (current condition) and not the 1956 water levels (dewatered mine). The title block of Figure 5.4. clearly states "Relative to 2019 Water Level".

Figure 5.4 is a large-scale figure but shows a small drawdown cone at the Union Hill mine. Sheet 12 of Appendix K.2 of the DEIR (which is plotted from Itasca's data) shows more definition with a 10-foot drawdown contour at the location of the Union Hill Mine shaft. This is more than the few feet stated by the commenter. The groundwater drawdown is the relative level of the groundwater and not the level of water that is in the mine shaft. The commenter is confusing the historic level of water level in the Union Hill mine shaft (20 feet) with the ground water level in the area of the shaft. Furthermore, as discussed in bullet 2 of this response, the model was specifically calibrated against the historic water level in the Union Hill Shaft.

The commenter appears to confuse directions in its comment by claiming that the New Brunswick shaft is west of the Union Hill mine. The New Brunswick shaft is east of the Union Hill mine rather than west. Additionally, the commenter confuses the water level in the shaft/mine workings with the ground water level. As previously explained, the commenter is incorrect about the baseline which was used for predictive modelling. The initial condition is not the baseline as explained in bullets 4 and 5 of this response.

As the commenter is mistaken about the groundwater model that was used in the DEIR, the commenter's specific critique of the model is based on a misunderstanding. The groundwater model was calibrated by experts in groundwater modelling and peer-reviewed by the County's own groundwater experts and constitutes substantial evidence of the DEIR's conclusions.

Response to Comment Grp 8-129

Please see Responses to Comments Grp 8-127 through Grp 8-128. The baseline used is the 2019 (current condition) and water drawdowns shown and used to determine impacts are relative to the 2019 (current condition) and not the dewatered mine (as at 1956 and after initial dewatering by the proposal project). As the commenter's understanding of the groundwater model's assumptions are incorrect, the commenter's conclusions about the effects of dewatering are also incorrect.

Response to Comment Grp 8-130

The commenter asks for a drawdown map and groundwater elevation contour map for the shallow aquifer based on 1956 conditions before cessation of dewatering. To provide additional clarity on the impact of the project to groundwater levels, Sheet #16 has been attached to the Final EIR which shows relative ground water levels after initial mine dewatering (before new mining

commences) which is the same as modelled groundwater levels in 1956. The information provided in Sheet 16 is consistent with the analysis in the DEIR and does not change any impact analysis.

Response to Comment Grp 8-131

The commenter requests detailed hydrographs of simulated water levels from 1920 (When the Idaho mine was dewatered) through 2020 (current condition) and for 25 years of planned mining. The commenter requests these for the location of wells WS95, WS216, WS201, WS80, WS91, and WS85 on Figure 2-6 of Appendix K.3. The wells chosen by the commenter are the wells highlighted in the figure and spread over several miles in or near the mineral rights area for the project.

The hydrographs requested by the commenter are not necessary because the goal of the predictions is to show the location and the magnitude of the estimated drawdowns. The commenter does not explain how the hydrographs would be used or how they would alter the conclusion in the DEIR that the project could have a potentially significant impact with respect to groundwater supplies.

The goal of the predictions prepared in the groundwater model is to show the location and the magnitude of the estimated drawdowns relative to the baseline (2019 current condition) in order to determine the potential impact of the project to domestic water wells. Simulated drawdown contour maps, relative to the baseline, have been produced for all relevant periods of the project.

Response to Comment Grp 8-132

The commenter requests a detailed model water budget (all volumetric water inputs and outputs) for the general area of the mineral rights from 1920 (When the Idaho mine was dewatered) through 2020 (current condition) and for 25 years of planned mining in one-month increments.

The goal of the requested water budget is not apparent. The commenter does not explain how monthly water budgets would be used or how they would alter the conclusion in the DEIR that the project could have a potentially significant impact with respect to groundwater supplies.

The goal of the predictions prepared in the groundwater model is to show the location and the magnitude of the estimated drawdowns relative to the baseline (2019 current condition) in order to determine the potential impact of the project to domestic water wells. As the DEIR already concluded that the impact could be significant, and estimates drawdown in the vicinity of the project site, a water budget is not necessary to complete this goal.

Response to Comment Grp 8-133

The commenter asks that the model should be run using 2019 water levels as the initial conditions for predictive simulations. However, the model already shows impacts relative to the 2019 (current conditions). The commenter is using a different definition of “initial condition” than is used in the Itasca Groundwater Model Report (Appendix K.3). Please see Responses to Comments Grp 8-128 and Grp 8-129.

Hydrographs are not necessary for the analysis. Please see Response to Comment Grp 8-131.

Water budgets are not necessary for the analysis. Please see Response to Comment Grp 8-132.

Response to Comment Grp 8-134

The commenter questions the validity of the DEIR's conclusions, because of the amount of time that the samples were held prior to testing. As noted in the comment, SW-846 provides guidance but is not applicable in all situations. Furthermore, as noted in the EPA Memo 7 related to SW-846 (https://www.epa.gov/sites/default/files/2015-10/documents/memo7.pdf):

> "SW-846 contains the analytical and test methods that EPA has evaluated and found to be among those acceptable for testing under subtitle C of the Resource Conservation and Recovery Act (RCRA). In most situations, SW-846 functions as a guidance document setting forth acceptable, although not required, methods to be implemented by the user, as appropriate, in responding to RCRA-related sampling and analysis requirements. The methods are intended to be used and modified, as needed, to promote unbiased, sensitive, precise, comparable, and specific analyses and test results. In addition, with the exception of method-defined parameters (e.g., Method 1311, the Toxicity Characteristic Leaching Procedure), SW-846 methods need not be applied in a prescriptive manner. "

Notably, the SW-846 guidance was specifically developed for use in evaluating the presence of human-created hazardous wastes under programs related to the Resource Conservation and Recovery Act. Its application has since expanded to include Superfund evaluations and other sites related to man-made releases of toxic substances. Due to the prevalence of these types of sites, the guidance provided by SW-846 became standard operating procedure for analytical laboratories. However, the sample holding times and preservation methods are not universally applicable under all conditions.

The baseline evaluations conducted for the Idaho-Maryland Mine were conducted on native materials (surface water, groundwater, rock) and were not part of an analysis related to RCRA or to assess the presence of existing waste materials. Thus, the guidance in SW 846 is just that, guidance, but it does not represent a strict set of procedures that must be followed for the data to be usable for the purposes of this EIR.

The analyses related to metals were conducted on native geologic material that have been present in the environment for many millions of years. The purpose of the testing was to assess the potential for actions related to the proposed project to mobilize naturally-occurring metals within the minerals in the rock. The time between collection of the rock sample and the lab analysis, and the temperature at which the rock samples were stored or transported, has no effect on the presence or mobility of the naturally occurring metals within the rock itself. This is in stark contrast to the sampling that is typically conducted under the programs, such as RCRA, for which SW 846 was developed. In those cases, the sampling and analysis is typically intended to evaluate the presence of chemicals that were added by human activity and whose presence and nature tend to be transient. As such, the hold times for the rock samples do not affect the validity of the results or the validity of the DEIR's analysis.

Response to Comment Grp 8-135

The hold times do not apply since the analyses were being conducted on rock samples for metals that are a part of the naturally occurring minerals in the rock. Please see Response to Comment Grp 8-134.

Potential for loss of mercury under the conditions described could be of concern if the testing was being conducted on materials that may contain elemental mercury. However, the samples were all from drill core in native geologic formations that do not contain mercury mineralization and that

were not a part of any past operations at the Idaho-Maryland Mine. Thus, any mercury that could potentially be present would be trace amounts that might be part of the mineral matrix in the naturally occurring geologic formations. Extended hold times and temperatures above 6 degrees Celsius would not affect the presence of mercury in the samples since the natural rock has been present for millenia and exposed to a wide range of temperature variations over that period.

As noted in Table 4-7 of Appendix K.2 of the DEIR, boron was not detected in any of the samples analyzed, so there is no potential that boron could have leached from glass sample containers.

The notations from ACZ noted in this comment are not relevant to the samples that were actually analyzed. Testing for chloride, nitrate, nitrite, and sulfate were not conducted on the solid rock and tailings samples provided to the laboratory. Instead, the lab was requested to conduct a wet chemistry analysis on the DI-WET leachate after the leaching was completed (see Chain of Custody forms on EMKO Appendices pp 318-319). Testing for wet chemistry parameters such as the anions listed above is not possible on dry rock samples. Thus, the sample did not even exist until it was created by the lab. Holding times and sample temperature have no bearing since the sample was created and subsequently analyzed directly in the lab.

According to California State Certificate of Environmental Laboratory Accreditation Certificate No.: 2935 (https://acz.com/wp-content/uploads/2021/11/California.pdf), ACZ is certified to analyze boron, sulfate, and solids (filterable, non-filterable and settleable) in non-potable water but ran the analyses using methods for hazardous waste instead, which do not include certification for those analytes.

The analyses not offered for certification or are not covered by NELAC certification #ACZ were conducted as part of the acid-base accounting evaluation. ACZ Laboratories holds certification from the State of Nevada for acid-base accounting methods. Nevada is currently the only state agency offering this certification. https://acz.com/index.php/geochemistry/. Please see Response to Comment Grp 7-167.

Response to Comment Grp 8-136

The holding time for coliform bacteria tests is 6 hours, which presents a challenge for typical field sampling programs where the time to collect multiple samples and then deliver the samples to the laboratory often cannot be completed within 6 hours. This occurred with the sampling at the New Brunswick shaft where obtaining a single sample sometimes required more than an hour and the work occurred overnight. The sampling conducted was to assess baseline conditions, however, and has no bearing on the finding of significant impacts from the project related to water quality. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

Field measurements of pH are provided in Tables 3-5, 3-8, and 3-10 of Appendix K.2.

Comments on hold time exceedance for samples D-1 and ED-1 for BOD, MBAS, NO_3, and NO_2 are noted and acknowledged. The accuracy of these results do not have any bearing on the finding of significant impacts from the project related to water quality. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

At the time any sampling for NPDES discharge permitting is conducted in accordance with permits required from the Central Valley Regional Water Quality Control Board (see April 4, 2022 comment letter from the Water Board, Agency Letter 5), additional fish bioassay studies may be

necessary. However, the existing fish bioassay results do not have any bearing on the finding of significant impacts from the project related to water quality.

Response to Comment Grp 8-137

The ACZ lab reports are, in fact, provided in their entirety in the appendices to the EMKO report in Appendix K.2 of the DEIR. As noted in the responses above, the holding times and related notations are either not relevant to the analyses conducted or have no bearing on the impact analysis in the DEIR.

Group Letter 9

CENTER for SCIENCE in PUBLIC PARTICIPATION
a 501(c)(3) non-profit corporation
224 North Church Avenue, Bozeman, MT 59715
Phone (406) 585-9854 / Fax (406) 585-2260 /web: www.csp2.org / e-mail: csp2@csp2.org
"Technical Support for Grassroots Public Interest Groups"

March 16, 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue
Nevada City, CA 95959-8617
Idaho.MMEIR@co.nevada.ca.us
(530) 265-1423

Re: Comments on the Draft EIR for the Idaho-Maryland Mine Project

From: David M. Chambers, Ph.D., P. Geop.

Background

David Chambers has 40 years of experience in mineral exploration and development – 15 years of technical and management experience in the mineral exploration industry, and for the past 30+ years he has served as an advisor on the environmental effects of mining projects both nationally and internationally. He has Professional Engineering Degree in physics from the Colorado School of Mines, a Master of Science Degree in geophysics from the University of California at Berkeley, and is a registered professional geophysicist in California (# GP 972). Dr. Chambers received his Ph.D. in environmental planning from Berkeley. His recent research focuses on tailings dam failures, and the intersection of science and technology with public policy and natural resource management.

Grp 9-1

OVERALL COMMENT

This is a rather unusual mine project proposal, a request for an 80-year operating permit, in that most regulatory agencies would consider the level of information presented for this environmental review of the project sufficient only to consider this as a proposal for advanced exploration, not for mine development. This mine development proposal lacks the economic and environmental data necessary to evaluate a full mine development proposal.

Grp 9-2

Unlike a typical mine that is being proposed for production, the Idaho-Maryland mine; (1) does not have an identified mineral reserve, or even a mineral resource; (2) the drilling core is not sufficient to provide the necessary information on the geochemistry of the waste rock and tailings; and, (3) there is no surface water-quality modeling. These are all elements that are critical in evaluating the potential impacts of a proposed mine.

As a result, it is not known whether the mine waste could leach contaminants into ground and/or surface waters. The design details of the "engineered fill" facility have yet to be done, so it not known if the proposed design is geotechnically sound. In addition, the long-term closure costs for the mine have not been analyzed.

Page #2

SECTION-SPECIFIC COMMENTS

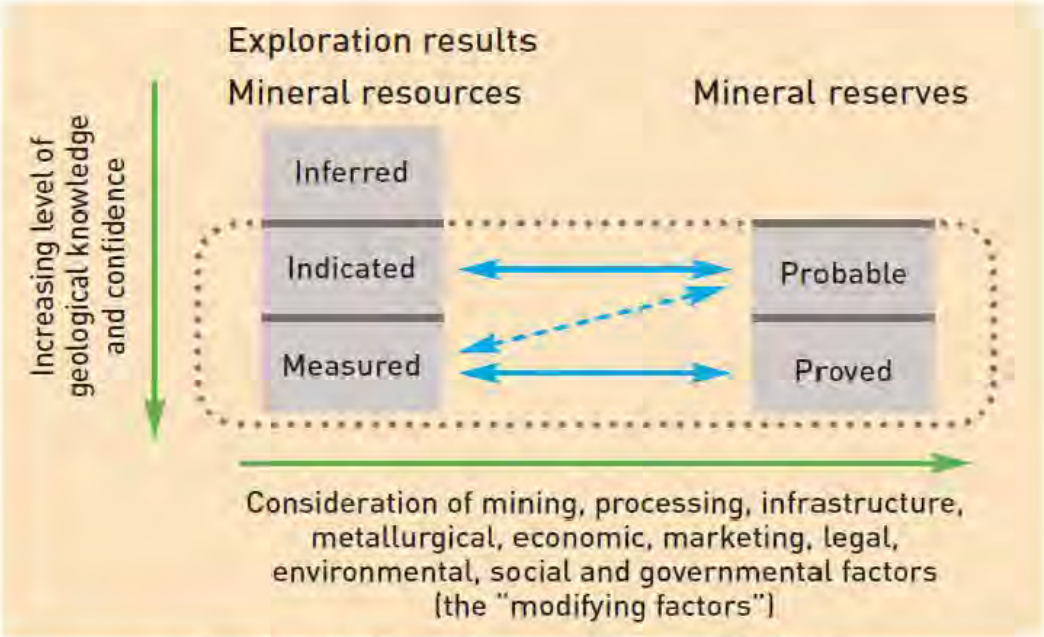
3.6 Project Objectives

In order to have a credible mine proposal, a minimum amount of ore must be identified to warrant the economic investment to open a mine. It is possible that a mining company has enough capital to self-fund the hundreds of millions of dollars necessary to bring a mine property like Idaho-Maryland to the point where it is ready to produce its first ounce of gold, but this is seldom the case. And even if this were the case, a responsible board of directors would require a thorough economic analysis before committing this level of funding for a project.

A mineral property with no current mineral resources or mineral reserves has been described by the Canadian National Instrument 43-101 policy as an "early stage exploration property" (OCS 2011). This is the case with the Idaho-Maryland property's latest 43-101 compliant technical report (Rise Gold 2017).

A mineral resource is a concentration or occurrence of solid material of economic interest. A mineral reserve is the economically mineable part of a measured and/or indicated mineral resource (ICMM 2013). The figure below has presented in approximately this same format for quite some time as a way to illustrate how the concepts of mineral resource and mineral reserve are related – technically, economically, and legally.

Grp 9-3



Classification of Mineral Resources & Reserves (ICMM 2013)

Grp 9-4

Rise Gold does not have enough drill samples to satisfy the requirements to meet any of the mineral resource or reserve definitions described in the Classification of Mineral Resources & Reserves. This same lack of an adequate number of drill samples also results in the lack of data required to adequately characterize the geochemistry of the waste rock and tailings that will be produced, or to supply test data on the leachate from this waste that would allow modeling of potential impacts to surface water.

Page #3

Geochemistry of the waste rock

The projected waste rock geochemistry analysis is summarized in the EIR Appendix K.2: Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project Nevada County, California, EMKO Environmental, February 2021.

In Table 4-5 (below) from Appendix K.2, it is predicted that the 96% of the waste rock will produced will be Meta-Andesite.

Table 4-5 Estimated Daily Barren Rock Production

Material Type	Tons per Day	Percent of Material Produced
Meta-Andesite	481	96
Altered Meta-Andesite	12	2
Diabase	5	1
Serpentinite	2	1
TOTAL	**500**	**100**

Rise completed 19 drill exploration drill core holes, totaling 67,500 linear feet, from 2017-2019. From this drill core, Benchmark Resources collected six drill core samples that it used to characterize the geochemistry of the waste rock. These samples are listed in Table 4-6.

Meta Andesite, which constitutes 96% of the waste rock to be mined, was taken from three intervals of drill core – samples MA-1, MA-2, and MA-3. Sample MA-1 was from the near surface rock 167' - 177' below the drill level, so it not representative of most of the Meta Andesite that will be produced from mining, which will occur at much greater depth. As a result, the geochemical predictions for approximately 96% of the waste rock to be produced comes from one 10-foot interval of drill core (Sample MA-2 from 3959.7 ' to 3969.7'), and one 1-foot sample (MA-3 from 3265' to 3266').

Table 4-6 Core Samples Collected by Benchmark Resources

Sample Name	Description	Date	Time	Bag #	Hole #	Elevation Interval
MA-1	Meta Andesite/Porphyrite	29/10/2019	10:45 AM	Y973551	I-19-13	167'-177'
MS-1	Meta Sediment/Porphyrite	29/10/2019	11:00 AM	Y973560	I-19-13	1,067'-1,077'
MA-2	Meta Andesite/Porphyrite	29/10/2019	11:05 AM	Y973594	I-19-13	3,959.7-3,969.7
MAA-1	Meta Andesite Altered/Porphyrite	29/10/2019	11:20 AM	core box	I-19-13	3,357'-3,360'
S-1	Serpentinite	29/10/2019	11:25 AM	core box	I-18-11	4,725.6'-4,725.7'
MA-3	Meta Andesite Altered/Porphyrite	29/10/2019	11:45 AM	core box	I-18-10	3,265'-3,266'

Another way to describe this is that the geochemical characterization of the 2 million tons of waste rock produced during the first 11-years of mining, and nominally the waste rock production from the entire 80-life of the proposed permit, is represented by these two samples, which come from a total of 11 feet of drill core.

Page #4

Australian Guidance on Sample Numbers (adapted from Australian Government Department of Industry, Tourism and Resources, 2007 (GARD Guide Table 4-5)

Mine Phase	Number of Samples	Description
Exploration	(1) Prospect Testing – Include sulphur in list of elements being analyzed for all samples tested; include the full range of pathfinder elements as defined by ore deposit/exploration model; collect and record mineralogical data as per exploration/ore deposit model; where the geology of the deposit is known include static testing of at least 3 to 5 representative samples of each key material type (i.e., lithology, alteration type); analysis of ground water and surface water for acidity and representative pathfinder elements. (2) Resource Definition – All samples tested for sulphur and representative samples tested for mineralogy as per ore deposit model. **Static testing of at least 5 to 10 representative samples of each key material type. *(emphasis added)*** Collect groundwater and surface water data. Surface water and groundwater analysis to include acidity as well representative metal ions. All testing to include QA/QC samples.	By the end of the resource definition phase, there should be adequate information to accurately characterize the ARD potential of the ore body (high and low grade), although further test work will normally be required to characterize the ARD potential of waste rock and ore and hence tailings.
Pre-Feasibility	**Static testing of several hundred representative samples of high and low grade ore, waste rock and tailings**, the number dependent on the complexity of the deposit geology and its host rocks. ***(emphasis added)*** All drillhole samples analyzed must include sulphur analysis and identified representative metal ions. Sampling density is dependent on complexity of ore deposit and host rock geology interval of representative drill holes but should be restricted to single rock units or lithologies - include minimums. **Kinetic testing of at least 1 to 2 representative samples of each material type. *(emphasis added)*** Surface water and groundwater analysis to include acidity as well as pH, EC and representative metal ions, including Al, Fe, Mn. All testing to include QA/QC samples.	Where required, the number of samples must be sufficient to populate a "resource" block model of the ore and host rocks that will be affected by mining with a reliable distribution of NAPP[1] data (e.g., acid producing potential (APP), sulphur and acid neutralizing capacity (ANC) (or NPR data) on ore, waste rock and wall rock.
Mine Planning, Feasibility and Design	Where required, additional static testing as required for block waste resource model refinement – **increase density of NAPP (or NPR) characterization. *(emphasis added)*** Inclusion of confirmatory testing (e.g., NAG testing for comparison to NAPP (i.e. APP, or sulphur, and ANC) for metalliferous deposits; and mineralogy or NPR values). Continuation of kinetic testing. Upgrade drillhole database and waste resource model for new ore positions. All testing to include QA/QC sample(s). Apply QA/QC to all analyses, not only ore. Include wall rock.	Data set must be sufficient to assess ARD potential to support a management plan. If data are insufficient, additional testing will be required.

Page #5

The widely accepted source of guidance for determining the number of samples for acid-drainage/metals-leaching prediction is the Global Acid Rock Drainage Guide (GARD 2018), published by the International Network for Acid Prevention. The GARD Guide has adopted the Australian Guidance on Sample Numbers for determining the number of samples needed to determine acid-drainage/metals-leaching potential (GARD Guide Table 4-5).

The number of samples used to predict the leaching potential of the tailings and waste rock for the proposed Idaho-Maryland Project does not meet even the lowest level of these criteria. The number of samples analyzed for this proposal would not even meet the requirements for the Exploration stage of sampling, let alone the Mine Planning, Feasibility and Design phase, which is the level of development being proposed for the Idaho-Maryland Project.

3.7 Project Components– Water Treatment

There is no discussion, or disclosure, of the operational water quality treatment needs or processes. The EIR merely requires that the applicant apply to the Regional water Quality Control Board for a discharge permit. The water quality discharge that will be required by the discharge permit should be disclosed in the EIR so that the public is able to assess and comment on the potential impacts. To simply assert that water quality standards will be met is not sufficient for reviewers to assess either the adequacy of the water treatment methods proposed, or the adequacy of the standards proposed for the discharge permit.

Grp 9-5

This completely circumvents any discussion or analysis of what the contaminants of potential concern might be, what contaminants would be monitored, what treatment methods are available, and where monitoring would take place. This information should all be disclosed in the EIR.

In addition, a Monitoring Plan should be included. The Monitoring Plan should incorporate all elements of monitoring, including surface water, ground water, air, and noise sampling. Sampling locations, frequencies, and constituents should be disclosed/discussed in the Monitoring Plan, and summarized in the EIR.

Grp 9-6

3.7 Project Components – Backfill

It is noted that approximately 500 tons/day of tailings will be backfilled into the mine as cemented paste. The technical details of the process are contained in "Desktop Study of Cemented Paste Backfill, ITASCA Denver, Inc. February 24, 2020." In this report it is noted that no tests on the leaching characteristics of tailings have been performed, but that testing would be done when a cement had been selected. Even though the backfill is unlikely to turn acidic, the potential for neutral leaching of contaminants like arsenic need to be investigated.

Grp 9-7

The answers to several critical questions that should be addressed in Chapter 3 of the EIR are: (1) the grind size of the tailings used for backfill; (2) the type and amount of cement to be used; and, (3) the results of leach tests on the backfill.

This information should have been available for the EIR, and is another data gap in the EIR.

3.7 Project Components – Engineered Fill Transport

Even though this is nominally the section about the transport of the waste material, most of the technical information on the Engineered Fill is presented here.

Grp 9-8

The mine waste that is not backfilled into the mine will consist of 50% tailings (rougher tailings from flotation separation in the mill), and 50% waste rock from the mine. Approximately 4 million tons of waste would be placed at two sites near the mine during the first 11-years of mining. The number of samples utilized in the leach tests of this waste is not sufficient to properly characterize the contaminants

Page #6

that may be leached from the waste. Comparing the number of samples cited in the EIR to the sampling guidelines of the GARD Guide demonstrate the insufficiency of the existing tests.

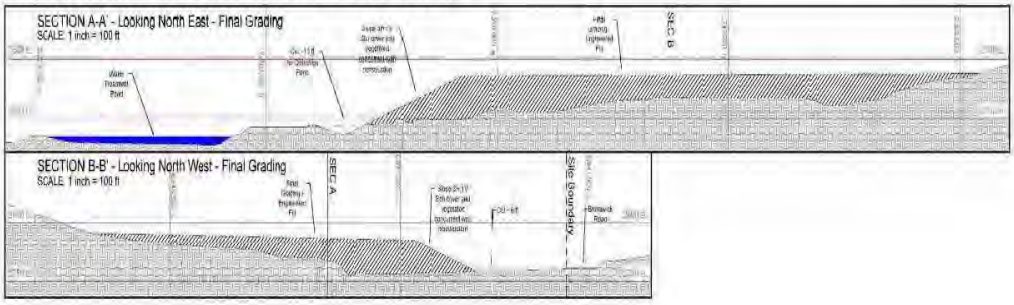
In addition to testing for the contaminants that may come from the waste, as the term "engineered fill" implies, this will be an engineered mine waste facility. The EIR, and its supporting documents, imply that the required engineering analysis will be done at some future time, but provide virtually no engineering analysis or design specifications for these waste facilities as a part of the EIR.

It is stated in the EIR that, "*Engineered fill would continue to be placed, graded, and compacted in a series of lifts …*" The only drawings of the cross sections of the waste facilities in the EIR are from Rise Grass Valley, not an engineering company, and seems to show the mine waste being deposited as end-dump layers that cannot be compacted to generate further stability, not horizontally-deposited layers that could be compacted.

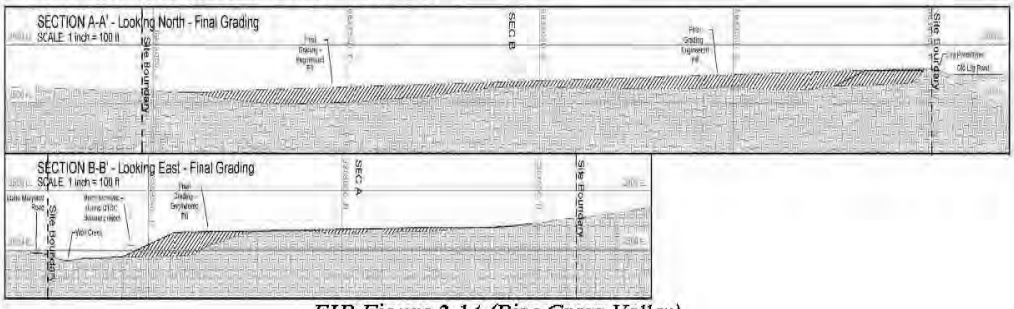
The new mine waste will be placed on top of portions of existing mine waste, which could provide a plane of weakness that could provide an additional failure plane for the significant weight of rock that will placed on top of it. The Brunswick facility is projected to be up to 90 feet in height, and the Centennial facility up to 70 feet high.

Grp 9-9

BRUNSWICK INDUSTRIAL SITE - SECTIONS



CENTENNIAL INDUSTRIAL SITE - SECTIONS



EIR Figure 3-14 (Rise Grass Valley)

Page #7

There is no technical report to provide the detail needed to evaluate the geotechnical viability and safety of these facilities. The potential for this waste to fail under static or seismic loading needs to be professionally evaluated by a qualified engineering contractor. It would be inappropriate to issue a permit for the construction of these waste facilities without proper engineering analyses. To illustrate what could happen, the picture in Photo 1 comes from a waste rock pile at a Nevada mine that failed due to inadequate engineering. While not catastrophic, such failures can cause significant environmental and economic damage.



Photo 1: Waste Rock Dump Failure at the Gold Quarry mine (2005)

The seismic reports discussed in the Geology section of the EIR are not up to date, and even if updated would not meet the requirements for a probabilistic seismic site analysis. Mine waste facilities must be designed to withstand much larger seismic events than required by typical seismic building codes because of the long expected life of the water facilities. According to information provided in the Brunswick and Centennial Industrial Site Geotechnical reports (EIR Appendices H.1 and H.4), a probabilistic and/or deterministic seismic assessment has not been done for the Idaho-Maryland site.

Grp 9-10

In the geotechnical report for the Centennial Industrial Site the mine waste to be used as engineered fill is described as; "*We understand that proposed foundation structures will be constructed on import fill material that will primarily consists of medium dense granular soil composed of silty or clayey sand/gravel, with possible rock fill at depths.*" The term "medium dense granular soil composed of silty or clayey sand/gravel" is not an adequate description of the tailings. Tailings, at a 75 um grind size, the most likely choice for grind size based on the flotation recovery testing done by McClelland Labs, are termed "silt" (see EIR Appendix H.4, Table 5.1-1, Particle Size Gradation, Historical Sand Tailings).

Page #8

Grp 9-11

With an equal ratio of tailings to waste rock in the engineered fill, not only is a careful analysis of the geotechnical properties of the tailings important, and currently lacking, but how these two fill sources are mixed is also critical, since the tailings and waste rock have very different geotechnical properties. These analyses are lacking in the EIR and its supporting technical reports.

Grp 9-12

In the EIR, it is also proposed that an alternative for placing the mine waste in the proposed facilities is selling the waste in the local marketplace as fill material. There are several issues that make this proposal unlikely. First, there is liability associated with mine waste. Even if the waste is purported to be contaminant-free, and this waste is associated with mining sulfide mineralization that can release metal contaminants, it is seldom possible to guarantee that all of the waste will be contaminant-free. According the laboratory analysis for the six waste rock samples analyzed for Acid-Base Accounting, the sulfide sulfur content of the waste rock varies from 0.04 - 1.78 % Sulfide Sulfur (EIR Appendix K.2, EMKO 2021, Table 4-8 Tailings & Barren Rock Samples - ABA Results). There is significant variability in the amount of sulfide sulfur, and significant amount of sulfide sulfur (1.78%), recorded in the very limited number of waste rock samples tested. If any of the waste sold as clean fill should cause a problem, the sellers of that material, and the company that produced that material, would likely be legally liable. Just the possibility of legal entanglement keeps virtually all mining companies from selling its waste rock or tailings, and is very likely to make it very difficult to find an independent distributer that is willing to assume this risk.

Grp 9-13

A second issue is one of logistics. The mine waste is produced at a constant rate – 1,000 tons per day, 365 days/year, for the life of the mine. Markets for fill material are typical episodic. For example, there is much more fill material placed during the summer than during the winter. In order to handle surges in the demand for fill material, temporary storage for a significant amount of material would be required by a vendor of this material. If the mining company is going to provide this service itself, then the storage facility should be evaluated as a part of the mine proposal. If the material is to be sold to an independent user, then the viability of that operation should be demonstrated with at least a contract that someone is willing to accept 1,000 tons/day of mine waste.

3.7 Project Components – Reclamation Plan

Most reclamation plans submitted as a part of a mine proposal are largely conceptual in nature, including the reclamation plan accompanying this EIR. However, for those tasks that can be clearly identified as being necessary for mine closure, these tasks should be described with enough detail that the engineering feasibility and cost can be analyzed.

In order to protect the public from incurring the costs associated with an unplanned mine closure, or bankruptcy, the funds should be available to public agencies that are sufficient for those agencies to take over and complete reclamation of the mine, and to perform any water treatment that may be required.

Grp 9-14

At the Idaho-Maryland Mine, it is known that mine openings must be closed, drains must be prepared to collect the seepage that has been coming from the mine, and that will presumably resume after mine closure, and that the mine waste facilities can be closed and safe configuration. However, there are no reclamation engineering specifications, work plans, or cost estimates made for the EIR.

The potential costs for post-closure water treatment, if required, should also be included. However, there is insufficient information on seepage water quality to conduct this analysis.

Financial Assurances for mine closure runs tens to hundreds of millions of dollars, so ignoring these costs puts taxpayers at significant risk of miscalculation at a later date. Because these sums are so substantial, the public should be informed about these costs, and how the costs were estimated.

This is a significant omission in the EIR.

Page #9

4.8.2 Existing Environmental Setting – Groundwater Occurrence in Mine Workings

Mine Flooding and Worker Safety

In the discussion of the Union Hill Mine, it is noted, "*The Union Hill Mine workings are within 95 feet to 180 feet of workings of the Brunswick Mine at three to four different levels. During the post WWII period, the combined Idaho-Maryland Mine workings were completely dewatered. In 1956, the water level at the Union Hill Mine was reported to be within 20 feet of the top of the shaft, suggesting that the complete dewatering of the adjacent mine workings resulted in no more than 10 to 20 feet of water level decline in the Union Hill Mine.*"

There are two important points to note in this discussion, (1) the Union Hill Mine is very close to the Idaho-Maryland at several levels; and, (2) there has been a possible weak hydraulic connection between the two mines, which is only logical.

Grp 9-15

The EIR notes that the Union Hills Mine will not be dewatered. The EIR suggests there is no significant hydraulic connection between the mines, but the discussion from the EIR quoted above suggests there could be some connection, and what is not known is whether this hydraulic connectivity could increase in the future.

There is no discussion in the EIR of the potential impacts for the Idaho-Maryland Mine if flooding were to occur during mining. From ITASCA Figure 2-3 (attached as the last page of this document), it can be seen there are extensive abandoned mine working above and adjacent to the Idaho-Maryland mine that will remain flooded after the Idaho-Maryland is dewatered.

If a conduit between these two mine were to open, for instance due to the widening of a fracture related to blasting vibrations or a seismic event, the flood of water into the Idaho-Maryland could be rapid and catastrophic for anyone working in the mine.

This issue must be thoroughly addressed before anyone is permitted to enter the dewatered mine.

4.8.4 Impacts and Mitigation Measures – Water Within Underground Mine Workings

Geochemistry of the tailings

Even though this is nominally the section about the underground mine water, most of the technical information on the geochemistry of the tailings samples is presented here.

Approximately 50% of the mine waste, also referred to as "engineered fill", disposed on the surface will be tailings. The geochemistry of these tailings is important because meteoric waters will infiltrate through the waste, and any leachate products will end up in groundwater, and potentially surface water.

Grp 9-16

Tailings produced in the milling process are generally homogeneous because the physical and chemical processing of the ore remains relatively constant, and the ore is typically blended to maintain a consistent ore grade to facilitate gold recovery. Because of this, fewer tailings samples than waste rock samples are required for leach testing, but those testing samples must be representative of the tailings that will be produced during mine operation.

While Appendix K.2 states that the tailings samples were generated from a "46 kg metallurgical sample". The ore sample used to create the four tailings samples contained 1.6% Sulfur (EIR 2021, p. 4.8-46). The four tailings samples had a sulfur content of 0.06 – 0.12% Sulfur (EIR 2021, p. 4.8-46), with Net Neutralization Potential greater than 100 for all samples (EIR Appendix K.2, EMKO 2021, Table 4-8 Tailings & Barren Rock Samples - ABA Results).

The drill hole intervals this material came from is not stated in the EIR, nor is the time when the metallurgical sample was generated. Again, if an NI 43-101 compliant report that reported a mineral

Page #10

resource and/or reserve were available, this basic information would have required and would have been available for the EIR.

In Appendix K.2, EMKO notes that the four samples are of different grind sizes. The size of the tailings particles could have an effect on the rate of leaching. Smaller grain size leads to more rapid leaching of contaminants. Based on the results of the metallurgical testing, a final grind size is generally selected before geochemical testing is done, but a final grind size has not been selected for this project. The different grind sizes of the tailings could have an unquantified effect on the leach testing of the tailings samples.

Grp 9-17

Because the size specification has geotechnical and geochemical implications for both the tailings disposed on the surface, and cemented backfill in the mine, the size specification needs to be disclosed in the EIR. The limited test results available from preliminary tailings tests are not sufficient to make long-term predictions for the geotechnical stability or water quality implications of the tailings.

The method selected for leach testing the tailings and waste rock used distilled water, which is the least aggressive of the leach testing methods. For mining waste, waste rock and tailings, short-term tests typically use a weak acid solution for leach testing in order to simulate the generation of some acid in the waste due to sulfide decomposition. Long-term leach testing, which runs for months rather than hours or days, typically uses distilled water, because natural sulfide decomposition and the accumulation of oxidation products has sufficient time to stabilize.

From Table 4-7 Tailings & Barren Rock Samples - Total Metals and DI-WET Results

Constituent	Test Type	Units	Tailings Samples				Rock Samples					
			F-1	F-2	F-3	F-4	MA-1	MA-2	MA-3	MAA-1	MS-1	S-1
METALS												
Aluminum	Total	mg/Kg	16100	16300	16300	16300	23000	24400	31100	421	22900	41300
	DI-WET	mg/L	0.17	0.18	0.26	0.28	0.94	1.08	0.6	0.49	0.99	0.32
Antimony	Total	mg/Kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.1	<0.2	0.6
	DI-WET	mg/L	0.0018	0.0015	0.0031	0.0020	0.0006	0.0041	0.0016	0.0104	0.0021	0.1050
Arsenic	Total	mg/Kg	1.7	1.4	2.000	1.2	0.2	6.1	0.5	34.8	0.7	36.8
	DI-WET	mg/L	0.0018	0.0013	0.0019	0.0014	<0.0002	0.0051	0.0014	0.0148	0.0005	0.1690
Copper	Total	mg/Kg	86	86	87	84	141	43	87	27	89	30
	DI-WET	mg/L	<0.01	0.01	0.02	0.09	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron	Total	mg/Kg	35500	36000	35200	35200	45600	42100	54900	15500	33700	36800
	DI-WET	mg/L	<0.03	<0.03	<0.03	<0.03	0.05	0.08	0.20	<0.03	<0.03	0.33
Manganese	Total	mg/Kg	1000	1010	990	994	604	747	1230	311	696	176
	DI-WET	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
GENERAL CHEMISTRY PARAMETERS												
Nitrate	DI-WET	mg/L	0.06	0.08	0.28	0.24	<0.02	<0.02	0.05	<0.02	<0.02	<0.02
Sulphate	DI-WET	mg/L	8.40	6.30	8.50	8.70	3.3	1.4	6.60	1.9	1.1	2.8

Grp 9-18

In reviewing the leach test results from Appendix K.2, Table 4-7: Tailings & Barren Rock Samples - Total Metals and DI-WET Results, the following observations are noted:

- Aluminum levels in the leachate are high. Even though the measurement was probably done as Total aluminum, these levels suggest that aluminum leaching could be an issue, and that Dissolved aluminum should be monitored.

- There is antimony present, and the water quality standard for antimony is low. Waste rock sample S-1 shows a level of antimony that is well above the water quality standard. Even though there is only a relatively small amount of S-1 rock in the waste, antimony should be monitored.

Grp 9-19

- Arsenic is measured at about 20% of the water quality standard, and is known to be an issue with the existing mine waste. Arsenic could become an issue if localized acidic conditions, or longer exposure time, drive the oxidation reactions.

Grp 9-20

Page #11

Grp 9-21
- Copper being detected at levels that could exceed water quality standards, but the measurement level for the sampling was too high, so we don't know enough about what is going on with copper.

Grp 9-22
- Iron and Manganese are both know to be present in existing mine water and the mine waste at levels that exceed water quality standards, but they are not showing elevated levels in the test data. This strongly suggests that the oxidation taking place in the mine itself, and in the mine waste on the surface, is more aggressive than that being simulated in the leach tests using distilled water.

Grp 9-23
- Nitrate, a residual from blasting, will almost certainly be present at levels significantly higher than projected in these tests.

Grp 9-24
- Similarly, sulfate will be higher than projected once the waste has time to oxidize.

Grp 9-25
- An important constituent, sulfide-sulfur, is not reported on a per-sample basis

Grp 9-26
In the summary of the report (Appendix K.2), EMKO notes that Potential Contaminants of Concern include ammonia, arsenic, hexavalent chromium, iron, manganese, pH, total suspended solids, TDS, and cis-1,2-DCE. To this list, I recommend adding antimony, copper, and nitrate.

Grp 9-27
Leach tests for the paste backfill also need to be completed. It is not appropriate to grant a mining permit that allows the use of this backfill without evaluating the potential long-term effects on water quality.

6.3 Selection of Alternatives – Alternatives Considered in this EIR

The mining project as proposed in this EIR has a fundamental lack of information on the economic viability of the mine, and potential environmental impacts related to geochemistry and water quality.

Grp 9-28
The data submitted in support of this EIR is only sufficient to support an application for dewatering the mine, and for underground exploration drilling. This would provide not only the information that will be required to perform a preliminary economic analysis of the orebody, but would also supply the samples needed for geotechnical and geochemical testing, and for water quality modeling.

The EIR should analyze an Alternative that provides for dewatering and underground exploration. That is the only Alternative that the information provided in this EIR will support.

Thank you for the opportunity to comment on this Draft EIR.

Sincerely;

David M. Chambers, Ph.D., P.Geop.

Page #12

References:

EIR 2021. Idaho-Maryland Mine Project Draft Environmental Impact Report, Raney Planning & Management, December 2021

EMKO 2021. Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project Nevada County, California, EMKO Environmental, February 2021

GARD 2018. Global Acid Rock Drainage (GARD) Guide, published by the International Network for Acid Prevention, Chapter 4.0 Defining the Problem – Characterization, (http://www.gardguide.com/index.php/Chapter_4)

ICMM 2013. Responsible reporting of mineral assets, International Council on Mining & Metals, Committee for Mineral Reserves International Reporting Standards, April 2013

ITASCA 2020. Desktop Study of Cemented Paste Backfill, ITASCA Denver, Inc. February 24, 2020

OCS 2011. NI 43-101 Standards of Disclosure for Mineral Projects, Form 43-101F1 Technical Report and Related Consequential Amendments, Chapter 5, Rules and Policies, Ontario Securities Commission, 34 OSCB, June 24, 2011, https://www.osc.ca/en/securities-law/instruments-rules-policies/4/43-101

Rise Gold 2017. Technical Report on the Idaho-Maryland Project, Grass Valley California, USA, prepared for Rise Gold Corp, Amec Foster Wheeler Americas Limited, June 1, 2017

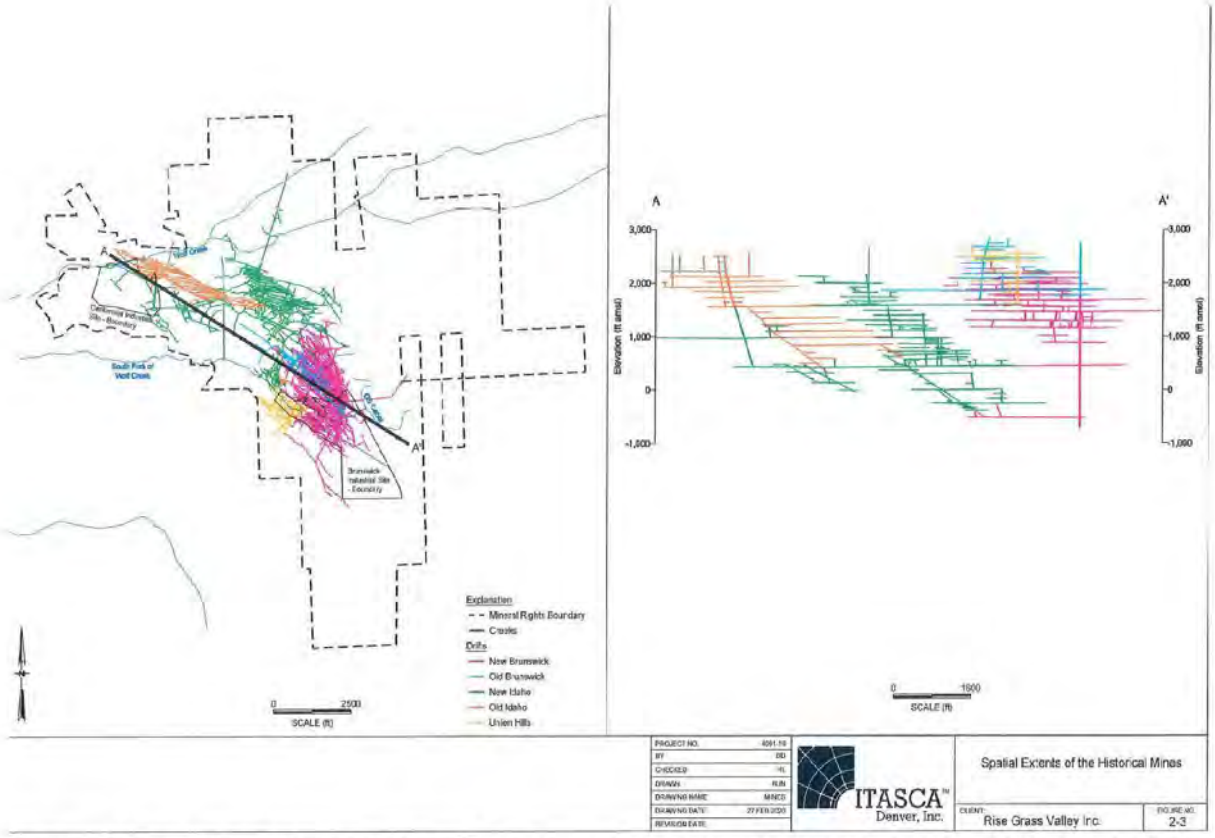


Figure 2-3, from Predictions of Groundwater Inflows to the Underground Mine Workings at the Idaho-Maryland Mine, ITASCA, November 2020

GROUP LETTER 9: DAVID CHAMBERS, CENTER FOR SCIENCE IN PUBLIC PARTICIPATION

Response to Comment Grp 9-1

This letter is a duplicate copy of content in Group Letter 7. Please see Responses to Comments Grp 7-173 through Grp 7-200.

Group Letter 10

First Church of Christ Scientist, Grass Valley
375 Crown Point Circle
Grass Valley, Calif. 95945
March 15, 2022

Matt Kelley, Sr. Planner
Nevada County Planning Department
950 Maidu Ave, Suite 170
Nevada City, California

Dear Mr. Kelley:

Grp 10-1 In response to your outreach for public comments on the Draft EIR for the Idaho-Maryland Mine Project, the First Church of Christ Scientist, Grass Valley submits the following:

Grp 10-2 Our primary concern with the project is the traffic and noise pollution that will occur from the project. Based on Figure 3-2 of the Draft EIR, our church is located approximately 800 feet from the Centennial Industrial Site, and also approximately 800 feet from the proposed haul route between the Brunswick Industrial Site, and the Centennial Industrial Site. According to your draft EIR, both of these sites will generate significant noise pollution. The EIR indicates the project will generate between 200 and 400 truck trips per day hauling industrial waste for compaction at the Centennial Industrial Site. If a heavy diesel truck hauling industrial waste generates about 110 decibels of noise at the haul point source, this would result in about 40-50 decibels of noise at our church which is about 800 feet away. If we keep our doors and windows shut, this would still create a noise disturbance at our church. We realize that a lot of inner city churches deal with a greater ambient noise level than this, but it will still significantly detract from the current peace and tranquility that we enjoy during our services.

Grp 10-3 One easy mitigation would be if the trucks did not operate during our services, which is between 10 and 11 am on Sundays, and between 7:30 and 8:30 pm on Wednesdays.

Grp 10-4 It is more difficult to determine the noise level created by the compaction activity on the Centennial Industry Site, as the EIR is negligent in assessing this issue. We would imagine the noise level would be similar to that of the truck hauling, so our concern would be the same.

Grp 10-5 Respectfully submitted,
Executive Board, First Church of Christ Scientist, Grass Valley

GROUP LETTER 10: FRED BELL, FIRST CHURCH OF CHRIST SCIENTIST, GRASS VALLEY

Response to Comment Grp 10-1

This comment is introductory. No response is required. Please see the below response to specific comments.

Response to Comment Grp 10-2

The comment states that commenter's primary concerns are traffic and noise. The scale on DEIR Figure 3-2 is incorrectly labeled. As a result, the distances cited in this comment which were based on that scale are similarly incorrect. The 1,600-foot reference on the scale should read 4,000 feet and is hereby corrected at the end of this letter. Using the correct scale, the actual distance from the Church of Christ Scientist, located at 375 Crown Circle in Grass Valley, was determined to be in excess of 3,000 feet to the Centennial Site and Brunswick Sites, and approximately 450 feet to the centerline of the nearest point of Whispering Pines Lane and Brunswick Road. Given the substantial distances from this receptor from the project noise sources, and the similarity of this receptor to Receptor #5, this location was not specifically evaluated in the noise study prepared for the DEIR. However, because the ambient noise exposure at this receptor is expected to be similar to that of Receptor #5 due to the similar distance to Brunswick Road, the baseline daytime, evening and nighttime average ambient noise environment at this receptor are approximately 50 dBA L_{eq}.

In response to this comment, the SoundPlan model was used to specifically model project noise exposure at this receptor. The results of that analysis indicate that average noise levels from the project, including all operations occurring on both the Brunswick and Centennial sites simultaneously, is predicted to be 19 dBA during daytime and evening hours, and 15 dBA during nighttime hours. The predicted noise level for receptor #5 is 29 dBA during daytime and 13 dBA during nighttime hours (see Tables 21 and 22 in Appendix L). These levels are well below both baseline ambient conditions and well below the noise standards applicable at the church use. As a result, the commenter's church would not be adversely affected by noise from the project.

DEIR Table 4.10-15 indicates that the project would result in a 2.6 dB increase in traffic noise levels on Whispering Pines Lane and a 0.3 dB increase in traffic noise levels on Brunswick Road. Neither of these increases exceed the project's standards of significance. In addition, because baseline ambient conditions at the church site are influenced more by traffic on Brunswick Road than by traffic on Whispering Pines Lane, the total change in traffic noise levels at the Church resulting from the project is predicted to be approximately 0.4 dB. As the project-related traffic noise level increase would be well below the criteria for a finding of a substantial traffic noise increase at the Church, no adverse noise impacts are identified for this receptor. The commenter's statement that heavy trucks generate 110 decibels of noise is unable to be verified without a distance being provided, but overall ambient traffic noise levels at this location are predicted to be approximately 58 dBA L_{dn} at the exterior of the church. Because heavy trucks currently utilize Brunswick Road extensively, noise generated by the approximately 6 additional heavy truck trips generated by the project each hour would not be significant at this receptor, with combined baseline plus project noise at approximately 58.4 dBA L_{dn}. An exterior noise level of 58.4 dBA L_{dn} would likely result in an interior noise level of 43.4 dBA L_{dn} with windows open and 33.4 dBA L_{dn} with windows closed. Interior noise levels of 45 dBA or less are typically considered acceptable for residential uses where sleep is critical. Therefore, these noise levels would not be expected to be destructive to typical worship activities.

Maximum noise levels generated during passbys of the project's heavy trucks would be similar to maximum noise generated currently by non-project heavy trucks which already operate daily on Brunswick Road. As a result, no increases in maximum noise levels would result from the project's heavy truck traffic at this receptor.

Response to Comment Grp 10-3

CEQA requires potentially significant impacts be identified and mitigation applied in cases where the noise impacts of a project are predicted to be significant by exceeding identified thresholds of significance. After making corrections to the DEIR Figure 3-2 (see below), it can be seen that the project will not have any significant noise impacts at the church, and noise mitigation is therefore not required.

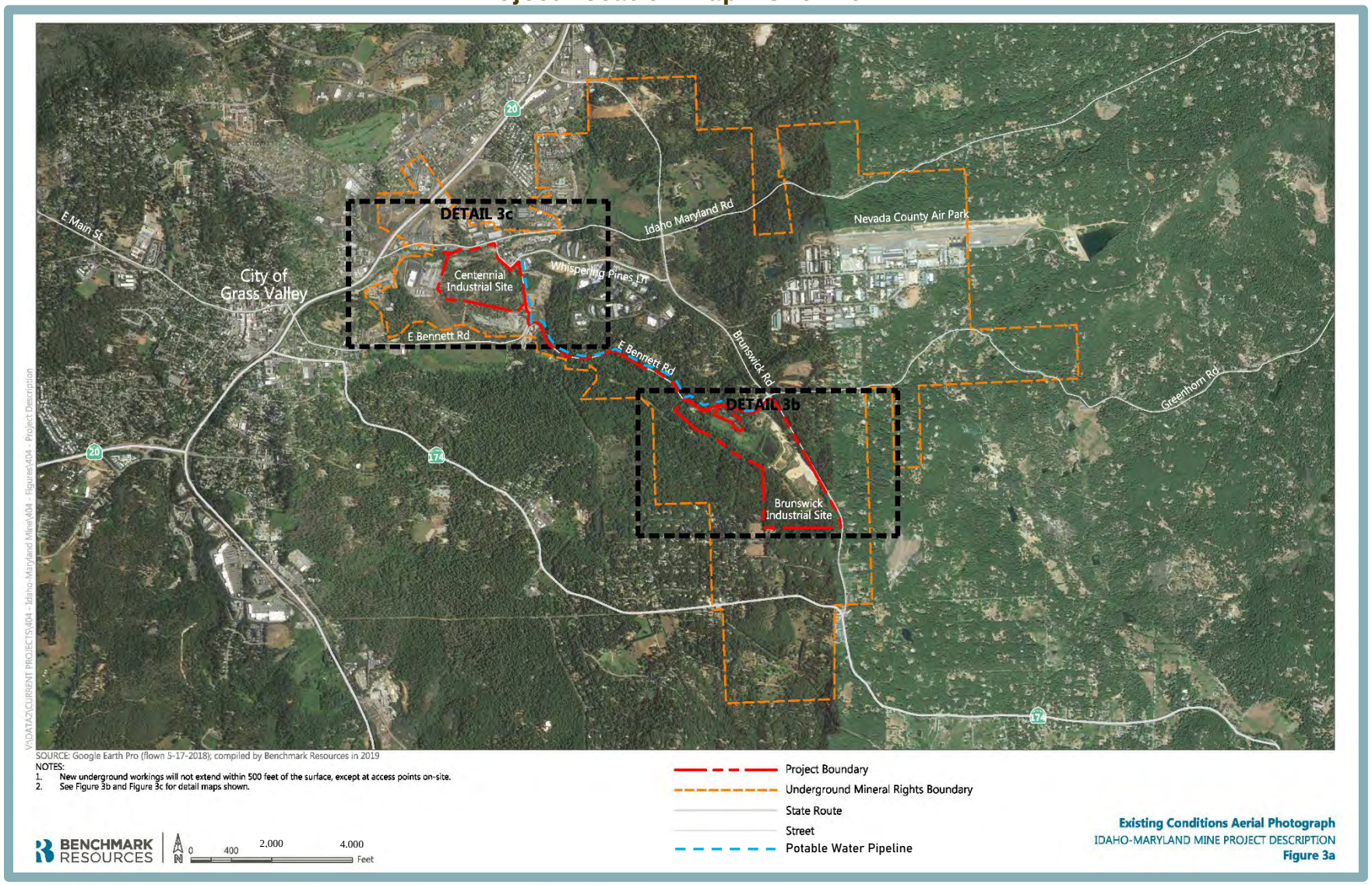
Response to Comment Grp 10-4

Commenter is concerned with the noise level of compaction activity on the Centennial Site. The noise analysis prepared for the DEIR specifically evaluated the noise generation of heavy earth-moving equipment used for engineered fill operations at the Centennial Site (see DEIR Impact 4.10-2 on DEIR pages 4.10-31 and 4.10-32). The predicted noise level at the Church of Christ Scientist on Crown Circle associated with engineered fill operations at the Centennial Site is 15 dBA, which would be imperceptible at this receptor location.

Response to Comment Grp 10-5

This comment is the signature line for the comment letter. No response is required.

Figure 3-2
Project Location Map - Overview



Group Letter 11

Friends of Banner Mountain (FBM) Est. 1984

FIREWISE USA
Residents reducing wildfire risks

FBM
PO Box 833
Nevada City, CA 95959

Board of Directors

President
Edward Sylvester
edward@bannermountain.org

Vice President
Ann Westling
ann@bannermountain.org

Treasurer
Chip Wilder
chip@bannermountain.org

Secretary
Susan Luhman
susanl@bannermountain.org

Communications & Firewise Coordinator
Jeff Peach
jeff@bannermountain.org

Members
Diana Abrell
diana@bannermountain.org

Susan Sanders
susans@bannermountain.org

Chuck Staetz
chuck@bannermountain.org

Andrew Wilkinson
andrew@bannermountain.org

FBM is a non-profit 501(c)(3) organization with an all-volunteer Board.



Mr. Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902

Re: Comment Deadline Extension for Idaho-Maryland Mine Project DEIR

Dear Mr. Kelley

Grp 11-1

The Friends of Banner Mountain is currently reviewing the Idaho-Maryland Mine Project Draft Environmental Impact Report (DEIR) and will be submitting a comment letter on the document. Given the length and complexity of the DEIR we respectfully request an extension of at least 30 days beyond the March 4, 2022 comment deadline.

We appreciate the County's well-organized web page that provides the DEIR and all supporting technical appendices, and look forward to reviewing these documents and working with you as this project makes its way through the environmental review process.

Sincerely,

Edward Sylvester, President
Friends of Banner Mountain

Cc: Heidi Hall, Supervisor , District 1

"Celebrating 37 Years as The Voice of Banner Mountain"
http://www.bannermountain.org

GROUP LETTER 11: EDWARD SYLVESTER, FRIENDS OF BANNER MOUNTAIN

Response to Comment Grp 11-1

The commenter requests an extension of the DEIR public review period. CEQA requires a minimum 45-day public review period for DEIRs submitted to the State Clearinghouse (PRC 21091). The County elected to provide an extended DEIR review period of 91 days from January 4, 2022, to April 4, 2022.

Group Letter 12

Friends of Banner Mountain (FBM) Est. 1984

FIREWISE USA
Residents reducing wildfire risks

FBM
PO Box 833
Nevada City, CA 95959

Board of Directors

President
Edward Sylvester
edward@bannermountain.org

Vice President
Ann Westling
ann@bannermountain.org

Treasurer
Chip Wilder
chip@bannermountain.org

Secretary
Susan Luhman
susanl@bannermountain.org

Communications & Firewise Coordinator
Jeff Peach
jeff@bannermountain.org

Members
Diana Abrell
diana@bannermountain.org

Susan Sanders
susans@bannermountain.org

Chuck Staetz
chuck@bannermountain.org

Andrew Wilkinson
andrew@bannermountain.org

FBM is a non-profit 501(c)(3) organization with an all-volunteer Board.

Grp 12-1

April 3, 2022

Mr. Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902

Re: Idaho-Maryland Mine Project Draft Environmental Impact Report

Dear Mr. Kelley

The Friends of Banner Mountain (FBM) is a 501(c)(3) organization whose mission is to protect Banner Mountain and its natural and cultural resources for the benefit of residents, visitors, and future generations. We have reviewed the Idaho-Maryland Mine Project Draft Environmental Impact Report (DEIR) and provide our comments in the attached document.

For reasons described in the attached comments we believe that the DEIR does not provide an adequate assessment of the potential impacts of this project and does not provide sufficient evidence and analysis for the Nevada County Board of Supervisors to make an informed decision about the EIR and the proposed project.

FBM conducted a poll to assess support or opposition to the proposed project among our members; five respondents supported the project and 133 opposed it. Many of those respondents brought up the issues that we describe in the attached comments.

We believe that construction and operation of the mine will adversely affect the quality of life for residents of Banner Mountain for generations and we are hopeful that the Nevada County Board of Supervisors will not approve this project.

Thank you for this opportunity to share our concerns and comments about this project.

Sincerely,

Edward Sylvester, President
Friends of Banner Mountain

1

GENERAL COMMENTS

1. Mitigation Monitoring and Reporting Program and Maintaining Public Access to Monitoring Reports and Permit Applications

Mitigation monitoring and reporting is a required element for many of the impacts described in the DEIR; the various management plans cited in the DEIR also describe numerous monitoring and reporting requirements. As discussed on DEIR Page 2-4 these monitoring and reporting requirements will be summarized in the Mitigation Monitoring and Reporting Program (MMRP). The reporting requirements among the many mitigation measures and management plans described in the DEIR are diverse and we are hopeful that there will be clarity in the MMRP as to where and when these monitoring reports will be submitted.

We appreciate the way that Nevada County has provided a well-organized website at www.mynevadacounty.com during the DEIR process so that the public has easy access to review the DEIR and supporting technical studies. We request that Nevada County continue to maintain a project website to provide transparency and document accessibility for the public for the duration of construction and the 80-year permit term. The content of the monitoring reports is very germane to determining whether the proposed mitigation is working; therefore, Friends of Banner Mountain (FBM) and many residents of Nevada County would like to have easy access to those monitoring reports and permit applications without having to resort to Public Record Act (PRA) requests.

Grp 12-2

FBM is also concerned that Nevada County may not have adequate staffing and resources to track, review and respond to the many monitoring reports and permit applications that will be submitted. Because the information in these monitoring reports may trigger remedial action, it is important that the County have sufficient funding to support dedicated staff who will promptly enforce and oversee implementation of those remedies. It is not sufficient to rely on review and oversight by agency staff who will be reviewing permit compliance (e.g., Regional Water Quality Control Board, California Department of Fish and Wildlife). Agency staff are busy and under no obligation to provide monitoring reports to private citizens without a PRA request. We believe it is the County's duty to provide the public with easy access to these reports during construction and for the life of the project.

To address the concerns described above we have the following requests:

a. Please develop a MMRP that includes information about:
   - The entity receiving the monitoring report or permit application (e.g., Nevada County Planning, Building or Environmental Health Department, or permitting agencies like Regional Water Quality Control Board)
   - The interval or triggering event for the submittal (e.g., quarterly, annually, or proposed mine activities such as preparing a Risk Assessment before storing explosives underground), and
   - Whether remedial action would be required if performance standards described in mitigation measures, management or monitoring plans are not met.

b. Please provide a discussion in the FEIR addressing:
   - The County's proposed plan for providing public access to monitoring reports, permit applications and any technical studies that are produced during construction and operation for the duration of the 80-year permit.
   - The County's proposed plan to provide sufficient funding to support the County's sustained oversight and monitoring during construction and 80 years of operation.

Grp 12-3

2. Security/Bonds

As described on DEIR Page 4.6-24, the Surface Mining and Reclamation Act requires preparation and implementation of a Reclamation Plan and security in the form of a surety bond, trust fund, irrevocable letter of credit from an accredited financial institution, or other method acceptable to the Count to fund implementation of that plan. That is the only security mentioned in the DEIR; there is no discussion of insurance or security to ensure that the many DEIR mitigation, closing, and reclamation commitments will be fulfilled in the event of the applicant's financial collapse.

A review of Rise Gold Corp's July 31, 2021 Form 10-K and 10Q annual and quarterly reports with the U.S. Security and Exchange Commission (https://www.risegoldcorp.com/financial-statements) is not reassuring and indicates that the proposed mining operation is economically marginal and the anticipated gold revenue is speculative. If the applicant files for bankruptcy after impacts have already occurred, but before the mitigation is implemented, there will be no funds to provide remedial action and mitigation.

Grp 12-4

We understand that the County has engaged the services of a consultant to provide an independent economic analysis of the economic impacts of the mine, which we appreciate. That analysis will likely show substantial declines in property values, which is one of many concerns expressed by FBM members. However, we understand the scope of work does not include addressing the impacts of the project if mitigation cannot be implemented in the event of the applicant's financial failure and bankruptcy. The conclusions of a "less than significant" impact on many resources is based on implementation of the DEIR mitigation measures, but if there is no funding available to implement monitoring and remediation measures those less than significant conclusions would not apply. To address our concern's regarding the financial solvency of the applicant and potential failure to implement monitoring and mitigation please:

a. Provide a discussion in the FEIR describing the proposed source of funding for implementing mitigation measures and remedial actions in the event of the applicant's financial failure and withdrawal from the project after impacts have already occurred. Ideally this would be in the form of security from the applicant, similar to what is described on DEIR Page 4.6-24, but also addressing the restoration and mitigation actions in addition to the required Reclamation Plan.

3. Project Schedule/Sequencing

Construction time estimates are an important element for assessing project impacts on traffic, air quality, noise, and other topics but the estimates are not consistent throughout the various technical section of the DEIR. The DEIR states in some places that the project is estimated to have a twelve-month construction phase, but also states that the construction of the water treatment facility alone would take eighteen months. Significant grading and underground development would be needed before initiating the eighteen-month construction of the water treatment facility, and that facility would need to be completed and fully operational before dewatering (a six-month process) of the mine could begin. After dewatering is complete, the new shaft for ventilation and emergency access would need be constructed to the 1000' depth by working upwards from below. Then, before beginning any actual new mining, the tunnels would need to be restored sufficiently to allow for construction of the underground rock crushing facility. All of these activities would need to happen sequentially rather than concurrently. The eighteen-month estimate of construction seems far too short a

Grp 12-5

period of time to accommodate the sequential construction process. The estimate of construction duration needs to be consistent and as accurate as possible throughout the EIR sections to provide an adequate assessment of impacts. In addition, the schedule needs to reflect the time required to secure the many required permits described in the DEIR. To address this issue, please provide the following in the FEIR:

a. A revised project description (that will carry through in all EIR sections) that offers an accurate and consistent representation of all project components, including expected duration and sequence of each component, and incorporating the time required to secure the many permits identified in the DEIR.

SPECIFIC COMMENTS ON DEIR IMPACT ANALYSIS AND MITIGATION

4. Hydrology and Water Quality/Water Supply/Well Impacts

One of FBM's chief concerns about the project is that it could adversely affect local groundwater resources and wells for many of our members by dewatering the mine and lowering groundwater levels. The project area for the groundwater and well impact analysis should have encompassed the entire 2585-acre area under Banner Mountain where the applicant's mineral rights extend and where underground mining will occur rather than just the approximately thirty wells on East Bennett Drive.

Grp 12-6 The groundwater model that predicted impacts of the proposed long-term and sustained dewatering effort was calibrated based on pumping rates from the historical Idaho Brunswick Mine and only one 1956 water level measurement was collected from the flooded and inactive Union Hill shaft. We believe that using only one water level measurement from 64 years ago to calibrate the analysis for a complex bedrock aquifer system over a large region introduces a significant amount of uncertainty to the model, thereby making the model results inaccurate.

Grp 12-7 Data for the wells analysis came from private wells within a limited area and the data are old and cover just a few years. No usage data is provided, and critical data such as reduction in groundwater recharge from precipitation fails to include the 75 acres of low-permeable mine waste on the two sites. The groundwater model does not include the new access shaft, which would create a local area of groundwater drawdown and based on our review it looks like other existing mine features within a few hundred feet of the surface were also not evaluated in the ground water model. These mine features would contribute to the downward transmission of ground water from the near surface fractured rock areas. In addition, the groundwater model report assumes the geology in the area to be mined is homogeneous. Modeling that relies upon uniform rock, which is consistent from place to place, behaves in a more predictable fashion than rock that in bedrock systems having multiple faults and irregularities.

Grp 12-8 The mine water drains from several locations along Wolf Creek near Centennial Drive, and the DEIR provides only rough approximations of the mine water outflow rates from these areas. Furthermore, these outflow data are contradicted by more reliable records from previous studies which indicate ten times more outflow. Mine water inflow analysis is based on sparse mine water level data from the New Brunswick shaft and only 12 water level measurements were taken between 2003-2007, and three measurements in 2018-19. Please note that these measurements could be incorrectly interpreted; the water level reaches a limit when it exceeds the level of the drains from which the mine water flows and doesn't reflect would could be substantial inflow. Without a measurement of the outflow, the amount of inflow cannot be determined by the water level in the New Brunswick shaft.

Grp 12-9

The DEIR inappropriately defers to the future the collection of additional data via a Groundwater Monitoring Plan. The DEIR acknowledges that more groundwater level data is needed to assess the potential impacts of the proposed project on groundwater levels. Mitigation Measure 4.8-2(a)(4) (DEIR Page 4.8-67) states that this needed water assessment be conducted "once dewatering of the underground mine workings commences." However, once dewatering begins, it will be impossible to measure baseline levels which makes this mitigation measures ineffective.

Grp 12-10

The DEIR relies on fifteen monitoring wells to estimate impacts on water supply wells but does not explain how it arrived at this number of wells or their location, nor is an explanation provided as to why fifteen monitoring wells would be sufficient to estimate the impacts on all water supply wells around the mine area. In complex fractured bedrock spread out over thousands of acres, monitoring water levels at fifteen locations could not provide the needed data to ensure that groundwater impacts to hundreds of existing water supply wells in the project vicinity are identified and mitigated. Groundwater monitoring networks should be established in advance of the project, and the resulting monitoring information should be included in the FEIR.

Grp 12-11

Our members are very concerned about water supply and competition for groundwater for future residential wells in light of the impacts of the project and also from the effects of climate change. According to DEIR Page 4.11-51, water demand within the Nevada Irrigation District's (NID's) service area is expected to exceed supplies by more than 45 percent from 2025 to 2040 in Single Dry Years and by less than 10 percent from 2025 to 2040 during the first and second years of a Multiple Dry Year period. The surface water supply to NID will be subject to reductions during single and multiple dry years. The DEIR concludes that any water supply deficit can be addressed through NID's Water Shortage Contingency Plan, but this NID mitigation may not be possible if NID must limit its own allocations due to drought and climate change.

Grp 12-12

Based on our review of the DEIR and supporting technical studies, we believe that the DEIR does not provide adequate information about existing and future conditions of groundwater, water supply, and wells, and does not accurately assess potential impacts of the project on these resources. To remedy these deficiencies please provide:

a. An updated and revised groundwater model to more accurately predict the extent of the well drawdown caused by the predicted 80 years of mine-dewatering and dewatered maintenance.
b. A more accurate and comprehensive analysis in the FEIR that addresses the issues discussed above. The revised analysis needs to better reflect current and future site conditions and incorporate impacts of climate change to determine the extent and the severity of potential impacts upon groundwater resources, water supply and wells within the larger 2585-acre area under Banner Mountain.
c. A revised and more comprehensive Well Monitoring Plan.

Grp 12-13

The DEIR does not adequately characterize the current mine water chemistry. The Hydrology Report (DEIR Appendix K.2, Table 4-10, page 120) uses discharge screening limits and data from the New Brunswick shaft to define water treatment criteria. However, a more accurate sampling of mine water would be from the drains located along Wolf Creek rather than from the New Brunswick shaft, as described in the analysis of mine water flow (see DEIR Figure 4.8-7). This figure shows water entering the New Brunswick shaft then flowing downward through the existing mineworks to exit the drains at Wolf Creek (e.g., Eureka drain, East Eureka drain). Only a few samples taken from the drains were reported, but these samples are much more representative of the mine water chemistry and indicate higher levels of iron, manganese, arsenic, aluminum, and zinc than the New Brunswick shaft samples (DEIR K.2 Tables 3-6). We believe that regular testing over time at the mine drains



would provide a more accurate assessment of the contaminants flowing out of the mine under varying conditions, regular testing must be conducted over time at the Mine drains. To address this concern, we request that:

d. Provide the results of water quality sampling at the drains located along Wolf Creek rather than the New Brunswick shaft to better define water treatment criteria and provide a revised assessment of potential impacts based on this new sampling data.

5. Hazards and Hazardous Materials

Chapter 4.7 (*Hazards and Hazardous Materials)* and Chapter 4.13 (*Wildfire)* concludes that the project would not impair implementation of emergency response plans, and that project impacts would be below the threshold of significance for Hazards and Hazardous Wastes (*"Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan"*). The paragraph below from DEIR Page 4.7-38 (with identical text on Page 4.13-17) is the only analysis in the DEIR about how 118 haul truck round trips between 6:00 a.m. to 10 p.m., seven days a week to State Route (SR) 20/49 via Brunswick Road, would affect emergency evacuation routes.

> *"In the event of an evacuation order in the vicinity of the proposed mine, such as an evacuation of residents off of Greenhorn Road, the incident command center would contact dispatch and direct them to contact the mine and request the mine operator to shut down the mine and cease all truck hauling operations.[20] While Brunswick Road is not a primary evacuation route, it would be the evacuation route used by residents of the Greenhorn Road area to evacuate to the primary evacuation route of SR 49/20. Ceasing haul truck operations during the emergency evacuation order would ensure that the proposed project would not have the potential to physically interfere with an emergency evacuation plan. Operation of the approximately 7.4 haul trucks per hour attributable to the proposed project could either be temporarily ceased and/or these trucks could pull off the road to enable residents to evacuate as quickly and expeditiously as possible. With the temporary cessation of mine operations, if directed by County dispatch, no further haul trucks would be entering Brunswick Road during an evacuation order. Accordingly, County OES has stated that the proposed project would not have a significant impact related to physically interfering with an adopted emergency evacuation plan."*

Grp 12-14

This conclusion is based on one conversation between Lieutenant Robert Jakobs, Emergency Operations Coordinator, Office of Emergency Services, Nevada County Sheriff's Office, and Nick Pappani, Vice President, Raney Planning & Management, Inc., on January 5, 2021. The DEIR provides nothing more that this brief narrative on the course of action to be taken in the event of an evacuation off of Greenhorn Road, and relies on the opinion of Mr. Jakobs at County OES. However, no details other than the date are provided about the conversation between Mr. Jackobs and Mr. Pappani, nor can the reader determine what information was provided to Mr. Jakobs when he came to that conclusion of no significant impact on an adopted emergency evacuation plan.

Grp 12-15

Wildfire safety and evacuation routes are the number one concern for residents of Banner Mountain during fire season, which is now more than half the year. Brunswick Road and subsequent entry onto SR 20/49 is already a major evacuation bottleneck not just for residents evacuating from Greenhorn Road but also from Banner Lava Cap and Idaho Maryland roads, and would be worse with the additional mine truck traffic.

Chapter 5.6 (*Significant and Unavoidable Impacts*) already identifies a significant, unmitigated traffic impact to the Brunswick Road/Idaho Maryland Road, Brunswick Road/SR 174, and Idaho Maryland Road/Centennial Drive intersections, but there is no assessment of how this significant impact affects evacuation scenarios for Banner Mountain residents.

The DEIR offers no analysis quantifying how much worse it would be during construction and operation of the project and whether the additional traffic might physically interfere with an emergency evacuation plan. Banner Mountain residents are not reassured by skimpy and vague language in the DEIR that the incident commander would contact dispatch to request the mine operator to shut down the mine and cease truck hauling operations.

Grp 12-16

a. Please revisit the conclusion of no significant impacts to implementation of evacuation plans with the following additional analysis and information:
   - A more detailed analysis of the effects of project traffic during construction and operation on evacuations in any residential areas that might use Brunswick/SR 20/49 and Brunswick Road/SR 174 access for evacuation egress.

Grp 12-17

   - Details on the process and timing of notification for mine shutdown and cessation of truck hauling operations. For example, what would be the trigger for notification that the mine needs to shut down and cease truck traffic? Would a voluntary evacuation order on Greenhorn Road carry the same weight as a mandatory evacuation order to trigger cessation of truck traffic? Would voluntary or mandatory evacuation orders in any area that might need to use Brunswick/S R 20/49 or Brunswick/SR174 for egress trigger a requirement to cease operations and truck hauling? The analysis needs to extend beyond those areas: "*In the vicinity of the proposed mine*" but rather include all areas where residents might need to use Brunswick Road/SR 20/49 or Brunswick/SR174 for evacuation. Please be aware that, depending on the location of the fire, thousands of residents on Banner Mountain and in Cascade Shores might need to use the Brunswick/SR 20/49 area for evacuation.

Grp 12-18

   - Details on specifically who (title/position) would be contacted at the mine and confirmation that this person has the authority and means to immediately cease mine operations and truck hauling. Please also provide an estimate as to how long this notification and shut-down process would take and the effect of delays in shutting down truck operations on evacuations.

Grp 12-19

   - Provide additional support for the conclusion that the project would not impair implementation of an emergency evacuation plan and that no mitigation is required. We believe that mitigation may be required and that a draft Wildfire Evacuation Plan should be prepared which provides the specific details we request above.

Our members are also concerned about the potential impacts of on-site temporary storage of mine waste material, which is not discussed in the DEIR. The DEIR does not provide sufficient information to demonstrate that mine waste disposal by off-site sales would be viable. The applicant proposes to sell waste rock on the open market if it is still being produced after the two proposed waste rock piles reach capacity. The market for aggregates varies significantly by season and during rainy seasons it might be necessary to stockpile the aggregate onsite. However, there are no provisions for onsite storage in the DEIR or an assessment of impacts related to such storage. Dispersing waste rock and other mine waste over large areas without containment often results in contamination but this potential impact is not assessed in the DEIR.

Grp 12-20

The Regional Water Quality Control Board (RWQCB) has jurisdiction over the disposal location requirements for mine waste rock to make sure discharges would not pose a threat to water quality, but there is no information

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in the DEIR acknowledging this approval process is required. Although the DEIR does not discuss this, the concept of selling waste rock may not be feasible and alternative disposal methods should be considered. The absence of provisions for temporary waste rock storage (and the associated analysis of its impact) creates strict operational constraints and potential impacts on all phases of processing, but this impact has not been addressed in the DEIR. To address these concerns, please provide the following in the FEIR:

b. An analysis of the impacts of on-site storage of mine waste disposal and alternatives to off-site sales for mine waste disposal, and the impacts of those alternatives.

Grp 12-21

Management of asbestos-laden mined materials is not adequately addressed in the DEIR. Asbestos is likely to be released during underground blasting, crushing, and ore processing and during on-road transport, placement grading and compaction. The DEIR states that the Asbestos Management Plan would ensure that average mined material and engineered fill contains less than 0.01% asbestos. (DEIR Page 3-20). However, testing the asbestos content does not control the amount of asbestos in the actual material mined. To control the average amount of asbestos in output materials (and to avoid significant impacts related to asbestos exposure), but currently, the DEIR does not include any evidence that asbestos levels will not exceed this threshold. The testing process may require up to two weeks before the results are known, yet the project would continue daily mining activities during this time. This daily mined material would have to be stockpiled while awaiting the test results, which could expose workers to dangerous of asbestos. Furthermore, if the running average of asbestos in the daily mined material exceeds the required threshold, batches containing higher asbestos levels would have to be stockpiled in order to be later mixed with batches having lower asbestos levels. The DEIR does not disclose this fact nor does it analyze the associated impacts. The mineral processing described in the DEIR does not address the need for stockpiling materials or address the likely impacts of such efforts. To address this concern, please provide the following in the FEIR:

c. A revised Asbestos Management Plan that provides details on all of the steps necessary to safely manage this hazardous waste, including the location and organization of stockpiled materials, and safeguards to avoid fugitive dust emissions and potentially hazardous conditions.

6. Noise/Vibration

Grp 12-22

Many of our members choose to live on Banner Mountain because of the quiet and peaceful setting it offers, so potential noise and vibration impacts from the mine are a source of great concern. Some of the mine operations would generate noise levels of 85 dBA and begin early in the morning and extend into the evening, and some operations would occur 24 hours per day for 80 years. Tunneling and blasting would occur for 80 years, but DEIR does not identify the hours of these operations. The DEIR concludes that the project would not have significant noise impacts because they would comply with general County noise standards, but compliance with County standards is not the same as "less than significant" noise impacts.

Grp 12-23

In our quiet neighborhoods on Banner Mountain typically the only nighttime noises are the calls of Pacific chorus frogs in spring. But the DEIR states that because the project will comply with the County's nighttime noise level standards, an evaluation of sleep disturbance is not warranted. We disagree with this assertion because the project includes many operations that will occur during early morning or nighttime hours, including dewatering, indoor facility construction, truck loading/unloading and off-site hauling mineralization processing, and water treatment. The combination of morning and nighttime industrial activities and low background/ambient noise levels could definitely cause sleep disturbance for many of our members.

Grp 12-24

The DEIR identifies mine development (tunneling) and gold mineralization production (tunneling and production blasting) as part of the project, but it does not identify the hours of operation for these project components. The DEIR states that underground exploration and mining would occur 24 hours per day, 7 days per week, and assuming that underground exploration and mining include mine development and gold mineralization production, tunneling and blasting could occur at night. If this is the case, the project's noise and vibration impacts would be far more severe than the DEIR discloses.

Without explicit restrictions in the DEIR' s project description pertaining to the hours of tunneling and blasting, coupled with conditions of approval, the DEIR cannot simply assume that tunneling and blasting operations would not occur at night and would not adversely impact nearby receptors. The DEIR should have clearly identified the hours of mine development and gold mineralization production. The DEIR should have evaluated these impacts and identified and specified appropriate mitigation for nighttime noise.

Grp 12-25

The DEIR does not consider the absolute increase in noise levels compared to ambient background conditions. As described in the Salter Report (letter to Shute, Mihaly & Weinberger, from Salter Inc., dated March 9, 2022) certain operations could be 25-35 dB above background ambient noise levels. These noise levels would be perceived as more than four times as loud as the median ambient noise levels. The DIER assesses these impacts as less than significant because overall noise from these operations would not exceed the County's standards. The DEIR should have evaluated both the increase in noise level and the absolute noise level associated with the project.

Grp 12-26

Noise and vibration measurements were taken only at the Centennial and Brunswick sites and along the proposed pipeline location between the two sites. While processing would occur on these sites, tunneling and blasting would occur throughout the 2,585-acre mineral rights boundary under Banner Mountain. Tunneling and blasting could certainly result in excessive noise levels and vibration, but DEIR provides no evidence that noise and vibration impacts were measured throughout the entire mineral rights boundary. Many of our members live in areas immediately above or near the 2,585-acre mineral rights boundary, but the DEIR does not describe noise and vibration impacts to these residents. The DEIR should have disclosed the project's potential for noise and vibration impacts throughout the entire mineral rights boundary.

Grp 12-27

The DEIR does not adequately distinguish the project's construction-related noise sources from its operational noise sources. This distinction is very important because the DEIR asserts that the County's noise standards do not apply to construction-related activities. If the DEIR characterizes an operational activity as a construction project it may have incorrectly determined such impacts to be exempt from the County's noise standards and also determined the impact to be less-than-significant under CEQA. For example, the DEIR states that mine development (tunneling) would be constructed throughout the life of the mine which would require drilling and the use of explosives, and a new mine shaft would be
developed on the Brunswick Site. These massive project components appear to be characterized as construction activities, but would potentially extraordinarily noisy as they would require extensive drilling and rock excavation. If these are activities are considered construction rather than operation, it inappropriately assumes the noise from these sources would be exempt from the County's noise standards.

Grp 12-28

The DEIR relies on varying thresholds for the project's traffic and on-site noise sources. It uses a numerical increase in noise only to determine the significance of the project's traffic noise impacts, specifying +5.0 dB or more as constituting a significant traffic noise impact. For on-site noise sources, it relies on the noise limits included in the Nevada County General Plan Noise Element and the Nevada County Land Use and Development Code. The DEIR should have assessed project's noise levels relative to the noise levels that residents actually experience (ambient noise) rather than to the County's standards.

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Grp 12-29

The DEIR asserts that vibration from the project's blasting operations would be barely perceptible to nearby receptors. The DEIR identifies a 0.4 in/sec peak particle velocity (PPV) vibration limit based primarily on a vibration study performed following an underground nuclear blast in Mississippi in 1964. As described in the Salter Report, human responses to a single blast does not reflect the impact on the community from ongoing, perceptible and potentially unpleasant vibration over the 80-year lifespan of this project. the DEIR ignores guidance by the U.S. Office of Surface Mining and Reclamation and Enforcement:
All blasting must take place during daylight hours unless more restrictive times are specified. If night-time blasting is approved by the regulatory authority, it must be based on evidence from the operator that the public will be protected from adverse noise and other impacts.

The DEIR provides no evidence that the public will be protected from adverse effects from the project's blasting operations and does not include restrictions on blasting vibration during evening and nighttime hours. According to the Salter Report, residents could experience "strongly perceptible" and borderline "unpleasant" vibration as a result of blasting. This impact would occur for 80 years. The DEIR does not disclose this significant impact.

Grp 12-30

To evaluate the project's blasting-related noise impacts, the DEIR relies on noise measurements conducted at the Sutter Gold underground mine in Amador County. The Sutter Gold study found blasting noise to be 75 dBA, on average, at a distance of 200 feet from the mine portal. However, to translate those findings to the Project's Brunswick Site, the DEIR assumes that noise at the project site would be reduced by 20 dB compared to the Sutter Gold mine. Other than mentioning the difference in orientation and size of the portal, this claim of 20 dB noise reduction is unsubstantiated. As described in the Salter Report twenty decibels of noise reduction is a substantial change in noise emission. Without the unsubstantiated 20 dB of reduction, the Salter Report notes that the blasting noise at the nearest sensitive receptors would be between 72 and 77 dBA. As stated in the DEIR, ambient median and "background" noise levels at many sensitive receptors is between 35 dBA and 50 dBA. Therefore, the blasting noise could be substantially above the ambient noise levels, by approximately 25 to 40 dB.

Grp 12-31

a. To address these concerns about noise and vibration impacts that would affect many of our members, please provide a revised analysis of noise and vibration that includes the following:

- Clearly identify the hours of mine development and gold mineralization production. If these operations occur at night or early in the morning, please evaluate the potential for noise and vibration to cause sleep disturbance and include appropriate mitigation for nighttime noise.
- Evaluate both the increase in noise level and the absolute noise level associated with the project.
- Assess the project's potential for noise and vibration impacts throughout the entire 2,585-acre mineral rights boundary where many of our members reside.
- Categorize each project component as either construction-related or operation-related and for each construction-related component provide details such as the construction-phasing plan, including the timing and duration of each and every project. This analysis should include each construction-project that is expected to occur over the project's 80-year timeframe.
- Evaluate the project noise levels relative to the noise levels that residents actually experience (ambient noise) rather than to the County's standards.

7. Biological Resources

Grp 12-32

The foothill yellow-legged frog, a species listed as Endangered by the California Department of Fish and Wildlife (CDFW), could occur in the South Fork of Wolf Creek at the Centennial and Brunswick sites and also downstream of those sites. [Please note that the foothill yellow-legged frog is listed as Endangered under the California Endangered Species Act, not a Candidate for Threatened as incorrectly stated in DEIR Table 4.4-6 and on DEIR Page 4.4-37.] DEIR Page 4.4-37 states: "*The main stem of Wolf Creek within the Centennial Industrial Site is considered suitable habitat for this species*" and notes that it has been documented within 3.9 miles of the site. Then in the same paragraph the DEIR inexplicably characterizes the potential for this species to occur at the Centennial as "very low" despite the fact that suitable habitat is present. No protocol level Visual Encounter Surveys were conducted for this species at the Centennial site.

Grp 12-33

The impact analysis and proposed mitigation for foothill yellow-legged frog and for other special-status aquatic species like western pond turtle is focused on construction impacts rather than the operational effects of discharging mine water to the South Fork of Wolf Creek for 80 years. Potential impacts of mine water discharges on the aquatic life in the South Fork of Wolf Creek are dismissed by stating that these discharges would need to comply with Central Valley Regional Water Quality Control Board National Pollutant Discharge Elimination System (NPDES) No. CAG995002 and that monitoring of NPDES regulated parameters (e.g., temperature, pH, turbidity, dissolved oxygen) would be conducted to ensure the project stays within safe threshold limits identified within the NPDES discharge requirements. However, we are concerned that mine water discharges would overheat the South Fork Wolf Creek. Mine water ranges between 14 and 15 degrees Celsius, and NPDES requirement specifies that the discharge temperature not exceed existing temperature in the South Fork of Wolf Creek by more than 5 degrees Fahrenheit (2.8C). The DEIR provides a range of values for creek flow and temperature but it is based on just a few samples collected in April and August of 2019 and Jan 2020. More than 15 years of monitoring by the Wolf Creek Community alliance provides data indicating that the temperature of the creek often falls substantially below 10 degrees C, and that these temperatures commonly occur during low flow times. As described above, we are also concerned about water quality impacts and the effects that the discharges will have on foothill yellow-legged frogs, western pond turtles and the benthic macroinvertebrates upon which these species and many others rely.

a. To address this concern, please provide the following information in the FEIR:

- A comprehensive assessment of impacts to foothill yellow legged frogs, western pond turtles and other aquatic life in the South Fork of Wolf Creek resulting from the discharge of mine water over an 80-year period. This assessment should be based on a detailed analysis of the water quality treatment processing and a comprehensive discussion of proposed water quality monitoring.
- Please also provide details on what immediate and long-term remedial actions would be taken if the NPDES water quality monitoring results indicate that NPDES thresholds are not being met. Please clarify whether mine operation and dewatering would cease until NPDES water quality thresholds are met, and if not, what the impact would be on continued water quality impacts on foothill yellow legged frogs, western pond turtles and other aquatic life in the South Fork of Wolf Creek.

Grp 12-34

A population of Pine Hill flannelbush, as species listed as federally Endangered and a California Rare Plant, was observed at the Centennial site. The DEIR states that 18 Pine Hill flannelbush plants would be directly impacted by proposed engineered fill placement at the Centennial Site. Mitigation for this impact refers to DEIR Appendix F.4, a Habitat Management Plan (HMP) for this species, and DEIR Mitigation Measure 4.4-1(a) indicates that only Steps 1-4 of the HMP would be required before issuance of a grading permit. HMP Steps 1-4 involve seed

collection and transplantation. Step 5 (DEIR Page 4.4-65-66) requires more seed collection and transplanting if the Steps 1 – 4 are not successful, and also calls for:

> *"Habitat Enhancement: Prior to issuance of grading permits, pursuant to the HMP, the applicant shall enhance Pine Hill flannelbush habitat outside the disturbance footprint, which could include removal of invasive plants and conducting a pilot study by collaborating with CAL FIRE or other research facility to conduct prescribed fire in areas to enhance natural germination and recruitment, as Pine Hill flannelbush need fire for successful germination, and root sprouts.*
>
> *Conservation Easement: Prior to issuance of grading permits, the applicant shall record a Conservation Easement for the on-site Pine Hill flannelbush avoidance area, or use a similar land protection mechanism that runs with the land in perpetuity, to protect the Pine Hill flannelbush plants within the avoidance area. The management guidelines for the Conservation Easement or similar mechanism shall require that the habitat be managed for the Pine Hill flannelbush and its associated habitat. The applicant shall also record a Conservation Easement or use a similar land protection mechanism for any offsite areas not owned by the applicant where the transplants are to be located."*

This mitigation measure is internally inconsistent; the Step 5 requirements for habitat enhancement and a conservation easement indicate that these measures should be implemented before issuance of the grading permit, but the language in the introductory paragraph of Mitigation Measure 4.4-1(a) indicates that it would be implemented only if Steps 1-4 are not successful.

We believe that all of the recommendations in the HMP should be implemented before issuance of the grading permit. Mitigation for impacts to this beautiful and rare plant should not be delayed and should not be mitigated solely by relying on transplants. Mitigation should focus on the more comprehensive and ecosystem-based approach described in the HMP to fully mitigate for project impacts rather than just relying on putting transplants in the ground.

Development of the habitat enhancement plan would be time consuming and will require extensive coordination with agencies such as CalFire, CDFW, and USFWS (and should also include the Redbud Chapter, our local California Native Plant Society) and therefore this collaborative effort should begin now. Waiting until after the monitoring results from the transplanting are available would delay development of the habitat enhancement plan and direct impacts to the Pine Hill flannelbush population at the Centennial site would go unmitigated for years. The HMP should be revised to provide more details on the proposed habitat enhancement plan, what activities that plan would include, and an assessment of how enhancement activities would fully mitigate for project impacts.

Grp 12-35

The HMP should be revised to provide more details on the proposed conservation easement, including identifying entities that could serve as easement holders, an estimate of stewardship costs for ongoing management of the easement lands in perpetuity, and a source of funding for those costs. Such costs are typically calculated with a Property Analysis Record or some other tool.

Grp 12-36

The HMP (page 6-1) indicates that flannelbush seed collection was conducted on August 21, 2019 with Mr. Brett Hall from the UC Santa Cruz Arboretum as a part of the UC Santa Cruz Native Plant Program. The HMP should provide an update on the status of those seedlings so the public can have some assurances that the transplantation proposed as mitigation is on a successful trajectory.

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Grp 12-37

b. To address these concerns discussed above about mitigation for Pine Hill flannelbush, please provide the following:

- A revised Mitigation Measure 4.4-1(a) that calls for implementation of Steps 1 -5 from the Pine Hill Flannelbush HMP before issuance of grading permits.
- A revised Pine Hill Flannelbush HMP that includes the additional details on habitat enhancement and conservation easements discussed above, as well as updates on the status of the seeds collected in August 2019.

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GROUP LETTER 12: EDWARD SYLVESTER, FRIENDS OF BANNER MOUNTAIN

Response to Comment Grp 12-1

This is an introductory comment. The commenter's opposition to the proposed project is noted for the decisionmakers. The commenter is referred to Master Response 1 - (Non-EIR/Administrative Issues). The comment also expresses general concern regarding the alleged inadequacy of the DEIR. The commenter provides specific concerns in the following portion of the letter, which are addressed below.

Response to Comment Grp 12-2

The commenter requests that the County maintain a public website page about the project during construction and operation of the mine, so the public can have access to monitoring reports without submitting a public records act request. The commenter also makes specific requests about the contents of the mitigation monitoring and reporting program. This comment does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 12-3

The commenter requests that the FEIR include discussion of the County's plan to provide public access to monitoring reports, permit applications and any technical studies that are produced during mine construction or operation. Additionally, the commenter requests that in the FEIR, the County explain the source of funding for mine oversight and monitoring. This comment does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 12-4

The commenter asserts that the applicant may become insolvent and not be able to pay for mitigation required in the DEIR, and requests that the DEIR include a discussion on funding for restoration and mitigation activities in the case of mine operator insolvency or mine shutdown. Mitigation requirements in the DEIR are required to be implemented prior to the commencement of the project action that would cause the respective impact. As such, impacts would not be allowed to occur prior to implementation of mitigation beforehand. This comment does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 12-5

The commenter suggests that the construction timeline provided in the DEIR is unrealistically short and should be lengthened to reflect sequential construction tasks. Please see Master Response 24 – Project Construction Schedule.

Response to Comment Grp 12-6

The commenter asserts that the groundwater analysis should have contemplated mining within the entire 2,585-acre mineral rights area and that insufficient data was used in the groundwater model. There are not valuable gold deposits within the entire 2,585-acre mineral rights area, thus, presuming that mining would occur in the entire mineral rights area would not be accurate. Moreover, the applicant has specific areas that will be targeted for gold extraction, and the groundwater model is based on that plan, along with reasonable assumptions about potential extension of mining into other areas. The groundwater model did look at potential drawdown within the entire mineral rights area, but only a small number of wells were shown to have a significant impact, prior to mitigation. Please see Master Response 7 - Location of Future Mining Areas, and Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 12-7

Regarding age and amount of well data: See Response to Comment Grp 7-23.

Regarding the service shaft and near surface working in relations to the ground water model: please see Responses to Comments Grp 7-80 and Grp 7-81.

Regarding the recharge rate where the engineered fill will be placed: please see Response to Comment Grp 7-78.

The groundwater model does not assume that the rock is homogenous and includes changes in hydraulic conductivity with depth, geological units, and faults. Please see Chapter 4.8 and Appendices K.2 and K.3 of the DEIR and Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 12-8

Regarding the drain outflow data from previous studies: please see Response to Comment Grp 7-68.

Measurements of current water flow from the drains is not based on the measurement of the water level in the Brunswick Shaft. The water flow from the mine drains was measured directly as is discussed in Chapter 4.8 of DEIR and Appendix K.2 of the DEIR. Please also see Responses to Comments Grp 7-69 through Grp 7-76.

Response to Comment Grp 12-9

Please see Response to Comment Grp 21-110 and Master Response 15 - Adequacy of Groundwater Monitoring Wells. The commenter asserts that the requirement to collect groundwater data is inappropriate deferral of mitigation. However, Mitigation Measure 4.8-2 requires "Water-level monitoring data for a minimum of 12 months before commencement of dewatering of the mine." As such, the collection of data is not deferred and is required by the DEIR before dewatering commences.

Response to Comment Grp 12-10

Please see Response to Comment Grp 21-119 and Master Response 15 - Adequacy of Groundwater Monitoring Wells. With regard to the commenter's request that groundwater monitoring networks be established before the project commences, see Response to Comment Grp 12-9 above.

Response to Comment Grp 12-11

Please see Master Response 16 - Drought and Climate Change. In response to the commenter's questions on water supply, the Nevada Irrigation District (NID) approved a water supply assessment (WSA), which concluded that NID has sufficient water to supply the project and its existing customers.

With regard to NID's Water Shortage Contingency Plan, as described in NID's 2020 UWMP (Chapter 6 Drought Plan) and the WSA (Section 6.2 Additional Planned Future Potable Water Supplies), there are numerous management and operational efforts available to NID to address supply shortfalls during drought periods. Demand reductions, carryover storage strategies, system operational strategies, supplemental supplies, increased storage, and others are all options available to NID in the event of a water shortage condition. NID will evaluate each specific shortage condition and select the appropriate response action(s) for implementation. If supplies become extremely critical requiring implementation of Stage 6 of NID's Water Shortage Contingency Plan, drinking water supplies to NID's treated water and municipal water customers may be reduced to health and safety use of water only, but would not be cut off.

NID is in the early stages of a long-term visioning and planning effort to better understand potential future conditions and needs in response to climate change, and identify management and operational practices to meet those needs. The process, Plan for Water, will identify optional water management practices as triggering points if supply, demand, regulatory, legal, and other events are reached. These practices may include supply projects, demand management efforts, policy changes, and others. As the Plan for Water process is developing mitigation measures for drought resiliency, NID will continue to implement its current drought and water shortage contingency efforts as described in NID's 2020 UWMP.

Response to Comment Grp 12-12

This comment summarizes the prior comments Grp 12-7 through Grp 12-11. Please see Responses to Comments Grp 12-7 through Grp 12-11, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 12-13

Please see Response to Comment Grp 7-12.

Water sampling data from the drains at Wolf Creek have already been provided in the DEIR. See Chapter 4.8 and Appendix K.2 of the DEIR.

Response to Comment Grp 12-14

The commenter asserts that the project's truck traffic may impair emergency evacuations and asserts that further analysis is required. However, the project truck traffic accounts for only approximately 1% of typical traffic on Brunswick Road and would not affect an evacuation. Please see Master Response 5 – Evacuation Zones.

Response to Comment Grp 12-15

Project traffic would not affect an evacuation for residents on Greenhorn, Banner Lava Cap, or Idaho-Maryland Roads. Please see Master Response 5 – Evacuation Zones. The commenter states that Chapter 5.6 identifies a significant, unmitigated traffic impact to the Brunswick Road/Idaho-Maryland Road intersection. This is incorrect. Page 5-11 of the DEIR states the following:

> The EIR requires implementation of Mitigation Measures 4.12-1(a-c), which would reduce the project's significant effect to the Brunswick Road/Idaho-Maryland Road intersection and the Idaho-Maryland/Centennial Drive intersection; however, the project's impact to the SR 174/Brunswick Road intersection would remain *significant and unavoidable*. The reason for this is that while Mitigation Measure 4.12-1(b) requires the applicant to enter into a traffic mitigation agreement with the County and provide the project's fair share toward needed improvements, the remaining funds for the intersection improvements are unknown, in terms of timing and contributing parties.

The text says the project's impact to the SR 174/Brunswick Road intersection would remain significant and unavoidable after mitigation, not the Brunswick Road/Idaho-Maryland Road intersection. To further demonstrate this, page 4.12-66 of the DEIR states the following:

> *Brunswick Road/Idaho-Maryland Road*
>
> Signalization would improve the Brunswick Road/Idaho-Maryland Road intersection to LOS D. This intersection is identified to be signalized in the City of Grass Valley GVTIF. Under EPAP Plus Project (Scenario #1), the project is expected to add 35 additional vehicles through the intersection during the 3:30-4:30 PM time period, and under EPAP Plus Project (Scenario #2), the project would add 47 additional vehicles. Mitigation Measure 4.12-1(a) requires the applicant to pay the GVTIF to the City of Grass Valley,

> given that the needed intersection improvement is included in the City's TIF. Thus, payment of the GVTIF would reduce the impact to a *less-than-significant* level.

The commenter has a similar misunderstanding of the Idaho-Maryland/Centennial Drive intersection. The text on page 5-11 of the DEIR says the project's impact to the SR 174/Brunswick Road intersection would remain significant and unavoidable after mitigation, not the Idaho-Maryland Road/Centennial Drive intersection. To further demonstrate this, page 4.12-66 of the DEIR states the following:

> *Idaho-Maryland/Centennial Drive*
>
> Signalization will improve the Idaho-Maryland/Centennial Drive intersection to LOS D. This intersection is identified to be signalized in the City of Grass Valley GVTIF. Under EPAP Plus Project (Scenario #1), the project is expected to add 18 additional vehicles through the intersection during the 3:30 to 4:30 PM time period, and under EPAP Plus Project (Scenario #2), the project would add 15 additional vehicles. Mitigation Measure 4.12-1(b) requires the applicant to pay the GVTIF to the City of Grass Valley, given that the needed intersection improvement is included in the City's TIF. Thus, payment of the GVTIF would reduce the impact to a *less-than-significant* level.

While the DEIR concludes that the proposed project would have a significant and unavoidable impact to the SR 174/Brunswick Road intersection, there are a few important factors to consider. First, this intersection would not serve as a key evacuation route for the area in question, and residents in the intersection area have multiple routes to evacuate the area (e.g., Lower Colfax Road, Rattlesnake Road, SR 174 EB). Second, Mitigation Measure 4.12-1(b) of the DEIR requires the applicant to enter into a Traffic Mitigation Agreement with the County regarding the SR 174/Brunswick Road intersection. The Agreement shall require the applicant to pay the project's fair share contribution toward the improvements necessary to improve intersection operations to an acceptable level. The Agreement shall include the fair share calculations and total payment amount. Based on the Caltrans methodology to assess fair share, it is estimated that the fair share percentage is 14.9%. While the project is contributing toward addressing its contribution of traffic to the SR 174/Brunswick Road intersection, the remaining funding needed to improve the intersection (e.g., signalization) is not yet certain, nor secured. As a result, the DEIR conservatively concludes that the impact would remain significant and unavoidable.

Response to Comment Grp 12-16

Please see Response to Comment Grp 12-15 and Master Response 5 – Evacuation Zones.

Response to Comment Grp 12-17

If regular traffic were interfering with an evacuation, local authorities would implement traffic control and the project traffic, which is relatively minor in comparison to existing traffic, would also be redirected to minimize interference. Please see Master Response 5 – Evacuation Zones.

Response to Comment Grp 12-18

Please see Responses to Comments Grp 12-14 and Grp 12-17. Please also see Master Response 5 – Evacuation Zones. The project would have a manager present onsite at all times, who would be available should Nevada County Regional Dispatch Center contact the operation to request the mine to shut down trucking.

Response to Comment Grp 12-19

Please see Master Response 5 – Evacuation Zones.

Response to Comment Grp 12-20

Please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets.

Please also see Chapter 4.8 of the DEIR and Master Response 8 - Mine Waste Characterization.

Response to Comment Grp 12-21

The project does not propose temporary stockpiles of mine waste, and would hold that material in silos until it is picked up by trucks for engineered fill use or for sale as construction aggregate. Please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets.

In regard to asbestos: Please see Responses to Comments Grp 7-6 and Grp 7-7, and Master Response 22 - Conservatism of Asbestos Assumptions.

Response to Comment Grp 12-22

The commenter disagrees with the DEIR's conclusion that noise impacts would be less than significant, states that an evaluation of sleep disturbance is warranted, and states that the DEIR does not disclose the hours in which blasting would occur. Hours for noise generating activities are described in Chapter 4.10 and Appendix L of the DEIR. In regard to hours of blasting, see Responses to Comments Grp 21-143 and Grp 21-144. With regard to sleep disturbance analysis, please see Response to Comment Grp 21-130.

County noise standards are not the only standard of significance used for the noise analysis, as the DEIR also considered a substantial increase in ambient noise levels to be a significant increase, even if the noise does not exceed the County noise standard. Please see Section 4.10.3, and Table 4.10-5 of the DEIR.

Response to Comment Grp 12-23

Please see Response to Comment Grp 21-130.

Response to Comment Grp 12-24

Please see Responses to Comments Grp 21-130, Grp 21-143 and Grp 21-144.

Response to Comment Grp 12-25

See Response to Comment Grp 21-133.

Response to Comment Grp 12-26

The project's potential for noise and vibration throughout the entire mineral rights boundary has already been considered in the EIR. The DEIR's analysis of blasting vibrations is based on an assumption that blasting would take place a minimum of 500 feet below surface. Any noise from blasting would only be at the opening to surface at the two shafts on Brunswick site which has already been analyzed in Chapter 4.10 of the DEIR. As such, the location of noise sources of the project would not change based on the area of mining underground. Please also see Master Response 7 - Location of Future Mining Areas.

Response to Comment Grp 12-27

The commenter asserts that construction noise was not differentiated from operation noise in the DEIR. However, the DEIR specifically analyzed the separate noise impacts of construction and of operations. As stated on page 4.10-16 of the DEIR, the Nevada County Land Use and Development Code exempts construction noise from the County noise standards. Nonetheless,

an evaluation of construction noise is provided in the DEIR for purposes of CEQA analysis. See Chapter 4.10 of the DEIR.

Response to Comment Grp 12-28

The commenter states that for on-site noise sources, the DEIR relies on noise limits included in the Nevada County General Plan and Nevada County Land Use and development Code and should have assessed project noise levels relative to the noise levels that residents actually experience (ambient noise) rather than to the County's standards. Because the County's noise standards are adjusted upwards or downwards based on ambient conditions, the DEIR analysis effectively did evaluate impacts relative to ambient conditions by applying the appropriate offsets to the County's standards to account for the baseline ambient conditions. Specifically, application of standards 5 dB above the ambient are required where baseline ambient conditions currently exceed the County standards and, where baseline ambient levels are more than 5 dB below the County standards, the standards have been set at the baseline ambient level plus 5 dB. Finally, where ambient conditions are less than 5 dB below the County standards, no adjustment for ambient conditions is applied in the analysis. Table 6 of Appendix L (Table 4.10-6 of the DEIR) shows the baseline ambient conditions at each representative receptor extrapolated from the ambient noise survey results and the corresponding maximum and average, daytime, evening, and nighttime noise level standards applicable at each representative receptor location after the appropriate adjustments to the County standards have been applied to account for the baseline ambient conditions. Please see pages 18-28 of Appendix L of the DEIR for a detailed discussion of applicable noise standards by receptor. Nonetheless, in response to this comment, the following two additional tables were prepared to provide the increase in ambient noise levels for each receptor location during daytime and nighttime periods, respectively. As indicated in Tables A & B, the project-related increases in ambient noise levels from all on-site noise sources are below the 5 dBA threshold for a finding of a significant noise increase.

Response to Comment Grp 12-29

Please see Responses to Comments Grp 21-143 and Grp 21-144.

Response to Comment Grp 12-30

See Response to Comment Grp 21-145.

Response to Comment Grp 12-31

Please see Responses to Comments Grp 12-22 through Grp 12-29.

Response to Comment Grp 12-32

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 12-33

Please see Chapter 4.4 of the DEIR and Master Response 30 - Biological Study Technical Adequacy, Master Response 32 - Temperature of Mine Water Discharge, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 36 - Flows in South Fork Wolf Creek, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Table A
Project-Related Increases in Daytime Ambient Noise Levels at the Nearest Sensitive Receptors
Idaho-Maryland Mine Project - Nevada County, CA

	Existing Daytime Ambient Noise		Project Daytime Noise Generation		Existing + Project Noise Levels		Project-Related Noise Increase	
Receptor	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
1	58	76	56	68	60	76	2	0
2	63	81	54	67	63	81	0	0
3	61	82	39	46	61	82	0	0
4	55	72	37	43	55	72	0	0
5	49	66	29	34	49	66	0	0
6	50	67	29	34	51	67	1	0
7	49	66	29	33	49	66	0	0
8	54	72	38	48	54	72	0	0
9	48	66	35	41	48	66	0	0
10	47	66	34	40	47	66	0	0
11	47	67	34	42	47	67	0	0
12	49	69	33	41	49	69	0	0
13	51	70	34	43	51	70	0	0
14	50	72	41	48	51	72	1	0
15	51	73	44	55	52	73	1	0
16	48	71	45	51	50	71	2	0
17	56	73	43	49	56	73	0	0
18	52	69	47	53	53	69	1	0
19	54	69	41	50	54	69	0	0
20	57	72	47	55	58	72	1	0
21	55	70	47	58	56	70	1	0
22	56	71	51	62	57	71	1	0
23	58	73	55	67	60	73	2	0
24	60	75	50	66	61	75	1	0
25	60	75	49	67	60	75	0	0
26	51	64	51	68	54	68	3	4
27	51	64	46	57	52	64	1	0
28	51	64	46	57	52	64	1	0
29	51	64	40	50	51	64	0	0
30	51	64	34	39	51	64	0	0

Table B
Project-Related Increases in Nighttime Ambient Noise Levels at the Nearest Sensitive Receptors
Idaho-Maryland Mine Project - Nevada County, CA

	Existing Nighttime Ambient Noise		Project Nighttime Noise Generation		Existing + Project Noise Levels		Project-Related Noise Increase	
Receptor	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
1	50	66	14	15	50	66	0	0
2	55	71	14	16	55	71	0	0
3	51	69	17	21	51	69	0	0
4	56	70	17	20	56	70	0	0
5	50	64	13	17	50	64	0	0
6	51	65	14	18	51	65	0	0
7	50	64	17	19	50	64	0	0
8	45	65	14	16	45	65	0	0
9	39	59	20	25	39	59	0	0
10	37	58	19	25	37	58	0	0
11	37	59	20	26	37	59	0	0
12	39	62	18	20	39	62	0	0
13	41	64	22	28	41	64	0	0
14	42	64	31	39	42	64	0	0
15	43	65	36	45	43	65	1	0
16	40	62	40	48	43	62	3	0
17	57	71	36	45	57	71	0	0
18	53	67	41	49	53	67	0	0
19	46	65	36	42	47	65	1	0
20	50	68	39	43	50	68	0	0
21	48	66	33	37	48	66	0	0
22	48	67	28	30	48	67	0	0
23	51	69	24	27	51	69	0	0
24	53	71	23	27	53	71	0	0
25	52	71	25	28	52	71	0	0
26	44	56	26	31	44	56	0	0
27	44	56	25	29	44	56	0	0
28	44	56	26	29	44	56	0	0
29	44	56	26	30	44	56	0	0
30	44	56	24	28	44	56	0	0

Response to Comment Grp 12-34

Mitigation Measure 4.4-1(a) includes three different and independent requirements to mitigate project impacts to the Pine Hill flannelbush. The first measure requires the preparation of a habitat management plan, a draft of which was included in Appendix F.4. The habitat management plan (i) is to mitigate the direct loss of 18 Pine Hill flannelbush as a result engineered fill placement and the potential indirect loss of 4 Pine Hill flannelbush within 30 feet of the edge of the engineered fill. The second measure (ii) requires the Project Proponent to enhance the Pine Hill flannelbush habitat that would not be impacted by engineered fill placement. The third measure (iii) requires a conservation easement be placed on the onsite Pine Hill flannelbush avoidance area and any offsite transplant areas. All measures are required to be completed prior to the issuance of a grading permit. This is hereby clarified in the revised mitigation measure text in the EIR (page 4.4-69), as shown below.

4.4-1(a) *i.* *Prior to issuance of grading permits for the Centennial Industrial Site, the Project Applicant shall obtain an Incidental Take Permit (ITP) from CDFW for Project-related impacts to the Pine Hill Flannelbush. During the consultation process with CDFW, the Centennial Pine Hill Flannelbush Habitat Management Plan (Matuzak 2021) (HMP) shall be revised if required by CDFW, and must be approved by CDFW prior to implementation. This HMP shall include habitat enhancement and conservation easement requirements. If the USFWS determines that the plants within the Study Area are the federally endangered Pine Hill flannelbush prior to project implementation, then a USFWS Biological Opinion must also be secured, and the USFWS would also need to approve the HMP prior to implementation. Note that the measures outlined below are minimum measures, and additional measures may be required by CDFW to be included in the HMP during consultation.*

Prior to issuance of grading permits for the Centennial Industrial Site, implement project-specific mitigation measures 1-3 outlined below consistent with the County and CDFW approved HMP, as well as the Habitat Enhancement and Conservation Easement. Project-specific mitigation measures generally include protective measures for the Pine Hill flannelbush within the on-site avoidance area. For project actions that will directly impact the Pine Hill flannelbush, measure 4 (monitoring) shall occur on an ongoing basis, and measure 5 depends upon the results of monitoring, and thus, measures 4 and 5 are not required prior to issuance of grading permits).~~implement project-specific mitigation measures 1-3 within the Centennial Pine Hill Flannelbush Habitat Management Plan (Matuzak 2021) (HMP), to the satisfaction of the County, USFWS and CDFW. Project-specific mitigation measures generally include protective measures for the Pine Hill flannelbush within the on-site avoidance area. For project actions that will directly impact the Pine Hill flannelbush, measure 4 (monitoring) shall occur on an ongoing basis, and measure 5 depends upon the results of monitoring, and thus, measures 4 and 5 are not required prior to issuance of grading permits):~~

1. *Seed Collection;*

   Collect seed for seedbanking and for future replacement and recovery efforts pursuant to the requirements of Section 6.2 of the HMP.

2. *Develop Transplantation Plan and Monitoring Plan;*

   The Transplantation and Monitoring Plan shall be developed in consultation with USFWS and CDFW, and shall, at a minimum, address location(s) for dormant season relocation, site selection for transplanting, and metrics of successful establishment (i.e., Section 6 of the HMP).

3. *Transplanting;*

   Transplant the individuals of Pine Hill flannelbush that fall within the disturbance footprint to another site with similar soil, hydrologic, vegetation type and aspect. The transplantation site(s) selected shall extend the known population spatially, in other words, planting beyond the known perimeters of the existing population is preferable, to maintain population coverage. Transplanting shall occur in the season deemed to have the greatest potential for success, generally the fall, after rains have commenced.

4. *Transplant Monitoring; and*

   Transplants shall be monitored every month for the first six months, then subsequently, every two months for the first two years. After monitoring identifies successful establishment and flowering for the second season for each of the transplants, transplanting will have been deemed successful.

5. *Alternative Measures to Transplantation and Seed Collection (if required pursuant to the criteria in the HMP)*

   If Steps 1-4 of the HMP are not successful in maintaining the Pine Hill flannelbush population numbers, then the following measures shall be taken:

   - *Individuals shall be grown from seed and transplanted out in a 100:1 ratio for those taken.*
   - *Transplants of individuals grown from seed shall be planted with similar soil, hydrologic, vegetation type and aspect.*
   - *Transplanting shall occur in the season deemed to have the greatest potential for success, generally the fall, after rains have commenced.*
   - *Transplants shall be monitored every month for the first six months, then subsequently, every two months for the first two years.*

ii. *Habitat Enhancement:* *Prior to issuance of grading permits, pursuant to the HMP, the applicant shall enhance Pine Hill flannelbush habitat outside the disturbance footprint, which could include removal of invasive plants and conducting a pilot study by collaborating with CAL FIRE or other research facility to conduct prescribed fire in areas to*

enhance natural germination and recruitment, as Pine Hill flannelbush need fire for successful germination, and root sprouts.

iii. Conservation Easement: Prior to issuance of grading permits, the applicant shall record a Conservation Easement for the on-site Pine Hill flannelbush avoidance area, or use a similar land protection mechanism that runs with the land in perpetuity, to protect the Pine Hill flannelbush plants within the avoidance area. The management guidelines for the Conservation Easement or similar mechanism shall require that the habitat be managed for the Pine Hill flannelbush and its associated habitat. The applicant shall also record a Conservation Easement or use a similar land protection mechanism for any offsite areas not owned by the applicant where the transplants are to be located.

The above revisions are for clarification purposes and do not alter the conclusions of the DEIR.

Response to Comment Grp 12-35

Comment noted. The requested level of detail is not required for a mitigation measure.

Response to Comment Grp 12-36

Comment noted. This additional information requested by the commenter is not necessary to analyze and conduct an impact analysis resulting from potential project impacts.

Response to Comment Grp 12-37

Please see Responses to Comments Grp 12-34 through Grp 12-36 above.

Group Letter 13

Gold Country Avian Studies
14401 Pierite Road Nevada City, CA 95959 (510)541-9078

To: Nevada County Planning Commission
Attn: Matt Kelley, Senior Planner
950 Maidu Avenue, Suite 170
Nevada City, CA 95959

Dear Mr. Kelley and the Nevada County Planning Commission,

Grp 13-1

I am a biologist and the director of Gold Country Avian Studies (GCAS), an organization focusing on avian research and education in the Sierra Foothills. We have found that the DEIR for the proposed Idaho Maryland Mine (IMM) project is deficient in numerous areas that would directly affect the environment and wildlife of the Centennial and Brunswick sites, as well as the surrounding area, especially South Fork Wolf Creek and the portion of Empire Mine State Historic Park that the creek transects, a meadow known as the Bennett Street Grasslands. Since December 2016 I have run a year-round bird monitoring program in the Grasslands, performed with a permit from the Park and in conjunction with Bear Yuba Land Trust. The land trust holds a conservation easement on 7+ acres within the grasslands along South Fork Wolf Creek. At the grasslands we perform detection surveys and run a monitoring station where we operate 10 mistnets to passively capture wild birds, then band and release them. The grasslands are a rich, biodiverse ecotone that connects a conifer covered hillside, a riparian creek corridor, and a very wet meadow which drains from the hill where the Centennial site is located. At the Brunswick site, the project proposes to put its untreated wastewater into a vibrant pond, rich with birdlife. After treatment, the water will be discharged into the creek, which flows downstream though the grasslands where we run the monitoring program. The DEIR is inadequate in that is does not call out the Significant and Unavoidable Impacts that the proposed project would have to the birds and other wildlife that use South Fork Wolf Creek and its riparian habitat for breeding, foraging, and cover. Nor does it address the direct environmental or economic impacts that the mine activities would have on the monitoring program that GCAS runs.

1



Brunswick site pond

4.4 Biological Resources

Grp 13-2

The Idaho-Maryland Mine Project DEIR is deficient in that it does not it does not acknowledge nor address Significant and Unavoidable impacts to the 98 native bird species that my organization has captured or detected in the Grasslands, all of which are protected by the Migratory Bird Treaty Act. This list includes 4 rare, special status species including the critically endangered willow flycatcher. These species and their relevant statuses are listed below and can be found at this link from the State of California Natural Resources Agency Department of Fish and Wildlife:

***Empidonax traillii* willow flycatcher**
State rank: S1/S2: critically imperiled/imperiled in the state at subspecies level (State listing of the full species includes all subspecies.)
CESA (California Endangered Species Act): Endangered
USFS:Sensitive
USFWS: Bird of Conservation Concern

2

***Contopus cooperi* olive-sided flycatcher**
State rank: S3 vulnerable
CDFW:Species of Special Concern
IUCN:Near Threatened
NABCI:Yellow Watch List
USFWS:Bird of Conservation Concern

***Icteria virens* yellow-breasted chat**
State rank: S3 = Vulnerable
CDFW: Species of Special Concern

***Setophaga petechia* yellow warbler**
State rank: S3/S4 Vulnerable
CDFW:Species of Special Concern
USFWS:Bird of Conservation Concern

Grp 13-3

First, GCAS takes issue with the following statements from the DEIR:

Page 471 of the DEIR states "California black rail is the only special-status bird that was identified as potentially occurring on the Sites, though it is considered to have only a very low potential to occur. Common avian species having no special status are not at risk of populations declining below self-sustaining levels." In Appendix F.10, the Updated Technical Memorandum for the Idaho-Maryland Mine Project – South Fork Wolf Creek Discharge Biological Resources Assessment states "The habitat (aquatic and upland riparian zone) associated with the South Fork Wolf Creek does not provide suitable habitat for other CESA listed species such as the California black rail (*Laterallus jamaicensis coturiculus*)".

We disagree with these statements and believe that the pond area and adjacent meadow on the Brunswick property *could* in fact provide proper habitat for the California black rail. Moreover, the statement that "California black rail is the only special-status bird that was identified as potentially occurring" is absolutely incorrect--on at least 15 separate occasions GCAS has captured or detected one or more individuals of the above-mentioned special status species (yellow-breasted chat, yellow warbler, olive-sided flycatcher, and the critically endangered willow flycatcher). During four out of the past five years **we have captured more than 7 willow flycatchers** in the creek vegetation. In 2003 this

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species was estimated to have only 400 remaining breeding pairs! We can only imagine that this species is in greater jeopardy today, and for the DEIR to ignore its presence in this region is completely negligent.

Moreover, **the DEIR is deficient because it did not consider significant relevant facts known to the county:** in my NOP comment letter addressed to Matt Kelley, dated August 17, 2020, I listed 3 special status species we had encountered in the Bennett Street grasslands, including willow flycatcher, and on March 10, 2021, I also submitted to the county planning department a folder of all our CDFW California Natural Diversity Database (CNDDB) special status species submissions. On March 24, 2022 at the DEIR Public Hearing, an updated list of all CNDDB submissions and photographs of all 4 Special Status species was provided to the Commissioners and are included in this letter as well (see below).

Grp 13-4

The DEIR's biological surveys of the South Fork Wolf Creek riparian area were severely lacking, My understanding from Appendix F.10 is that the only biological survey that occurred in the South Fork Wolf Creek riparian area was a Visual Encounter Survey (VES) during which two people walked the creek on August 29, 2019. Not only is it likely that many amphibians were missed during this late, hot, dry time of year in a warming climate, but also, there is no evidence that any bird survey was attempted. If so, bird vocalizations are almost non-existent at that time of year and locally breeding migrants would have already departed.

In addition, a second meadow, located on the Brunswick property, also rich with birdlife, lies directly to the east of a vibrant pond where the project will pump its untreated wastewater. Using this pond as a wastewater dump is a tragic waste of a vibrant wetland, which is a rare asset in a very dry region in the midst of a multi-year drought. Studies must be required to determine if diverting water from this pond into a treatment facility could dry this meadow, and/or determine if contaminants in the wastewater can leach to this meadow. Also, a precise plan would need to be developed to protect wildlife from contaminated pond water. **It must also be stated that this meadow on the Brunswick property is dense with excellent willow habitat, and it is quite likely that the protected CESA willow flycatchers that we have caught in late summer may in fact breed at this location, and may be dispersing downstream towards the Bennett Street**

Grp 13-5

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Grp 13-5

Grasslands, using South Fork Wolf Creek as a migration corridor. Multi-year studies of these aspects of the project must be studied, addressed, and mitigated, but none of this is adequately addressed in the DEIR. It is of utmost importance that the county ensures that this willow habitat be viewed as a vital, protected wetland and should not be disturbed in any way by the project owner without adequate permitting. The "rebuilding" of the southwest pond berm suggested in the DEIR could have Significant and Unavoidable Impacts on birds and wildlife including the CESA willow flycatcher, the adjacent meadow, and rich, willow habitat of South Fork Wolf Creek. Two breeding wood duck pairs were recently (March 26, 2022) observed on the pond, as a testament to the importance of the habitat that this area provides.



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Meadow and extensive willow habitat available on Brunswick property

Grp 13-6

We find the statement "Common avian species having no special status are not at risk of populations declining below self-sustaining levels" (DEIR p 471) extremely disturbing. The landmark Rosenberg et al. 2019 peer-reviewed study published in the journal Science demonstrates a "cumulative loss of billions of breeding individuals across a wide range of species and habitats… and that declines are not restricted to rare and threatened species—those once considered common and wide-spread are also diminished." The study's results demonstrate that in my 50 year lifetime, we have lost 1/3 of the birds (in sheer volume) that existed in North America when I was born in 1971; a horrible tragedy. According to the 2019 State of the Birds Report produced by the North American Bird Conservation Initiative (NABCI), a consortium of governmental organizations and NGOs, "just 15 species of "common birds" (species that were once abundant, such as meadowlarks, juncos, blackbirds, and swallows) account for more than two-thirds of the total loss in native bird populations. Our common birds are now suffering population losses in the tens of millions— similar to the decline of the Passenger Pigeon." Even the dark-eyed junco, a 'common' backyard feeder bird, has had one of the steepest declines in North America. **So, the DEIR's**

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statement indicating that "common...species are not at risk of populations declining" is simply absurd, and the authors should be ashamed for even making this suggestion.

Grp 13-7

Section 4.4-4 The DEIR indicates in this section that no mitigation is required for a 'Less than Significant' Impact of "**Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites."** However, GCAS's data indicates that the SF Wolf Creek may be used regularly during migration season by the endangered Willow Flycatcher, Yellow-breasted Chats, and Yellow Warblers. Also, we have documented evidence that black bears use the Bennett Street Grasslands as a wildlife corridor and den nearby. We also have concerns that increased traffic between the meadow and the Centennial site, and between the grasslands and the Brunswick site could negatively impact bird and other wildlife moving between these areas.

Given that the Bennett Street Grasslands are located between the Centennial site and the Brunswick site, and across the street from a proposed housing development (see below), extensive additional studies need to be performed regarding the Significant and Unavoidable Impacts that the project will have on the grasslands and the riparian corridor. These should include but are not limited to general bird surveys; surveys of special status species; willow flycatcher surveys during breeding and migration periods; research on impacts of temperature change and flooding that the creek may have on invertebrates; and studies on the effects of flooding on ground nesting birds, of which there are numerous resident and migrant examples at the site. Additionally, we have documentation of birds, bobcats, bear, coyote, mountain lions and other wildlife moving freely between the grasslands and the area of the proposed housing development and the Centennial site, and additional studies must be performed to identify the Significant and Unavoidable Impacts that the additional traffic and noise created by the proposed housing development and the mine project would have on wildlife, their migration corridors, and the aesthetics of the grasslands of Empire Mine State Historic Park.

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Grp 13-8

4.4-2(a) Foothill yellow-legged frog According to https://animaldiversity.org/accounts/Rana_boylii/ "at lower elevations, foothill yellow-legged frogs breed from late March to early May, after the high-water stages of streams subside. At higher elevations, breeding usually takes place from June to August, after the ice and snow has melted from the high-mountain lakes..... Depending on the water temperature, the eggs may hatch within 5 to 37 days." This development is probably accelerated in warmer temperatures, and slowed in colder ones. Given our warming climate, it is likely that even at higher elevations the breeding period would have occurred earlier rather than later in the summer. In this case, even assuming the latest possible breeding date, which is unlikely given the drought of the past few years, warmer temperatures would have caused a short hatching period and egg masses could have easily been missed during the one survey performed August 29, 2019, and that this species is present nearby, so additional studies should be performed.

Grp 13-9

4.4-2(b) Western pond turtle On p 90 of the DIER states re: the western pond turtle *"If a nest is documented during pre-construction surveys, a non-disturbance buffer shall be established, as determined by a qualified biologist, based on the location of the nest until all eggs have hatched and the juveniles have dispersed out of the proposed impact area."* It is not clear to GCAS how any reasonable biologist could expect that juvenile turtles would or could disperse out of this area to the nearest pond, which is approximately 1,969.81 ft (600.40 m) away and across the busy Brunswick Road. This impact is Significant and Unavoidable.

Grp 13-10

4.4-2(f) More specifics should be provided regarding how and when roosting bats should be surveyed. Given the extensive period of disuse of the shaft tower, it is likely that the tower is used as a roosting or maternal roost site by a variety of bat species. Simply shutting the bats out of the tower when they depart to forage is UNETHICAL and should not be considered as a viable mitigation.

Grp 13-11

4-8 Hydrology and Water Quality

Ignoring the Significant and Unavoidable Impacts to South Fork Wolf Creek by alteration of temperature, water levels, and clarity, and the addition of toxins to South Fork Wolf Creek could **Result in Loss, Disturbance, or Degradation of**

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Jurisdictional Waters of the United States, and Waters of the State, Including Wetlands, which would not be acceptable under CEQA.

An extensive study of the hydrology of waters potentially entering the pond/wetland located immediately east of the Centennial site (south of the Ferguson Plumbing Supply buildings) should performed as this wetland is important to birds, frogs, and other wildlife. The DEIR provides no mention of any mitigation for impacts to surface or ground waters flowing into this wetland. Terrain maps would imply that this is the lowest elevation location in the area, so greater attention should be given to impacts to this pond/wetland.

Grp 13-12

4.4-3(c) The DEIR states: "To the extent feasible, as determined by the qualified biologist in coordination with the Corps, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area. This is woefully inadequate. The language "to the extent feasible" allows too much leeway for the project sponsor to do the minimum necessary rather than actually care for the waterways and adjacent resources, vital resources .

The DEIR also must clarify a plan for placement of rock and rip rap along Wolf Creek and clarify how construction byproducts will be prevented from discharging into South Fork Wolf Creek, and specify how "dissipation" riprap will work at the point of entry into the creek.

Grp 13-13

The DIER indicates that a clay liner covered with geomembrane will line the pond, and that filtration through mined manganese dioxide, treated with sodium hypochlorite or potassium permanganate, and that sodium hydroxide will be used to treat NH3 in higher concentrations due to explosives. The presence of these chemicals could ultimately end up in the drinking water of the residents and water sources available to wildlife in untenable, whether allowed or unintentional. This Impact is Significant and Unavoidable and must not be allowed.

Grp 13-14

Aesthetics 4.1

4.1-1 The project inaccurately describes Impact 4.1-1 as Low Significance (LS) and requests a zoning variance to increase 4 separate buildings to a height of up to

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165, well above the currently zoned 45 foot limit. This would be a negative impact to the character of the region and a Significant and Unavoidable Impact to the trails of the adjacent state park, from which one can view the property.

Grp 13-15

4.1-3 We disagree that new sources of light are of Low Significance and could have Significant and Unavoidable Impacts to wildlife and the surrounding communities, potentially reducing home values and making the properties less desirable for those who wish to buy homes in the area.

4.10 Noise and Vibration

Grp 13-16

4.10-6 The DEIR indicates that no mitigation is required for a "Less Than Cumulatively Considerable" Impact of "Generation of a substantial permanent increase in ambient noise and/or vibration levels associated with the cumulative noise and vibration from all sources of the proposed project." However, GCAS disagrees with this, and is concerned that noise impacts could affect the fecundity (breeding success) of nesting birds. Knowledge of this impact can be found in many peer-reviewed scientific publications, too numerous to catalog here.

Rezoning

Grp 13-17

Due to the Significant Impacts proposed by the project, GCAS does not support the rezoning from **M1-SP to M1-ME of the Brunswick site.** "The proposed project includes the requested rezone of the parcels located at the Brunswick Industrial Site from M1-SP to Light Industrial with Mineral Extraction Combining District (M1-ME)" (see DEIR Figure 4.9-3).

We also do not support the transfer of 46.27 acres at the Centennial site (p 54) to reconfigure property lines to resolve issue of proposed buildings crossing property boundaries.

Grp 13-18

Additional Considerations

The DEIR is also deficient in that it does not address the simultaneous impacts of a 300+ unit housing development currently under review by the city of

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Grass Valley, which is proposed on Bennett Road between the Centennial site and the grasslands at APNs: 009-560-005, 010, 031 – 039, by owner Timothy Snow and Millennium Engineering.

Also, in apparent violation of CEQA legislation, the IMM DEIR decouples the Centennial development from that of the Brunswick area and is written as if the Centennial developments are a "done deal." The Centennial site has numerous contaminants present and the site's development is sure to have Significant and Unavoidable Impacts on human and environmental health, and the Centennial and Brunswick site proposals must be considered in conjunction, as ONE project, and all negative Impacts considered simultaneously.

Grp 13-19

Numerous aspects of the IMM project require substantial environmental monitoring, such as long-term effects on Air and Water Quality and impacts to wells and the aquifer. The DEIR does not give sufficient consideration to who will be responsible for the extensive monitoring necessary for the 80-year life of the mine, and beyond. The monitoring of these impacts should not be left to the responsibility of the project sponsor, (for whom financial gain is the primary goal), nor to Nevada County, the City of Grass Valley, and its taxpayers. So, who will perform a sufficient level of monitoring that will keep our citizens and the environment healthy and who will pay for this Herculean task?

Grp 13-20

Gold Country Avian Studies agrees with the arguments put forth in comment letters submitted to the County by Empire Mine State Historic Park and CEA in opposition to aspects of the DEIR and supports the efforts and intentions of those organizations.

In summary, the Bennett Street grasslands are a biodiverse gem providing ideal habitat for resident and migratory birds. It is plentiful in food sources, as well as perennial water from South Fork Wolf Creek, which supports the invertebrates that birds feed to their young and consume during migration stopovers. Moreover, the grasslands are known to be the last remnant of the grassy valley after which Grass Valley acquired its name -- this site truly encompasses our community's heritage and serves as a rich environmental reservoir.

Grp 13-21

The true gold of our county are its stunning landscapes, its beautiful forests, its sparkling life-filled waters, and the diverse wildlife that populate these

habitats. It will be a sad day when this is sacrificed for the short-sighted gain of pulling ore from the ground.

Sincerely,



Allison Nelson, MS
Director, Gold Country Avian Studies

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Special Status Species Detected at Bennett Street Grasslands of Empire Mine Historical Park

yellow-breasted chat *Icteria virens*



Photo: GCAS

yellow warbler *Setophaga petechia*



Photo: GCAS

willow flycatcher *Empidonax traillii*



Photo: GCAS

olive-sided flycatcher *Contopus cooperi*



Photo: Cornell Lab of Ornithology

Gold Country Avian Studies

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NEL18F0004	4/4/2019	Contopus cooperi	olive-sided flycatcher	PDF	7/7/2018	Nevada	Grass Valley	ABPAE32010
NEL18F0003	4/4/2019	Icteria virens	yellow-breasted chat	PDF All Files(3)	9/4/2018	Nevada	Grass Valley	ABPBX24010
NEL18F0005	4/4/2019	Setophaga petechia	yellow warbler	PDF	9/25/2018	Nevada	Grass Valley	ABPBX03010
NEL19F0011	8/16/2020	Icteria virens	yellow-breasted chat	PDF	8/6/2019	Nevada	Grass Valley	ABPBX24010
NEL19F0014	8/16/2020	Empidonax traillii	willow flycatcher	PDF	8/6/2019	Nevada	Grass Valley	ABPAE33040
NEL19F0013	8/16/2020	Empidonax traillii	willow flycatcher	PDF	8/11/2019	Nevada	Grass Valley	ABPAE33040
NEL19F0012	8/16/2020	Empidonax traillii	willow flycatcher	PDF	8/25/2019	Nevada	Grass Valley	ABPAE33040
NEL20F0005	8/17/2020	Icteria virens	yellow-breasted chat	PDF All Files(3)	8/11/2020	Nevada	Grass Valley	ABPBX24010
NEL20F0006	8/17/2020	Empidonax traillii	willow flycatcher	PDF All Files(4)	8/11/2020	Nevada	Grass Valley	ABPAE33040
NEL20F0011	1/14/2021	Empidonax traillii	willow flycatcher	PDF All Files(10)	9/6/2020	Nevada	Grass Valley	ABPAE33040
NEL20F0012	1/14/2021	Setophaga petechia	yellow warbler	PDF All Files(4)	9/6/2020	Nevada	Grass Valley	ABPBX03010
NEL21F0005	3/2/2022	Icteria virens	yellow-breasted chat	PDF	7/1/2021	Nevada	Grass Valley	ABPBX24010
NEL21F0006	3/4/2022	Empidonax traillii	willow flycatcher	PDF	8/12/2021	Nevada	Grass Valley	ABPAE33040

GCAS CNDDB submissions as of 4/4/2022

Bennett Street Grasslands bird species detections

Species captured at Bennett Street Grasslands	Scientific Name
Acorn Woodpecker	*Melanerpes formicivorus*
American Robin	*Turdus migratorius*
Anna's Hummingbird	*Calypte anna*
Ash-throated Flycatcher	*Myiarchus cinerascens*
Audubon's Warbler	*Setophaga coronata auduboni*
Bewick's Wren	*Thryomanes bewickii*
Black Phoebe	*Sayornis nigricans*
Black-chinned Hummingbird	*Archilochus alexandri*
Black-headed Grosbeak	*Pheucticus melanocephalus*
Black-throated Gray Warbler	*Setophaga nigrescens*
Brown Creeper	*Certhia americana*
Bullock's Oriole	*Icterus bullockii*
Bushtit	*Psaltriparus minimus*
California Quail	*Callipepla californica*
California Scrub-jay	*Aphelocoma californica*
California Towhee	*Melozone crissalis*
Calliope Hummingbird	*Selasphorus calliope*
Cassin's Vireo	*Vireo cassinii*

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Cedar Waxwing	*Bombycilla cedrorum*
Chestnet-backed Chickadee	*Poecile rufescens*
Downy Woodpecker	*Dryobates pubescens*
Dusky Flycatcher	*Empidonax oberholseri*
Fox Sparrow	*Passerella iliaca*
Gambel's White-crowned Sparrow	*Zonotrichia leucophrys gambelii*
Golden-crowned Sparrow	*Zonotrichia atricapilla*
Gray Flycatcher	*Empidonax wrightii*
Hairy Woodpecker	*Dryobates villosus*
Hammond's Flycatcher	*Empidonax hammondii*
Hermit Thrush	*Catharus guttatus*
Hermit Warbler	*Setophaga occidentalis*
House Finch	*Haemorhous mexicanus*
House Wren	*Troglodytes aedon*
Hutton's Vireo	*Vireo huttoni*
Lesser Goldfinch	*Spinus psaltria*
Lincoln's Sparrow	*Melospiza lincolnii*
MacGillivray's Warbler	*Geothlypis tolmiei*
Northern Mockingbird	*Mimus polyglottos*
Nashville Warbler	*Leiothlypis ruficapilla*
Nuttall's Woodpecker	*Dryobates nuttallii*
Oak Titmouse	*Baeolophus inornatus*
Orange-crowned Warbler	*Oreothlypis celata*
Oregon Junco	*Junco hyemalis oreganus*
Pacific Wren	*Troglodytes pacificus*
Pine Siskin	*Spinus pinus*
Purple Finch	*Haemorhous purpureus*
Red-breasted Nuthatch	*Sitta canadensis*
Red-breasted Sapsucker	*Sphyrapicus ruber*
Ruby-crowned Kinglet	*Regulus calendula*
Rufous/Allen's hummingbird	*Selasphorus* hummingbird
Savannah Sparrow	*Passerculus sandwichensis*
Sharp-shinned Hawk	*Accipiter striatus*
Song Sparrow	*Melospiza melodia*
Spotted Towhee	*Pipilo maculatus*
Steller's Jay	*Cyanocitta stelleri*
Swainson's Thrush	*Catharus ustulatus*
Townsend's Warbler	*Setophaga townsendi*
Varied Thrush	*Ixoreus naevius*
Warbling Vireo	*Vireo gilvus*
Western Bluebird	*Sialia mexicana*
Western Flycatcher (likely Pacific-Slope)	*Empidonax difficilis*

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Western Tanager	*Piranga ludoviciana*
Western Wood Pewee	*Contopus sordidulus*
White-crowned Sparrow	*Zonotrichia leucophrys*
Willow Flycatcher	*Empidonax traillii*
Wilson's Warbler	*Cardellina pusilla*
Wrentit	*Chamaea fasciata*
Yellow Warbler	*Setophaga petechia*
Yellow-breasted Chat	*Icteria virens*

Species detected but not captured	**Scientific Name**
American Kestrel	*Falco sparverius*
Band-tailed Pigeon	*Patagioenas fasciata*
Belted Kingfisher	*Megaceryle alcyon*
Brown-headed Cowbird	*Molothrus ater*
Canada Goose	*Branta canadensis*
Common Raven	*Corvus corax*
Common Yellowthroat	*Geothlypis trichas*
Cooper's Hawk	*Accipiter cooperii*
European Starling	*Sturnus vulgaris*
Great Blue Heron	*Ardea herodias*
Great-horned Owl	*Spinus pinus*
Golden-crowned Kinglet	*Regulus satrapa*
Mourning Dove	*Zenaida macroura*
Northern Flicker	*Colaptes auratus*
Northern rough-winged Swallow	*Stelgidopteryx serripennis*
Olive-sided Flycatcher	*Contopus cooperi*
Pileated Woodpecker	*Dryocopus pileatus*
Red-tailed Hawk	*Buteo jamaicensis*
Red-tailed Hawk (dark morph)	*Buteo jamaicensis*
Rock Pigeon	*Columba livia*
Say's Phoebe	*Sayornis saya*
Townsend's Solitaire	*Myadestes townsendi*
Turkey Vulture	*Cathartes aura*
Virginia Rail	*Rallus limicola*
Western Meadowlark	*Sturnella neglecta*
White-breasted Nuthatch	*Sitta carolinensis*
Wood Duck	*Aix sponsa*

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GROUP LETTER 13: ALLISON NELSON, GOLD COUNTRY AVIAN STUDIES

Response to Comment Grp 13-1

This is an introductory comment expressing general concerns regarding the project and its associated DEIR. Please see responses to the following comments addressing the commenter's specific concerns.

Response to Comment Grp 13-2

The commenter generally states that the DEIR is deficient, and the project would directly affect the environment and associated wildlife. DEIR Chapter 4.4 analyzed potential impacts to special--status bird species, special-status bats, and non-special status birds protected by other laws (see Impact 4.4-2). Impacts were identified as potentially significant and required mitigation (e.g., preconstruction surveys) reducing these impacts to less than significant level. Please see Master Response 30 - Technical Study Adequacy and Master Response 37 - Birds and Raptors. Master Response 37 includes minor changes to Mitigation Measure 4.4-2(g) (e.g., pre-construction nesting bird surveys) to identify, by name, the riparian bird species identified by the commenter. In addition, Table 4.4-6 of Chapter 4.4, Biological Resources of the DEIR, is hereby revised as shown at the end of this letter to add descriptions of the bird species and evidence of their low potential for occurrence on the Centennial and Brunswick Industrial Sites. Similarly, page 4.4-39 of Chapter 4.4 is hereby revised as follows:

> Riparian Bird Species
>
> Several species of birds are known to forage and nest within riparian habitat along stream corridors, including the willow flycatcher (*Empidonax traillii*), yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), and olive-sided flycatcher (*Contopus cooperi*). Yellow-breasted chat has been mapped within the CNDDB approximately 1.0 mile downstream of the Brunswick Area within the riparian habitat along South Fork Willow Creek. The willow flycatcher, yellow warbler, and olive-sided flycatcher have not been mapped within the CNDDB within 5 miles of the Brunswick Area or Centennial Area, but unprocessed data regarding their potential occurrence within the same vicinity as the yellow-breasted chat along the South Fork Wolf Creek downstream of the Brunswick Area is included in the Grass Valley Quad CNDDB search (CDFW 2022).
>
> However, compared to the riparian habitat downstream of the Brunswick Area where the yellow-breasted chat has been mapped in the CNDDB (CDFW 2022), the riparian habitat within the Centennial and Brunswick Industrial Sites provide minimal suitable habitat for any of these species given the level of disturbance historically within those areas as well as the recent disturbance within both areas in 2021 related to a fire that burned a large area within the Centennial Area and a large storm in late December 2021 that heavily impacted the riparian habitat along the South Fork Wolf Creek within the Brunswick Area. The previous mapped location of the yellow-breasted chat, as well as the locations of the other three riparian bird species included as unprocessed data within the CNDDB (CDFW 2022), are within the Empire Mine State Historic Park and have been identified in an area of substantially higher stream and riparian habitat quality than the more highly disturbed riparian habitat located along the South Fork Wolf Creek within Brunswick Area. Accordingly, these species have a low probability of occurrence onsite, and no potential impact is expected.

The aforementioned revisions to Chapter 4.4. of the DEIR are provided for clarification purposes in response to public comment and do not affect the adequacy of the DEIR analysis, which already identified that the proposed project would result in a potentially significant impact to nesting

raptors and other migratory birds. As a result, the DEIR includes mitigation (MM 4.4-2(g)) requiring pre-construction nesting bird surveys, and if nesting birds are detected, implementation of avoidance measures.

Response to Comment Grp 13-3

Please see Response to Comment Grp 13-2.

Response to Comment Grp 13-4

Please see Response to Comment Grp 13-2, as well as Master Response 38 – Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 13-5

As noted in DEIR Chapter 4.4, and various biological appendices (Appendix F) the "pond" is a man-made clay-lined pond that was constructed to support previous industrial land uses and surrounded by wet meadow, montane hardwood-conifer, and developed vegetation types. These technical studies analyzed the species that would utilize these habitats and the DEIR included an impact analysis and mitigation measures if an impact was identified. Therefore, potential impacts to the man-made pond, onsite vegetation habitats, and potential special status species were thoroughly analyzed.

As stated on page 4.8-30 of the DEIR, the clay-lined pond, constructed in the 1980s, for the former Bohemia Lumbermill, was permitted by the RWQCB through WDRs as a Class II Designated Waste Management Unit, under former Title 23 of the CCR, Subchapter 15, Section 2532. According to the WDRs (Order No. 88-185 for Bohemia Incorporated Grass Valley Mill), the pond was to be lined with a two-foot-thick clay layer having a permeability not to exceed 1x 10-6 cm/s. Vector Engineering found that the “clay liner system was constructed in substantial accordance with the SWRCB Title 23, Subchapter 15, Section 2532 regarding construction of the natural liner system for Class II Designated Waste Management Units.” Mitigation Measure 4.8-1(a) requires the applicant to submit a RoWD and obtain a WDR for the use of the surface impoundment (i.e. Brunswick clay-lined pond. At a minimum, the liner of the clay-lined surface impoundment shall be upgraded to include a synthetic liner meeting the specifications in Title 27, Section 22490(f), of the California Code of Regulations. Due to the very low permeability of the existing and proposed liner, water contained in the pond does not infiltrate into the adjacent wetland meadow and therefore diverting water from the pond to the water treatment plant would not dry out the adjacent meadow and water in the pond cannot leach out into the adjacent meadow. As stated on page 4.4-85 of the DEIR, the project includes excavation and reconstruction of a segment of the berm of the existing clay-lined pond to remove pockets of sawdust not removed during prior construction. No disturbance to the wetland meadow is proposed and Mitigation Measure 4.4-3(b) requires the appliance to implement the Watercourse/Wetlands/Riparian Areas Management Plans prepared for the Centennial Industrial Site and Brunswick Area, as approved in their final form by Nevada County. Specifically, the applicant shall implement the mitigation measures and conditions identified in the Management Plans, which include measures designed to protect aquatic resources and the biological resources they support. Regarding, the Willow Flycatcher, please see Master Response 37 - Birds and Raptors.

As discussed in Master Response 30 - Biological Study Technical Adequacy, the project site (including the pond within the Brunswick Industrial Site) has been subject to extensive biological surveys, peer review, and analysis in the DEIR.



Response to Comment Grp 13-6

CEQA requires the analysis of impacts, directly or due to habitat modifications, to special-status species protected by CDFW or USFWS. In addition, CEQA requires an analysis of impacts to non-special status birds if they are protected by other laws and regulations (e.g., Migratory Bird Treaty Act). DEIR, Impact 4.4-2, conducted this analysis consistent with CEQA.

Response to Comment Grp 13-7

Please see Master Response 37 - Birds and Raptors, regarding potential impacts to the California black rail, willow flycatcher, olive-sided flycatcher, yellow-breasted chat, and yellow warbler.

The CEQA guidelines require analysis of substantial interference to "the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites." Migration is defined as the seasonal movement of animals from one habitat to another. Various animal, bird, and fish species are not automatically considered migratory just because they move from one location to another. Migration serves a purpose for the species such as winter/summer habitat for foraging or breeding. It is acknowledged, and analyzed in the DEIR impact analysis (see Section 4.4.4), that species exist within the project site that are common to the area. Potential impacts to these species were analyzed and mitigation measures have been provided where it was determined impacts to species could occur as a result of project activities including preconstruction surveys and agency permitting. The only migratory species acknowledged by the County General Plan is deer migration corridors. Impact 4.4-4 addressed the project's impact to this potential migratory corridor and concluded it would be less than significant. The commenter does not raise any specific impact that would be caused by the project, but speculates that impacts could result. CEQA does not require analysis of speculative impacts. (CEQA Guidelines Section 15384.)

The commenter is concerned that increased traffic between the Bennett Street Grassland Meadow and the Centennial site and Brunswick site could negatively impact bird and other wildlife moving between these areas. Truck traffic from the proposed project is not on E. Bennett Road (see Figure 3.-13 of the DEIR) and traffic from operations along E. Bennett Road is limited to a portion of employees (approximately 12%) who may use that route to come to and from work at the Brunswick site (See figures 4.12-5 and 4.12-6 of the DEIR). As stated on page 4.4.74 of the DEIR, studies of the effects of noise on wildlife populations have shown that while some species can be negatively affected by traffic noise and wildlife densities are generally inversely proportional to distance from roadways, many species of wildlife are unaffected by roadway noise. In general, wildlife species have been shown to acclimate to the noise environment in which the species resides, or to select habitat based on a range of factors including the level of disturbance.

The project would not result in flooding and therefore would not have any impact to invertebrates or nests from flooding. Please see Chapter 4.8 of the DEIR and Master Response 36 - Flows in South Fork Wolf Creek. The project water discharge would be required to meet state water quality goals regarding temperature of discharged water. Please also see Master Response 32 – Temperature of Mine Water Discharge.

The commenter states that the DEIR must analyze how the project would affect the aesthetics of the grasslands of the Empire Mine State Historic Park. The project proposes no activities in the park that would have an aesthetic impact and no analysis is required.

Response to Comment Grp 13-8

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 13-9

As noted in Mitigation Measure 4.4-2(b), in addition to allowing an identified western pond turtle to move out of the way on its own, an option is also provided that a qualified wildlife biologist with a CDFW handling permit may move an individual out of the disturbance area. As a result, if a western pond turtle is identified during a preconstruction survey, they can safely exit the disturbance area either through their own movement or by a qualified biologist. As the adjacent South Fork Wolf Creek is habitat for western pond turtle, individuals of this species encountered around the pond could disperse from the pond to the creek.

Response to Comment Grp 13-10

Mitigation Measure 4.4-2(f) provides extensive detail regarding the survey of bats, specifically that surveys shall occur no more than seven days prior to surface disturbance, reporting requirements if bats are not found, passive removal if bats are identified, and avoidance until breeding roosts have dispersed. This mitigation measure allows for potential bats to be identified, prevented from returning to disturbance areas, and/or avoided to limit the potential for impact. As detailed in the revised mitigation measure, exclusion would not occur until all bats have vacated the roost (see Response to Comment AGCY 3-29). Most bats use different locations as day roosts every day, and passive exclusion is common practice, as it has little to no impact on bats, especially where there are numerous alternative roosts in the surrounding avoided forests.

Response to Comment Grp 13-11

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

The hydrology of waters entering the pond/wetland located east of the Centennial site has already been analyzed in the DEIR (See Chapter 4.8, Figure 4.8.3 and Appendix K.5 of the DEIR). Water currently flows from this offsite pond onto the Centennial site through a box culvert (see page 2 and page 7 of Appendix H.4) and would continue to flow through this offsite pond and onto the Centennial site (See figure H-2 of Appendix K.5). The project would not impact the pond/wetland located offsite to the east of the Centennial site and therefore further analysis is not required in the DEIR.

Response to Comment Grp 13-12

Mitigation Measure 4.4-3 requires additional state and federal permitting prior to the fill or any jurisdictional water. Negotiation with these agencies will determine avoidance, minimization, and compensatory mitigation requirements for project related disturbance. As stated in Mitigation Measure 4.4-3 “Compensatory mitigation can include but is not limited to the following: onsite and/or offsite wetland creation and/or restoration, purchase or placement of conservation easements, payment of an in-lieu fee, and/or purchase of mitigation credits at an approved Corps wetland mitigation or conservation bank.”

The commenter asks that the DEIR clarify a plan for placement of rip rap along Wolf Creek and specify how dissipation rip rap will work at the point of entry into the creek. Additionally, the commenter asks how construction byproducts will be prevented from discharging into South Fork Wolf Creek. The placement of rip rap is discussed in Mitigation Measure 4.4-3(b). Regarding the prevention of construction byproducts from entering the creek, Mitigation Measure 4.6-2 requires that the mine operator obtain coverage under the Construction General Permit, and to prepare and implement a Storm Water Pollution Prevention Plan.

Response to Comment Grp 13-13

Groundwater will be pumped from underground workings to the existing 40-acre-foot, clay-lined settling pond. The existing pond does not have a discharge point and therefore untreated water would not flow to surface waters. As noted by the commenter, the existing pond is clay lined. As described in the DEIR project description (Chapter 3) and Impact 4.8-1, the existing pond's claying lining was constructed with a 2-foot clay layer, consistent with RWQCB regulations. In addition to this clay lining, the applicant is proposing to install a synthetic liner that will be required to meet RWQCB regulation (required by Mitigation Measure 4.8-1(a)). The existing clay liner, combined with the synthetic liner, will prevent leaching of untreated water into the groundwater.

Please see Master Response 35 - Discharge to South Wolf Creek, for a detailed description of the water treatment system and eventual discharge of treated water into South Fork Wolf Creek.

Response to Comment Grp 13-14

As stated in Impact 4.-1, the County General Plan does not identify any scenic vistas in the vicinity of the project site. Impact 4.1-2, analyzing visual impacts from surrounding vantage points, concluded this impact was significant and unavoidable due to a change in views from these public vantage points.

Response to Comment Grp 13-15

The commenter states that they disagree with the significance conclusion regarding new sources of light. This impact was addressed in Impact 4.1-3 of the DEIR and found to be less than significant. As stated therein (page 4.1-24),

> The Brunswick Industrial Site is anticipated to include approximately 41 pole-mounted LED lights throughout the operational area, including the parking lot, building complex, and internal roads (see Figure 3-13 of Chapter 3, Project Description, which depicts the proposed exterior lighting plan for the Brunswick Industrial Site). The mounting height for the LED lights would be 20 feet. The 41 pole-mounted lights would be Gardco (by Signify) LED lights, which are "dark sky approved" by the International Dark Sky Association (IDA).[4] IDA's Fixture Seal of Approval Program certifies outdoor lighting fixtures as being Dark Sky Friendly, meaning that they minimize glare while reducing light trespass and skyglow. All products approved in the program are required to be fully shielded and to minimize the amount of blue light in the nighttime environment.

The above statement, in addition to the more extensive analysis contained in Impact 4.1-3, provides substantial evidence that the project's lighting effects would be less than significant.

Please see Master Response 1 - Non-EIR/ Administrative Issues, and Master Response 2 - Social and Economic Issues regarding impacts to property values. Comment noted.

Response to Comment Grp 13-16

Noise impacts to wildlife and bird species was analyzed in Impact 4.4-2 of Chapter 4.4, Biological Resources, and determined to be less than significant.

Response to Comment Grp 13-17

Comment noted. Please see Master Response 1.

[4] International Dark Sky Association: Dark Sky Approved Lighting. Available at: https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/#!/EcoForm-LED-site-and-area-G2-small-ECF-S/p/133073023/ category=34046011. Accessed August 20, 2021.

Response to Comment Grp 13-18

The commenter asserts that the DEIR is not adequate because it does not address the simultaneous impacts of a 300+ unit housing development under review by Grass Valley. A conceptual review of the mixed-use housing project located at 10662 East Bennett Road by the City of Grass Valley on October 12, 2021, was conducted after the Notice of Preparation for the Idaho-Maryland Mine project.

https://nevco.granicus.com/DocumentViewer.php?file=nevco_30c8ac8bef88b0269a248327f380cbfe.pdf&view=1

However, based on the City's online application tracking platform, no formal application has been submitted for the referenced conceptual project, so analysis of associated impacts would be mere speculation. CEQA does not require analysis of speculative impacts. (CEQA Guidelines Section 15384.)[5]

Response to Comment Grp 13-19

Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 13-20

As a required pursuant to CEQA, a mitigation monitoring and reporting program has been prepared and is included as Chapter 4 of this Final EIR. The mitigation measures and conditions of approval will be enforced by the County.

Response to Comment Grp 13-21

Comment noted. Please see Responses to Comments to Agency Letter AGCY 1 and Group Letters Grp 7 and Grp 8.

Response to Comment Grp 13-22

Comment noted.

[5] https://aca-prod.accela.com/GRASSVALLEY/Cap/CapHome.aspx?module=Planning&TabName=Planning&TabList=Home%7C0%7CBuilding%7C1%7CPlanning%7C2%7CCurrentTabIndex%7C2

Olive-sided flycatcher *Contopus cooperi*	--/SSC	Breeds in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds. Winters at forest edges and clearings where tall trees or snags are present. The nest is an open cup of twigs, rootlets, and lichens, placed out near tip of horizontal branch of a tree.	**Centennial Industrial Site** **Low**. Centennial Industrial Site, should some portion remain after remediation, contains marginal suitable habitat for the species. **Brunswick Area** **Low**. Brunswick Industrial Site contains marginal suitable habitat for the species.
Willow flycatcher *Empidonax traillii*	--/CE	Willow flycatcher males arrive first to the breeding grounds and establish territories. Males establish territories by singing on high perches. Females arrive later and settle onto a territory held by a male. Inhabits extensive thickets of low, dense willows on edge of wet meadows, ponds, or backwaters. Low, exposed branches are used for singing posts and hunting perches.	**Centennial Industrial Site** **Low**. Centennial Industrial Site, should some portion remain after remediation, contains marginal suitable foraging habitat for the species. Suitable nesting habitat absent. **Brunswick Area** **Low**. Brunswick Industrial Site contains marginal suitable foraging and nesting habitat for the species along South Fork Wolf Creek adjacent to open wet meadows. No impacts to riparian habitat are proposed.
Yellow-breasted chat *Icteria virens*	--/SSC	Summer resident and inhabits riparian thickets of willow and other brushy tangles near waterways. Nests in low, dense riparian habitat consisting of willow and blackberry as well as wild grape. Tends to nest within 10 feet of the ground.	**Centennial Industrial Site** **Low**. Centennial Industrial Site, should some portion remain after remediation, contains marginal suitable habitat for the species. **Brunswick Area** **Low**. Brunswick Industrial Site contains marginal suitable foraging and nesting habitat for the species.
Yellow warbler *Setophaga petechia*	--/SSC	Occurs principally as a migrant and summer resident from late March through early October; breeds from April to late July. Inhabits riparian thickets of willow and other brushy tangles near waterways. Nests in dense riparian habitat consisting of willow and cottonwood.	**Centennial Industrial Site** **Low**. Centennial Industrial Site, should some portion remain after remediation, contains marginal suitable habitat for the species. **Brunswick Area** **Low**. Brunswick Industrial Site contains marginal suitable foraging and nesting habitat for the species.

Group Letter 14

Nevada City Rancheria Tribal Council P.O. Box 2624 Nevada City, Ca. 95959
530-265-6563 (Chairman) 530-570-0846 (Secretary)

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: March 28, 2022

RE: Formal Request for Tribal Consultation Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code section 21080.3.1, subds. (b), (d) and (e) for Idaho-Maryland Mine by Rise Gold Corporation, Grass Valley, Nevada County, California

Dear Commissioners Milman, Duncan, Ingram, Mastrodonato, and Greeno:

This letter constitutes a formal request for tribal consultation under California law, including the provisions of the California Environmental Quality Act ("CEQA") (Cal. Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)) for the mitigation of potential project impacts to tribal cultural resource for the above referenced project. The Nevada City Rancheria Nisenan Tribe ("Tribe") hereby requests notice and information for the above referenced project, which is within the Tribe's territory, which includes the Nevada County Planning Commission's geographical jurisdiction. The Nevada City Rancheria Nisenan Tribe is a California Native American Tribe as defined by Cal. Public Resources Code section 21073, whose ancestral territory includes, specifically, the lands affected by the proposed project.

Grp 14-1

The Tribe has significant interests in the proposed Project including, without limitation Tribal Cultural Resources as defined by California Public Resources Code § 21074 ("Tribal cultural resources"), traditional ecological knowledge, and the current badges and intendants of the genocide of our people caused by gold mining in this area. Therefore, the Tribe requests consultation on topics that are to be included in consultation if requested pursuant to Cal. Public Resources Code section 21080.3.2, subd. (a), including without limitation alternatives to the project, recommended mitigation measures, significant effects of the project.

The Tribe also requests consultation regarding the discretionary topics pursuant to Cal. Public Resources Code section 21080.3.2, subd. (a), including without limitation the type of environmental review necessary, significance of tribal cultural resources, including any regulations, policies or standards used by your agency to determine significance of tribal cultural resources, significance of the project's impacts on tribal cultural resources, project alternatives

Chairman: Richard Johnson Vice Chair: Virginia Covert Secretary: Shelly Covert
Treasurer: Lorena Davis Alt: Sarah Thomas Mal: Saxon Thomas

and/or appropriate measures for preservation or mitigation that we may recommend, including, but not limited to:

(1) Avoidance and preservation of the resources in place, pursuant to Public Resources Code section 21084.3, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks or other open space, to incorporate the resources with culturally appropriate protection and management criteria;
(2) Treating the resources with culturally appropriate dignity considering the tribal cultural values and meaning of the resources, including but not limited to the following: (a) protecting the cultural character and integrity of the resource; (b) protection the traditional use of the resource; and (c) protecting the confidentiality of the resource;
(3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places; and
(4) Protecting the resource.

Grp 14-2

The Tribe also notes that the Draft EIR states that the Tribe did not respond within 30 days of notification of an offer to consult. See DEIR p. 4.5-21. Please be advised that the Tribe received notice on March 21, 2022, that the California Native American Heritage Commission finally determined that the Tribe "has provided sufficient documentation to the NAHC to be added to the NAHC's Contact/Tribal Consultation list." This notice comes approximately seven years after the Tribe first requested that the NAHC include the Tribe on its consultation list. Thus, it is only this week that the Tribe understood that it finally has achieved the protections of California law, including Tribal consultation mandates and consideration of Tribal cultural resources in the CEQA review process.

Grp 14-3

Moreover, given the history of genocide to our people caused by gold mining in this area, and because of the illegal termination of the Tribe's federal recognition, the Tribe's capacity to respond to such offers is necessarily limited to those matters that appear of genuine concern. Given the ongoing harm that gold mining caused to the Tribe and its members, the Tribe never thought the proposed project could possibly proceed to the point of seriously being considered by the Commission and the County. This is particularly true considering the County's Resolution No. 20-533 "recognizing the Nevada City Rancheria Nisenan Tribe's historical, cultural and continued significance to Nevada County and California …." Id. Thus, the Tribe requests consultation under this County law as well. See https://www.counties.org/general-information/county-structure-0 ("As the legislative body of the county, the Board of Supervisors may act by resolution ..."). The County recognizes that the discovery of gold here led to "the displacement of the Tribe and its members." Id. The County also acknowledges the "Tribe's continuous existence as an indigenous tribe in Nevada County, and further recognizes the Tribe's historical, cultural and continued significance to Nevada County and California." The County also "supports future collaboration and agreement between the County and the Tribe that strengthen each of their governments, for their mutual benefit and to ensure that local land use impacts on tribal and county governments, including their citizenry, services,

lands, and infrastructure, are maintained and mitigated for the benefit of all." Id. The Tribe therefore respectfully requests that the Commission, as a County agency, honor the County's Resolution by consulting with the Tribe regarding the proposed project as a matter of County law and policy, in addition to and distinct from CEQA and other applicable law.

The Tribe therefore requests consultation within 30 days of your receipt of this letter. Please contact me to arrange a convenient date and time to initiate the consultation process.

Sincerely,

Shelly Covert, Tribal Secretary
Nevada City Rancheria Nisenan Tribe
Shelly@NevadaCityRancheria.org

cc: Christina Snider, Executive Secretary, NAHC & Office of the Governor, Tribal Advisor
Debbie Pilas-Treadway, Chief Deputy Executive Secretary, NAHC
Alison Lehman, Executive Officer, Nevada County
Jeff Thorsby, Senior Management Analyst, Nevada County
Frank Lawrence, Esq.

GROUP LETTER 14: SHELLY COVERT, NEVADA CITY RANCHERIA NISENAN TRIBE

Response to Comment Grp 14-1

The commenter notes that the letter constitutes a formal request for tribal consultation under California law, including the provisions of CEQA Section 21080.3.1. Please see Response to Comment Grp 14-2.

Response to Comment Grp 14-2

California Public Resources Code Section 21080.3.1(d), requires formal notice to California Native American Tribes, as stated below:

> *Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.*

The County complied with the above requirement, despite the fact that the Nevada City Rancheria Nisenan Tribe was not added to the Native American Heritage Commission Contact/Tribal Consultation list until March 21, 2022.

As stated in the Cultural Resources Section of the EIR, "On November 25, 2019, Nevada County sent project notification letters with offers to consult pursuant to AB 52 to the Tsi Akim Maidu Tribal Council, Shingle Springs Band of Miwok Indians, **Nevada City Rancheria Nisenan Tribe**, and UAIC. The Tsi Akim Maidu Tribal Council, Shingle Springs Band of Miwok Indians, and **Nevada City Rancheria Nisenan Tribe did not respond within the 30-day consultation period**." (DEIR p. 4.5-21, emphasis added.) Additionally, the Project Proponent's cultural resource consultant, InContext, attempted to contact the Tribe on December 1, 2020 by letter, phone and email, and on December 16, 2022 by phone and email, with no response. The correspondence was addressed and sent directly to Shelly Covert, the author of Letter 14.

As such, the County considers the March 28, 2022 letter as a CEQA comment letter, but does not have legal authority to start a late consultation process under California Public Resources Code Section 21080.3.1 because the request for consultation was not received within 30 days of the notice.

Response to Comment Grp 14-3

The commenter cites to County Resolution No. 20-533, recognizing the Tribe's history, culture and significance to Nevada County and California, and again requests late consultation under the County Resolution.

The County agrees that consultation is required if a request is received within 30 days of receipt of formal notice; however, the Public Resources Code does not otherwise allow a lead agency to engage in formal consultation under CEQA if notice is not received within that 30-day timeframe. See the relevant language from California Public Resources Code Section 21080.3.1(b) below:

> *Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe,* ***and*** *(2)* ***the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation****.*

Importantly, the California Public Resources Code does not grant the County, as lead agency, authority for formal consultation based on requests received outside of the 30-day window. (See California Public Resources Code Section 21080.3.1 - 21080.3.2.) The commenter appears to argue that either the California Native American Heritage Commission's recent position change that the Tribe is eligible to receive notices, or that County Resolution No. 20-533 somehow allow a late consultation request to be made; however, California law does not provide any mechanism for official consultation based on untimely requests from newly notice-eligible tribes; and as stated above, the Nisenan Tribe actually did receive repeated notice from both the County and the Project Proponent's consultant, and did not contact the County. As such, the County cannot lawfully initiate a late formal AB52 consultation process based on the March 28, 2022 letter.

In addition, as noted on page 4.5-32 of Chapter 4.5 of the DEIR,

> The UAIC responded on December 18, 2019, and requested consultation and copies of the Cultural Impact Report, technical reports, requests for and results of records searches, and GIS SHP files. The County provided such information. In addition, the UAIC noted that they are not aware of any Native American archaeological sites in or near the project site.

Nevertheless, the County concluded that project impacts to tribal cultural resources could be potentially significant, but reduced to less than significant through imposition of mitigation measures (cf. MM 4.5-2 and 4.5-3).

Group Letter 15

NEVADA COUNTY ASSOCIATION OF REALTORS®
REALTOR®
"Committed to a Higher Standard"

April 4, 2022

County Planning Commission
County of Nevada
950 Maidu
Nevada City, CA 95959

RE: Comments on Draft Environmental Impact Report (EIR19-0001), prepared by the Idaho-Maryland Mine Project.

Nevada County Planning Commission
Danny Milman, District 1
Laura Duncan, District II
Robert Ingram, District III
Mike Mastrodonato, District IV
William Greeno, District V

Grp 15-1 Thank you for allowing us to speak before you on March 24th during Public Comments to address public comments on the Draft Environmental Impact Report. As stated, we reviewed the document and have the following concerns and questions:

- **Water –**
  - **Grp 15-2** The EIR does not sufficiently clarify remediation for homes in Brunswick/Bennett region that are on wells yet not included in the limited number of residences that will receive new access to treated water hook-ups
  - The report does not adequately address the drilling's impact on the water table and requirement for well modifications as well as fiscal impact to reach the new water table depths over the eighty (80) year mining period with 3.6 million gallons of water per day during de-watering and 1.2 million gallons per day during remaining mining over eighty-year period.
  - **Grp 15-3** The study does not sufficiently address the impact on the water table and potential for resulting ground movement.
  - **Grp 15-4** Report states that the mine will be a net water producer yet does not clarify the recipients. Will Nevada County have potential to recapture those waters?
  - **Grp 15-5** Minimal study of required erosion and subsidence remediation due to extensive increase of waterflow down Wolfe Creek.
  - **Grp 15-6** Question of whether a bond will be posted for the additional hook-ups to replace wells that may need to be addressed following re-opening.

■ 336 Crown Point Circle, Grass Valley, CA 95945 ■ Phone 530 272-2627 ■ Fax: 530 272-2646 ■ Email nevadacountyaor.com ■

Grp 15-7

- **Traffic**
  - Insufficient study on the impact of traffic along Brunswick and adjacent roadways with 300 employees commuting into and out of the workplace and one hundred (100) truck load transported each day during a twelve-hour (7am-7pm day).
  - Requesting clarification on traffic regulation at Brunswick/Whispering Pines (Absence of light signal) posing a safety issue with semi-truck crossing traffic every eight (8) minutes. Further, no requirement for signal at Idaho Maryland/Centennial which commuters may use as an alternate egress from business park due to traffic on Whispering Pines/Brunswick intersection.
  - With current traffic congestion posing access issues, how will this project affect emergency access to the public and emergency services?

Grp 15-8

- **Habitat and Contaminants**
  - The Centennial site requires remediation of contaminants. Report does not address removal and extent of rock refining and levels of contaminants in the tailings being disposed at the Centennial site, rain runoff on the adjacent waterway and resulting impact on lakes and communities downstream.

Grp 15-9

- What determined the amount set for the restoration bond and is it adequate to accommodate future site restoration to a natural, healthy state? The report does not address specific restoration levels required.

Grp 15-10

- **Noise**
  - Insufficient study of noise levels created with project – 24- hour operation
    - Noise from trucks and machinery loading and unloading tailings
    - Truck noise on Brunswick and adjacent roadways
    - Insufficient data as study reflects noise decibel levels lower than results of ambient noise from Brunswick in adjacent neighborhoods prior to the Idaho Maryland Mine re-opening.

Grp 15-11

- **Electricity/alternate Power**
  - The County is calling for a decrease in electricity usage. The report does not address electricity consumption and ability to work within the reduced guidelines or impact of alternative energy on noise levels.

Grp 15-12

Housing and workforce supply are not topics addressed in the Environmental Impact Report, yet the Association of REALTORS encourages the County to ensure that they are included under further study in the Economic Impact Report. We thank you for hearing our request for further information.

Sincerely,

Kathleen Hinman

Kathleen Hinman, RCE
The Nevada County Association of REALTORS

GROUP LETTER 15: KATHLEEN HINMAN, NEVADA COUNTY ASSOCIATION OF REALTORS

Response to Comment Grp 15-1
The comment is introductory and does not address the adequacy of the DEIR. Please see the below responses to comments.

Response to Comment Grp 15-2
Please see Master Response 15 – Adequacy of Groundwater Monitoring Wells. As noted in Master Response 15, the applicant has now provided a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Grp 15-3
The commenter's reference to ground movement is somewhat unclear but appears to concern subsidence due to groundwater pumping. Please refer to Master Response 29 – Near Surface Workings and Subsidence.

Response to Comment Grp 15-4
As stated on page 2 of the Water Supply Assessment for the project (Appendix N), the projected potable and non-potable water demand for building of the proposed project totals approximately 121 acre-feet per year. The project is expected to be a net producer of water through its discharge of approximately 1,371 acre-feet per year of treated mine water to the South Fork of Wolf Creek. The Nevada Irrigation District (NID) could adjust its flows upstream to use the extra water available downstream if it desired to. Customers of such water would be within the purview of NID.

Response to Comment Grp 15-5
Please see Master Response 35 – Discharge to South Fork Wolf Creek.

Response to Comment Grp 15-6
Please see Master Response 15 – Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 15-7
The commenter asserts that the DEIR inadequately studies traffic effects along Brunswick Road with 300 employees and 100 trucks. This is incorrect. As can be seen in Table 4.12-8 of the DEIR, Project Trip Generation, the project traffic analysis considered the traffic effects of employee and haul truck trips on the surrounding roadways, including Brunswick Road (i.e., Brunswick is study roadway segment). Other study roadways include E. Bennett Road and SR 174.

As indicated in Tables 4.12-10 and 4.12-11 of Chapter 4.12, the Brunswick Road/Whispering Pines Lane intersection would operate acceptable with the addition of project traffic.

Regarding the Idaho-Maryland/Centennial Drive intersection, page 4.12-66 of the DEIR states the following:

> Signalization will improve the Idaho-Maryland/Centennial Drive intersection to LOS D. This intersection is identified to be signalized in the City of Grass Valley

> GVTIF. Under EPAP Plus Project (Scenario #1), the project is expected to add 18 additional vehicles through the intersection during the 3:30 to 4:30 PM time period, and under EPAP Plus Project (Scenario #2), the project would add 15 additional vehicles. Mitigation Measure 4.12-1(b) requires the applicant to pay the GVTIF to the City of Grass Valley, given that the needed intersection improvement is included in the City's TIF. Thus, payment of the GVTIF would reduce the impact to a *less-than-significant* level.

Potential project effects on emergency access is addressed in Chapter 4.13, Wildfire. Please also see Master Responses 4 and 5.

Response to Comment Grp 15-8

Regarding cleanup of the Centennial Industrial Site, please see Master Response 4 – Cleanup Project is a Separate Project Under CEQA. Regarding water quality effects of engineered fill placement at the Centennial Industrial Site, please see Master Response 8 – Mine Waste Characterization.

Response to Comment Grp 15-9

The comment is somewhat unclear but the following response is offered. A final assurance cost estimate will be required annually pursuant to SMARA and the County Code that will estimate the cost of reclamation based on existing surface disturbance. Once concurrence with this estimate is received from the County and Department of Conservation, Division of Mine Reclamation, the application will be required to post a financial assurance mechanism (FAM) in the estimated amount.

Response to Comment Grp 15-10

Regarding the commenter's noise concerns, please see Response to Comment Grp 21-129 through 21-131.

Response to Comment Grp 15-11

Energy is addressed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy. The reference to "reduced guidelines" is unclear. Nevertheless, in an attempt to provide information that may be helpful, please see Master Response 25 – Nevada County Energy Action Plan.

Response to Comment Grp 15-12

The commenter's concerns related to housing and workforce supply are outside the scope of CEQA, but noted for the record. Please see Master Response 1.

Group Letter 16

March 23, 2022

Nevada County Planning Department
Mr. Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902
(530) 265-1423

Dear Mr. Kelley,

On behalf of the volunteer members of the Nevada County Chapter of Citizens' Climate Lobby/Education (CCL), please accept our comments to the Draft Environmental Impact Report (DEIR) for the Rise Gold Mine Project.

Grp 16-1

Our volunteer membership seeks to inform community members about ways to address climate change. Given the enormous amount of Greenhouse Gas emissions that could be produced by the Rise Gold Mine Project, the members authorized our submission of comments to the DEIR. You will find our comments in the separate 11-page document enclosed.

Thank you for your assistance to the Board of Supervisors and the Planning Commission of Nevada County. Your public service is an invaluable asset to the citizens of Nevada County.

Best Regards,

David J. Whitehead, PE
100 Bawden Ave.
Grass Valley, CA 95945
805 310-9355
ncccl2050@gmail.com

Comments to the Idaho-Maryland Mine Project SCH# 2020070378
Draft Environmental Impact Report, Volume I-X Chapters 1-8
Prepared for Nevada County, December 2021

Draft DEIR Comments submitted by David J. Whitehead, PE, 100 Bawden Ave, Grass Valley CA 95045

Table 2.1 Page 2-23

Grp 16-2

The Summary of Impacts and Mitigation Measures, Item 4.3-7(b) states " Rise shall retire carbon offsets equaling 2,664 MT CO2e, which was calculated by subtracting 1,100 MT CO2e (threshold) from the construction emissions generated by the project." However, in Table 4.3-23, the Total Annual Emissions (GHGs) generated during construction is calculated to be 3,444.55 MT CO2e. Subtracting the proposed threshold of 1100 MT CO2e from that figure would result in 2,344.55 MT CO2e, not 2664 MT CO2e. The value in Table 2.1 is approximately 320 MT CO2e greater than the value shown Table 4.3-23. It is not clear what accounts for this discrepancy, but it is noteworthy that the estimated values in the tables are presented as having a high degree of precision that is probably not justified by the underlying quality of the data.

Grp 16-3

In the section titled "Method of Analysis" (page 4.3-44), it is stated that using a construction start date of January 2021 "provides a conservative approach to the emissions analysis…because the existing regulations will ensure that emissions from construction equipment and vehicles during future years will be less intense than identical activities undertaken at the present time. Likewise, …if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced, which would result in reduced max daily and annual emissions." This statement reveals a misunderstanding of the cumulative nature of GHG emissions that underlies the discussion of GHGs. In an effort to portray their GHG emissions as less than significant in relation to the local air management district's significance criterion of 1,100 tons per year, Rise has presented their emissions estimates as though the date the project begins, or the schedule of construction and operation, make any difference. In fact, GHG emissions are unlike other pollutant emissions where concentration or intensity over time may have meaning. GHG emissions do not depend on a dose:effect relationship.

The effects of GHG emissions from the project will not be felt locally; they will impact the entire world. All of the sources of emissions around the world contribute to global warming and to other serious threats to life on Earth. Any GHG emissions above zero are potentially significant because carbon dioxide accumulates for many years in the atmosphere, incrementally contributing to global warming. If GHG emissions only warmed the atmosphere of Nevada County, then the approach taken in the DEIR would make sense. But that is not how GHG emissions affect the environment. Just as Nevada County will experience rising temperatures, weather extremes, threats to forest health, increased threats from wildfires, and changes in plant and animal populations in coming years because of the cumulative effects of GHG emissions from the multitude of sources that have been contributing to global warming over many decades, so the GHG emissions from the proposed project will contribute to the continuing threat of global warming for the life of the project. It does not matter that these emissions occur in January or

June, or that they occur over one year or two years, or that they are due to construction or operation, or even that they occur in Nevada County instead of Los Angeles County. What matters is the total amount of additional emissions that will occur and the amount of time that the carbon dioxide remains in the atmosphere.

Grp 16-4

The residence time of CO2 in the atmosphere, by the way, is between 300 and 1,000 years, much longer than the 80 year estimated life of the project. Carbon dioxide is removed from the atmosphere relatively slowly, by plant respiration, solution in sea water, by interaction with certain minerals, and by dissipation into space. Absorption of CO2 by seawater presents an additional existential threat to life on Earth because it results in acidification of sea water, and interferes with removal of CO2 by algae, and the growth of organisms that rely on calcium carbonate. Global warming is not the only global threat posed by continued increases in GHG emissions. Ocean acidification may be an even greater concern than global warming, but both are caused by the continued burning of fossil fuels. That is why Californians have decided to work so hard at finding ways to reduce their emissions of GHGs. It is not that California alone will benefit from these reductions. It is because Californians have decided to chip in and do their share to lead the nation in reducing their emissions, to find new ways to remove carbon dioxide from the atmosphere, and to help persuade the rest of the world to follow our lead. The DEIR alludes to the fact that vehicle emissions standards are expected to become more stringent in future years. Unfortunately, the preparers of the DEIR see this as a reason why they should not be concerned about their own emissions, instead of seeing it as a clear indication that their emissions will be an increasing concern.

In failing to recognize and treat GHG emissions seriously, the discussion of GHG emissions in the DEIR fails its most basic purpose, which is to correctly identify the environmental impacts of the project and to identify and evaluate appropriate mitigation measures to address these impacts. Whether or not the emissions from the project may be considered justified given the possible benefits of the project, the DEIR is inadequate for not properly identifying the impacts of GHG emissions that will result from the project, and for not presenting a full range of feasible measures to mitigate those impacts.

Grp 16-5

Needless to say, the preparers of the DEIR should review their calculations of GHG emissions and correct any additional errors. Further, the DEIR should present estimated values with an appropriate level of precision (a value of 2,344.55 MT CO2e may look accurate, but in reality, it may only be accurate to one or two significant figures). Such estimates would be more honestly presented along with some discussion of the sources and magnitudes of uncertainty in the estimates. The estimates should not focus on precise estimates of the fuel efficiency of the trucks to be used in the project, but on the uncertainty in the number of miles, number of vehicles, origination locations of the trucks, effects of weather conditions on the estimates, and perhaps most important, whether some items that have carbon footprints have been ignored in the analysis.

Grp 16-6

This project relies on materials that themselves have carbon footprints that will potentially impact the total GHG emissions of the project. These include, but are not limited to building materials, including concrete, steel, and paving materials. While the DEIR quibbles over the technicality of whether they will exceed an Air Management District significance threshold, presenting their estimates as accurate to six significant figures, they have entirely forgotten the cost in GHG emissions of producing the building materials needed for the project.

Chapter 4.3 Page 4.3-43

After a brief discussion of established GHG emission thresholds in adjacent Air Quality Management Districts, and noting that Nevada County has not established any thresholds for such emissions, the DEIR makes the following statement:

"For a conservative evaluation, the SMAQMD 1,100 MT CO2e per year construction GHG threshold has been applied to project construction. For operations, because the project is an industrial project that includes stationary sources (i.e., diesel generators used for emergency power), the project's GHG emissions were compared to the 10,000 MT CO2e per year quantitative threshold, which, as described above, is used by SMAQMD, PCAPCD, BAAQMD, and SCAQMD for industrial and/or stationary source emissions of GHGs. The substantial evidence for this GHG emissions threshold is based on the expert opinion of various California air districts, which have applied the 10,000 MT CO2e per year threshold in numerous CEQA documents where those air districts are the lead agency."

Grp 16-7

The DEIR claims that the consultant has made a "conservative evaluation", and yet has omitted GHG estimates for the production of concrete, paving asphalt, steel, and other building materials to be used in the construction period. These omissions result in an incomplete and unscientific calculation of GHG production, and indicate that the consultant has set a goal for its analysis to stay below the identified thresholds, rather than take a truly scientific and conservative approach to estimating GHG production of the project, letting "the chips fall as they may." The result is an incomplete description of the project to the public. The consultant should recalculate GHG production for the entire project scope, with the purpose of including all sources of GHG production for the project, both direct and indirect.

The proposal to utilize thresholds of other air districts in California does not necessarily mean that, should Nevada County decide to accept this approach, Nevada County will satisfy its duty to the public to thoroughly evaluate harmful environmental impacts and determine their significance. In fact, as Lead Agency, Nevada County may, and should, require that the DEIR make a more thorough analysis of GHG emission impacts. We recommend that Nevada County take an approach that recognizes the ever-increasing threats of climate change and GHG emission contributions to climate change, in view of the State of California's goals to address climate change impacts.

Grp 16-8

Among these goals is that California should achieve carbon neutrality by 2045 (Executive Order B-55-18). The DEIR correctly mentions that EO B-55-18 calls for CARB to work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal, but fails to mention that the next (five year) update of the Scoping Plan is due to be completed in 2022. The general direction of State policy in California has been to set more ambitious climate targets, and to achieve them earlier. Hence, for example, EO N-79-20 sets a goal to end sales of internal combustion passenger vehicles by 2035, as part of the goal to achieve carbon neutrality by 2045. In fact, the FAQ accompanying EO N-79-20 states that "separate rulemaking process and incentives will be needed to address other targets in the Executive Order. This includes more stringent standards for medium- and heavy-duty trucks, and reduced emissions from fossil fuel and electricity production." (https://ww2.arb.ca.gov/resources/fact-sheets/governor-newsoms-zero-emission-2035-executive-order-n-79-20). The DEIR should discuss this direction and, if possible, any foreseeable changes in State policy that may impact the project. While the DEIR mentions that passenger vehicle emission standards will

become more stringent, one of the implications of this change is that stationary and mobile GHG source emissions will need to be reduced. After all, the purpose of making vehicle emissions standards more stringent is not simply to reduce emissions from each source, but to reduce total emissions.

Furthermore, the DEIR proposes to mitigate only the GHG emissions that surpass the thresholds. This approach is not "conservative" at all. If the calculations reveal that the project will surpass the thresholds, then the project is a significant source and all GHG emissions should be mitigated.

Chapter 4.3 Page 4.3-92

The Rise Grass Valley Inc. proposal to mitigate project generated GHG emissions addresses construction emissions only. The proposal does not mitigate operational GHG emissions, nor indirectly caused GHG emissions generated by second-tier activities (i.e. purchase of concrete, paving asphalt, etc.) Furthermore, the DEIR does not estimate total CO2e emitted by the proposed project over its lifetime, which as discussed above, represents the actual cumulative impact of the emissions from the project since CO2 emissions from the project are expected to remain in the atmosphere for more than 300 years. Below is the calculation of total emissions over the course of the project based on information on annual emissions provided in the DEIR:

Grp 16-9

Total Proposed CO2e MT Produced

Time Period	Annual Amount	Number of Years	Total CO2e (MT)
2021	3,444.55	1 year	3,444.55
2022-2026	7,221.64	5 years	36,108.20
2027-2032	6,999.63	6 years	41,997.78
2033-2102	9,041.23	69 years	623,844.87
2103	46.09	1 year	46.09
Total		**81 years**	**705,441.49**

The project is estimated to generate more than 700,000 MT CO2e over its 81 year lifetime, which is equivalent to an average annual rate of emissions from the project of over 8,700 MT CO2e per year. The table above, showing total CO2 emissions illustrates the relatively minor impact that emissions during construction will have on global warming, compared to operational emissions. Given these vast differences in impact, and armed with the knowledge that CO2 resides in the atmosphere for hundreds of years, the DEIR's emphasis on the purchase just 2,444.55 carbon offset credits to mitigate the GHG emissions from the project might appear to the reader of the DEIR to be absurd, since this represents just 0.35 percent of the total GHG impact of the project.

Grp 16-10

Presumably, the rate at which the project produces GHG emissions will depend on a number of variables affecting mining operations, including the price of gold, subsurface conditions, and other factors that are difficult to accurately predict. The price of gold is likely to fluctuate over time, and activity at the project site will likely fluctuate as well. As a result, it seems reasonable to expect that the rate of GHG emissions may vary also. On page 4.3-50, the DEIR states that "the principal variation in operational activities over the lifetime of the project is the fate of non-gold bearing mined material that could be used as fill material." Is this an accurate statement? Or do external economic factors, such as the price of gold, have a bigger potential to impact operations? It should be noted that in the period between 1975 and 2022 the price of gold ranged from about $150/ounce to over $2,000/ounce. But during this time, there were a number of large fluctuations in price. The DEIR does not discuss the dependence of operational intensity on such factors, and gives the impression that the activities will occur at the same dependable steady rate for the life of the project. If this is not a reasonable expectation, the DEIR should discuss the potential for fluctuations in activity, including the relationship between operational activity and gold price, since among other things, these fluctuations may impact the rate of GHG emissions.

Grp 16-11

Page 4.3 -96-99 Carbon Offsets - Construction Emissions

The Nevada County Chapter of CCL supports carbon pricing as a means of reducing demand for fossil fuels and increasing demand for alternative sources of energy, because the cost of producing energy from fossil fuels does not adequately reflect the hidden environmental costs of GHG emissions. Although Carbon Offsets are not designed to reduce GHG emissions, we recognize that Carbon Offsets can be an effective interim measure to prevent new sources of GHG emissions from increasing the amount of CO2e in the atmosphere. Unfortunately, the project as currently proposed would only offset a tiny percentage of the emissions it produces. According to the California Climate Investment 2021 Annual Report, the cost of carbon offsets in 2020 was $125/MT CO2e, and the market price of Carbon Offsets is expected to continue to increase over time. This price is one measure of the true cost of emitting one ton of CO2, because it represents the cost of removing one ton of CO2 from the atmosphere by other means. Of course, not emitting the CO2 in the first place, by using an alternative source of energy or by increasing energy efficiency, would be preferable, but is not always feasible at the present time. The State's goal of achieving carbon neutrality (also known as Net Zero) by 2045 means that by 2045 the State would contribute, including offsets, the equivalent of no GHG emissions. Of course, any GHGs emitted before reaching Net Zero would continue to contribute to global warming. If Rise Gold does not mitigate the approximately 700,000 MT CO2e that the project would emit, then in order to achieve Net Zero, the people of the State will need to offset Rise Gold's GHG emissions through other means, such as developing alternative energy sources, reducing energy use, increasing energy efficiency, and developing carbon removal technologies. In effect, the people of California will need to subsidize the project to the tune of $125/MT CO2e at the current price of offsets. The cost to the public today of this subsidy to Rise Gold would be approximately $88 million, or roughly the value of 44,000 ounces of gold at current prices. This cost is likely to increase as the project proceeds. The question that should be asked is whether this is a good use of public money, and whether the project itself should bear this cost.

4.3-7(b) Carbon Offsets – Construction Emissions.

The discussion of "Carbon Offset Standards – Eligible Registries, Acceptable Protocols and Defined Terms" does not mention the State of California Cap and Trade program. By proposing to set standards for carbon offsets, the DEIR apparently would allow carbon offsets of any kind from any place in the world, as long as the carbon offsets could be evaluated to meet the proposed standards. The DEIR states that "Qualifying carbon offsets presented for compliance with this mitigation measure may be used provided that the evidence required by the "Reporting and Enforcement Standards" below is submitted to the County."

This proposal ignores the suite of projects that make up the California Cap and Trade program. Because the carbon emissions generated by the project occur in California, and impact California's citizens, the carbon offsets purchased by Rise Gold should be California Cap and Trade program offsets, not cheaper and less effective offsets from some other state or foreign country.

Grp 16-12

Such a mitigation measure risks harming Nevada County by undermining our ability to reduce or to eliminate GHG emissions. It also undermines the ability of Nevada County to participate in GHG emissions reductions plans of the State of California and the USA. If many jurisdictions in California approve projects that create new GHG emissions, and take the approach of the DEIR, California will not be able to reduce GHG emissions sufficiently to actually be effective in combating climate change.

Therefore, the proposed mitigation measure should be strengthened. The proposed mitigation measure should require Rise Gold to purchase California Cap and Trade program carbon offsets exclusively.

Also, the mitigation measure should include a requirement for Rise Gold to submit plans outlining how they will achieve Net Zero GHG emissions by 2045, the State of California goal, or sooner. The 80 year life of the proposed project permit extends far beyond the timeline for global Net Zero goals, and so is inconsistent with strategies established by the State of California.

The proposed Carbon Offset mitigation measure cannot reduce the cumulative impacts of this proposed project with regard to its GHG creation, both direct and indirect, construction and operational, for an 80 year permit. The significance level will not be reduced from CC to LCC. Therefore, the mitigation measure is inadequate.

Page 4.3-101 Cumulative Analysis

No cumulative analysis of GHG emissions for the Rise Gold project in the context of the atmosphere of the State of California is presented in the DEIR. All that the DEIR provides the public is a general discussion regarding twenty projects within Nevada County and the following statement:

Grp 16-13

"Based on the above considerations, the proposed project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project's impact is less than cumulatively considerable."

However, the proposed project conflicts with AB32 and the State of California Climate Scoping Plan because the project is estimated to produce over 700,000 MT CO2e which will cumulatively impact the global and California climates in combination with other known or reasonably foreseeable projects.

Page 5.2 Section 5.2 Cumulative Impacts

No identification of cumulative impacts of GHG emissions is presented in the DEIR.

In California Supreme Court case S217763 Center for Biological Diversity v. California Department of Fish and Wildlife; Newhall Land and Farming, the question was asked: "Does the Environmental Impact Report validly determine the development would not significantly impact the environment by its discharge of greenhouse gases?" Although the court found that the Lead Agency may rely upon numerical thresholds of significance for greenhouse gas emissions, "use of such thresholds is not required." The Court went on to advise that "Thresholds only define the level at which an environmental effect 'normally' is considered significant; they do not relieve the Lead Agency from its duty to determine the significance of the impact independently."

Grp 16-14

Nevada County, as Lead Agency, has a duty to the public to independently determine the impact of the Rise Gold project in generating over 700,000 MT CO2e over 81 years of construction, operations, and reclamation. That duty includes recognition of Nevada County's responsibility to reduce GHG emissions within the context of the State of California's goals under AB32, the updated Climate Scoping Plan, and EO B-55-18, among other goals and policies. The DEIR fails to address the cumulative impacts of generating over 700,000 MT CO2e in terms of the additive contribution to worsening the impacts of climate change on the State of California.

The DEIR should be revised to include a thorough cumulative impact analysis. This analysis should describe to the public how the Rise Gold project would impact the State of California as it attempts to reduce GHG production over the next 80 years.

Page 5.7 Table 5-2 Cumulative Geographic Scope by CEQA Topic

For Air Quality/Greenhouse Gas Emissions, the DEIR states that "the geographical context for global climate change is limited to the State of California." The DEIR also states that "at this time, neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the project."

Grp 16-15

Despite the lack of applicable numerical thresholds of significance, the DEIR then identifies significance thresholds that have been developed by several air quality management agencies, including the Sacramento Metropolitan Air Quality Management District (SMAQMD), the Placer County Air Pollution Control District (PCAPCD), the Bay Area Air Quality Management District (BAAQMD), and the South Coast Air Quality Management District (SCAQMD). Although these agencies have adopted similar significance thresholds, each jurisdiction's limits and rationales differ somewhat. Since none of these significance thresholds is applicable to the project, they provide no more than guidance to the Rise Gold project EIR and Nevada County is free to set significance thresholds of its own, based on other, possibly more appropriate criteria.

Examination of the supporting documents for the various Air Management Districts' significance thresholds reveals plenty of leeway for Nevada County to adopt a more appropriate significance threshold than the ones presented in the DEIR, such as a zero net GHG emission threshold, or a single 1,100 MT CO2e per year threshold, consistent with the screening threshold used by the SMAQMD following the California Supreme Court decision in Center for Biological Diversity v. California Department of Fish and Wildlife; Newhall Land and Farming in 2016.

The SCAQMD's Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG Significance Threshold, (October 2008), provides a detailed explanation of the origins and rationales for the SCAQMD's significance thresholds. The Draft Guidance Document cites a White Paper on Global Climate Change prepared by the Association of Environmental Professionals in 2007 that identified eight approaches it suggested that a Lead Agency may select in a CEQA document to address potential impacts of global climate change and a project's cumulative contribution to GHG. The only one that included a significance threshold was Approach 6, which would use zero net carbon dioxide equivalent increase as the threshold (http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf).

Shortly after, the California Air Pollution Control Officers Association (CAPCOA) prepared a White Paper: CEQA and Climate Change, in which three basic approaches were identified: including a zero GHG emissions threshold; and two non-zero threshold variations. The SCAQMD opted to adopt one of the non-zero threshold approaches rather than a net zero approach, but the basis for this choice was that the threshold was consistent with the goal of EO S-3-05 to reduce GHG emissions to a level 80 percent below 1990 levels or 90 percent below current (2008) levels by 2050. We now have not only a better understanding of the threats posed by global warming, but the State of California has decided to embark on a more ambitious path to addressing these threats by setting a goal of achieving net zero by 2045. Perhaps it is time to set significance thresholds lower as well.

In June 2020, the SMAQMD prepared "Greenhouse Gas Thresholds for Sacramento County" which discusses the development and rationales for its own GHG significance thresholds. In this document, SMAQMD explains that to assist lead agencies in determining significance, in October 2014 it adopted the current GHG thresholds of significance which include a construction threshold of 1,100 MT GHG/year, a land use operational threshold of 1,100 MT GHG/year, and a stationary source operational threshold of 10,000 MT GHG/year: (https://www.airquality.org/LandUseTransportation/Documents/SMAQMDGHGThresholds2020-03-04v2.pdf).

The document further explains that following the California Supreme Court decision in Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and Farming in January 2016, SMAQMD recommended suspending the thresholds for operational emissions, leaving only a 1,100 MT GHG/year screening threshold and the need to demonstrate all feasible mitigation for projects exceeding this threshold. SMAQMD then encouraged local agencies (in Sacramento County) to develop a Climate Action Plan (CAP) or GHG reduction plan "that could be used by the local agency to reduce GHG emissions and streamline CEQA review for development projects which can provide

adequate mitigation for GHG impacts by demonstrating consistency with the reduction measures adopted in the CAP." Thus, even within Sacramento County, SMAQMD recognizes that individual local agencies should be able to set their own significance thresholds for evaluation of CEQA projects.

To illustrate the increasing concerns about the State's ability to meet the goals of Executive Order B-55-18 (Carbon Neutrality), SMAQMD notes that "in January 2019, CARB held a workshop regarding carbon neutrality in California, during which CARB staff explained that the definitional parameters and meaning of the term – carbon neutrality – are still being explored. CARB intends to hold additional workshops to explore specific topics related to the pursuit of carbon neutrality, engage with other experts in the field and stakeholders, and conduct research to ensure than any path to carbon neutrality balances scientific, economic and social justice principles."

In 2018 the California Natural Resources Agency (CNRA) finalized its updated "CEQA Guidelines Amendments" document. The guidelines include the following (underlines added for emphasis):

1. Lead agencies must analyze the GHG emissions of proposed projects.
2. The focus of the lead agency's analysis should be on the project's incremental contribution to climate change, rather than simply focusing on the quantity of emissions and how that quantity of emissions compares to statewide or global emissions.
3. The impacts analysis of GHG emissions is global in nature and thus should be considered in a broader context. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national, or global emissions.
4. Lead agencies should consider a timeframe for the analysis that is appropriate for the project.
5. A lead agency's analysis must reasonably reflect evolving scientific knowledge and state regulatory schemes.
6. Lead agencies may rely on plans prepared pursuant to section 15183.5 (Plans for the Reduction of Greenhouse Gases) in evaluating a project's GHG emissions.
7. In determining the significance of a project's impacts, the lead agency may consider a project's consistency with the State's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is consistent with those plans, goals, or strategies.
8. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change.

Given the increasing risk that California, the US, and the world, may fail to achieve the reductions in GHG emissions necessary to forestall catastrophic global warming, it seems incumbent upon agencies to recognize the need to mitigate as many GHG emissions as feasible. Ignoring the incremental effects of the GHG emissions from the Rise Gold project simply because "operational" GHG emissions are treated differently from emissions from other types of sources conflicts with several of CNRA's guidelines listed above, and especially with the fifth item: "A lead agency's analysis must reasonably reflect evolving scientific knowledge and state regulatory schemes."



Grp 16-16

For the reasons discussed above, the appropriate significance threshold for GHG emissions from the Rise Gold project is a Zero Threshold. In effect, this was the threshold ultimately adopted in the Settlement following the State Supreme Court's decision in California Supreme Court case S217763 Center for Biological Diversity v. California Department of Fish and Wildlife; Newhall Land and Farming.

Even if a significance threshold of 10,000 MT CO2e per year for "operational" GHG emissions is adopted by Nevada County in the DEIR, and the estimates provided in the DEIR are accepted as reasonable, given the uncertainties associated with the assumptions of the analysis, the uncounted GHG contributions associated with the production of the building materials that will be used in the project, and the chance that unforeseen conditions that may be encountered during the project will increase the actual GHG emissions, nominal annual operational emissions of 9,000 MT CO2e per year should probably be considered close enough to 10,000 MT CO2e per year to warrant full mitigation. Nevada County has a responsibility to help California achieve its goal of net carbon neutrality by 2045, to the extent feasible, by not adding the additional burden of this project on the backs of the citizens of California.

GROUP LETTER 16: DAVID WHITEHEAD, NEVADA COUNTY CHAPTER OF CITIZENS' CLIMATE LOBBY/EDUCATION (CCL)

Response to Comment Grp 16-1

The County acknowledges the comment as an introduction to comments that follow. This comment is included in the Final EIR for review and consideration by the decision-makers prior to a final decision on the project. Comment noted.

Response to Comment Grp 16-2

The commenter has identified a transcription error in the summary Table 2-1 of the DEIR. This error is a typo and does not affect the impact analysis. Table 2-1, Mitigation Measure 4.3-7(b), page 2-23 of the DEIR, is hereby revised as follows:

> *4.3-7(b)* ***Carbon Offsets – Construction Emissions.***
>
> *Rise Grass Valley Inc. (Rise) shall retire carbon offsets in a quantity sufficient to offset the project's construction greenhouse gas (GHG) emissions to below the 1,100 metric ton carbon dioxide equivalent (MT CO_2e) per year construction threshold, consistent with the performance standards and requirements set forth below. Specifically, prior to Nevada County's (County) issuance of the project's first grading permit, Rise shall retire carbon offsets equaling ~~2,664~~ 2,345 MT CO_2e, which was calculated by subtracting 1,100 MT CO_2e (threshold) from the construction emissions generated by the project.*

The 2,345 MT CO_2e carbon offset value is already correctly calculated at 2,345 metric tons on page 85 of Appendix E.1 and for Mitigation Measure 4.3-7(b), as presented in Chapter 4.3 of the DEIR. This has been corrected in the Final EIR, as shown above. Contrary to the commenter's assertion, an editorial error does not cast aspersion on the underlying quality of the data.

Response to Comment Grp 16-3

The commenter asserts that the DEIR presents a misunderstanding regarding the cumulative nature of GHGs and intimates that any GHGs above zero should be considered potentially significant. Firstly, the statement quoted by the commenter is not in reference to the global nature of GHGs, but rather the regulatory required improvements in engines and associated reduction in emissions in future years. Regarding the cumulative nature of GHGs, the DEIR already acknowledges the potential impacts on a global, statewide, and Sierra Nevada regional scale from GHGs (see "Potential Effects of Climate Change" starting on page 4.3-15 of the DEIR). Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. However, regarding the commenter's assertion that any project that results in GHGs above net zero should be considered significant is inconsistent with the statewide guidance. As described in the DEIR on page 4.3-29:

> The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

The lead agency has determined that the threshold of significance for the project is 1,100 MT CO_2e per year for construction and 10,000 MT CO_2e per year for operations, based on substantial evidence provided in the DEIR (please see Master Response 27 – GHG Thresholds). These thresholds are the metric used to determine if the project results in a substantial contribution to the cumulative GHG impact. Given that the project would result in GHG emissions below the

applied construction threshold (after mitigation) and below the applied operational threshold (no mitigation required), and because the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, the project would not result in a cumulatively considerable GHG impact.

Response to Comment Grp 16-4

The commenter asserts that the DEIR is inadequate for not properly identifying the impacts of GHG emissions that will result from the project, and for not presenting a full range of feasible measures to mitigate those impacts. Notably, the GHG emissions presented in the DEIR are conservative, given that California regulations will reduce GHG emissions over time. For instance, Senate Bill 100 requires that zero carbon energy resources supply 100% of electric retail sales to customers by 2045. Neither this requirement, nor the progressive steps to achieve it (i.e., 44% of electricity by 2024, 52% by 2027, and 60% by 2030 be procured from renewable energy sources) were accounted for in the GHG analysis. Further, the lead agency has determined that the threshold of significance for the project is 1,100 MT CO_2e per year for construction and 10,000 MT CO_2e per year for operations, based on substantial evidence provided in the DEIR (please see Master Response 27 – GHG Thresholds). These thresholds are based on annual GHG emissions, rather than life cycle emissions of a project, which the commenter suggests the project's impacts should have been evaluated on. However, life cycle emissions are not required to be assessed under CEQA (please see Master Response 26 – Life Cycle GHG Emissions). Given that the project would result in GHG emissions during construction that would exceed the applied threshold of 1,100 MT CO_2e per year, mitigation has been applied to reduce emissions to a less than significant level. For operations, the GHG emissions do not exceed the applied threshold during any of the years of activity and therefore, no mitigation was required.

Response to Comment Grp 16-5

The commenter expresses concerns regarding the implied precision in the GHG emissions estimates presented in the DEIR. CEQA requires a good faith effort to estimate emissions from the project during construction and operation. It is common that granular details, such as exact distances that each truck travels for a project are unknown during the drafting of documents in support of CEQA. As such, estimation of emissions during the construction and operation of the project are based on the best project-specific information and industry-standard emission factors that were available at the time of analysis, as thoroughly described in the "Method of Analysis" of Chapter 4.3 of the DEIR, beginning on page 4.3-44. Changing the number of digits in the presentation of emissions estimates for the report would not change the analysis or conclusions in the DEIR. As stated by California Courts, "The need for thorough discussion and analysis is not to be construed unreasonably… to serve as an easy way of defeating projects. Absolute perfection is not required." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d at p. 406.) As such, the County acknowledges the comment and notes it expresses the opinions of the commenter and does not raise an issue related to the adequacy of any specific section or analysis of the DEIR. The comment has been provided to the decision-makers for their consideration prior to a final decision on the project.

Response to Comment Grp 16-6

This comment pertains to a "lifecycle" analysis for GHG emissions, which is not required under CEQA. Please see Master Response 26 - Life Cycle GHG emissions.

Response to Comment Grp 16-7

This comment pertains to a "lifecycle" analysis for GHG emissions, which is not required under CEQA. Please see Master Response 26 - Life Cycle GHG emissions.

Response to Comment Grp 16-8

The commenter suggests that the County should apply different thresholds than what were used in the analysis and summarizes the ongoing evolution of statewide GHG regulations. In regard to the GHG thresholds applied to the project, please see Master Response 27 - GHG Thresholds. Regarding GHG regulations, the commenter states that the "DEIR should discuss this [regulatory] direction and, if possible, any foreseeable changes in State policy that may impact the project". Statewide GHG regulations are thoroughly discussed in the DEIR beginning on pages 4.3-25 through 4.3-34. The project would not preclude the State from implementing these regulations that would reduce statewide GHG emissions. Rather, the "foreseeable changes in State policy" cited by the commenter, such as California requiring utility providers to supply electricity from 100% renewable sources by 2045, would result in a reduced estimated GHG emissions inventory associated with the project in future years, had they been accounted for in the project analysis. Finally, CEQA does not have a requirement for a project to mitigate beyond the threshold.

Response to Comment Grp 16-9

This comment pertains to a "lifecycle" analysis for GHG emissions, which is not required under CEQA. Please see also Response to Comment Grp 16-4 above. The commenter also implies that the project should be required to mitigate for operational GHG emissions, even though these emissions were found to be below the applicable CEQA threshold of 10,000 tons per year and were therefore deemed less than significant. CEQA does not require mitigation for impacts that are less than significant. Please see Master Response 27 - Greenhouse Gas Thresholds.

Response to Comment Grp 16-10

The commenter suggests that economic uncertainty and price of gold will affect the rate of mining. The project's emissions are estimated at the maximum production rate of the project (1,000 tons per day mineralized rock and 500 tons per day of barren rock). Higher production levels, which could result in higher GHG emissions are not proposed by the project and would not be allowed by the conditional use permit. As such, the analysis included in the DEIR presents the maximum reasonably foreseeable GHG emissions scenario. Variability in the price of gold, therefore, cannot result in an increase of GHG impacts from the project.

Response to Comment Grp 16-11

The commenter suggests that the project should purchase offsets such that the lifetime emissions would be net zero. Notably, the lead agency has determined that the threshold of significance for the project is 1,100 MT CO_2e per year for construction and 10,000 MT CO_2e per year for operations, based on substantial evidence provided in the DEIR (please see Master Response 27 – GHG Thresholds). These thresholds are based on annual GHG emissions, rather than life cycle emissions of a project, which the commenter suggests the project's impacts should have been evaluated on. However, life cycle emissions are not required to be assessed under CEQA (please see Master Response 26 – Life Cycle GHG Emissions). Given that the project would result in GHG emissions during construction that would exceed the applied threshold of 1,100 MT CO_2e per year, mitigation has been applied to reduce emissions to a less than significant level. For operations, the GHG emissions do not exceed the applied threshold during any of the years of activity and therefore, no mitigation was required. CEQA does not have a requirement for a project to mitigate beyond the threshold or to mitigate impacts deemed less than significant.

In addition, the project GHG inventory in the DEIR makes conservative assumptions for GHG emissions over the life of the project. As shown in Table 22 of Appendix E.1, for the Year 2033 to 2102 Scenario, PG&E supplied electricity makes up the majority (51%) of GHG emissions from the project at 4,636 metric tons. GHG emissions from electricity are calculated based on an

intensity factor of 204 pounds per MWh. These values will decrease over time due to the Renewable Portfolio Standard but were used for all scenarios as a conservative estimate (see page 347 of Appendix E.1). "On-road vehicles – Off-Site" makes up a large part (35%) of GHG emissions from the project at 3,123 metric tons. These emissions are primarily generated by haul trucks which are assumed to deliver engineered fill at an average distance of 60 miles (see page 246 of Appendix E.1). As heavy trucks and passenger vehicles are eventually transitioned to battery-electric vehicles, these emissions will likely be less than assumed in future years.

Response to Comment Grp 16-12

The commenter states that the project should exclusively use Cap-and-Trade compliance offsets. However, the project would not be a covered entity under the State's Cap-and-Trade program, as described in the California Air Resources Board's *Cap-and-Trade Instructional Guidance* (2012):

> Starting in 2012, major GHG-emitting sources, such as electricity generation (including imports), and large stationary sources (e.g., refineries, cement production facilities, oil and gas production facilities, glass manufacturing facilities, and food processing plants) that emit more than 25,000 MT CO_2e per year will have to comply with the Cap-and-Trade Program. The program expands in 2015 to include fuel distributors (natural gas and propane fuel providers and transportation fuel providers) to address emissions from transportation fuels, and from combustion of other fossil fuels not directly covered at large sources in the program's initial phase.

(https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/chapter1.pdf.) In addition, per the California Air Resources Board's *Draft 2022 Scoping Plan, Appendix D – Local Actions*:

> Over the years, agencies and courts have provided direction and guidance regarding GHG mitigation. Nevertheless, given the variety of potential projects and mitigation scenarios, some uncertainty and misconceptions persist. For example, when lead agencies consider offsite GHG mitigation (including offsets), they may sometimes conflate the requirements for compliance-grade offsets in California's Cap-and-Trade regulation with the requirements for GHG mitigation measures under CEQA. The Cap-and-Trade regulation requires that compliance offsets meet certain regulatory criteria, which specify that compliance offsets must be real, additional, quantifiable, permanent, verifiable, and enforceable. In general, the State's Cap-and-Trade Program restricts compliance offsets from being used for any purpose other than Cap-and-Trade compliance, including being used as mitigation under CEQA [emphasis added].

The project does not emit 10,000 MT of CO_2e per year and is not subject to the Mandatory Reporting Regulation since it does not result in more than 25,000 MT MT CO_2e per year. See CARB regulations for the mandatory reporting of GHG emissions on page 4.3-29 of the DEIR. The project is not a covered entity under Cap-and-Trade, and therefore Cap-and-Trade offsets cannot be used as mitigation for the project.

In addition, Mitigation Measure 4.3-7(b) specifies the requirements for carbon credits be real, additional, quantifiable, permanent, verifiable, and enforceable and does not allow "carbon offsets of any kind from any place in the world", as suggested by the commenter. Please see also Response to Comment Grp 16-11 above, which pertains to the commenter's assertion that the project should purchase offsets such that the lifetime emissions would be net zero. In addition, please see Master Response 28 - Greenhouse Gas Credits regarding the validity of mitigation requirements for carbon offsets.

Response to Comment Grp 16-13

The commenter asserts that the DEIR does not discuss cumulative GHG impacts. However, as GHGs are definitionally only a cumulative impact, the assessment included in the DEIR is a cumulative analysis. This topic is addressed above in Response to Comment Grp 16-3.

Response to Comment Grp 16-14

The commenter asserts that the DEIR does not discuss cumulative GHG impacts. This topic is addressed above in Responses to Comments Grp 16-3 and Grp 16-13.

Response to Comment Grp 16-15

The lead agency has determined that the appropriate threshold of significance for the project is 1,100 MT CO2e per year construction and 10,000 MT CO2e per year for operations. Please see Master Response 27 - GHG Thresholds.

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific quantitative thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). In summary, the County has discretion on how to evaluate the significance of GHG emissions under CEQA and could rely on other adopted thresholds if substantial evidence is provided, as explained in Section 3.4, Significance Criteria and Methodology, in the Air Quality and GHG Emissions Technical Report.

The commenter emphasizes the importance of conducting analyses that reflect evolving scientific knowledge and regulatory schemes. Notably, the commenter does not specify how the analysis does not reflect evolving scientific knowledge or regulatory schemes. However, for additional substantiation of the GHG approach to analysis in the DEIR, the CARB 2022 Draft Scoping Plan, which was released in May 2022 after the publication of the DEIR, as well as the project's NOP, is briefly discussed herein.

First, the Draft 2022 Scoping Plan provides the blueprint for how California can achieve carbon neutrality by 2045 or earlier. Even with ambitious and aggressive strategies to reduce anthropogenic sources of GHG emissions, achieving carbon neutrality is not accomplished in the state by reducing all sources of GHG emissions to zero. Instead, some sources, such as the industrial, agriculture/recycling/waste and electricity generation sectors, are anticipated to continue to generate GHG emissions to support California's growing economy and provide services, such as energy production and transmission, to the state (See Figures 2-1 and 2-5)[6]. As the state's GHG emissions inventory is anticipated to be greater than zero, addressing the residual GHG emissions (i.e., the gap in GHG emissions between non-zero and zero) are anticipated to be achieved through carbon capture and storage through natural and working lands and mechanical technologies. In summary, while ambitious strategies must be implemented to achieve carbon neutrality, not all development can or is expected to operate at a net carbon neutral level to support the state in meeting their carbon neutrality goals.

Second, the Draft 2022 Scoping Plan, Appendix D, Local Actions, provides some guidance on evaluating project-level alignment with state climate goals.[7] The first approach that the State recommends for proposed land use developments to demonstrate that they are aligned with State climate goals is based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing; however, this approach is not applicable

[6] https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp.pdf
[7] https://ww2.arb.ca.gov/sites/default/files/2022-05/2022-draft-sp-appendix-d-local-actions_0.pdf

to the project as it only applies to residential and mixed-use development projects. The second approach CARB outlined is net zero GHG emissions, which they noted may be an appropriate overall objective for new residential development, but this approach may not be feasible or appropriate for every project. The two examples of land use development projects in Appendix D (Newhall Ranch and Centennial) that committed to net zero are very large primarily residential developments and are not representative of typical development under CEQA, including the proposed project. The third approach to demonstrating project-level alignment with State climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted. Use of a numeric threshold adopted by AQMDs/APCDs, as expert agencies, was applied in the DEIR GHG emissions analysis. As such, the DEIR GHG emissions analysis does not conflict with evolving science and regulation as provided in the CARB 2022 Draft Scoping Plan, albeit being released following public review of the project's DEIR.

Response to Comment Grp 16-16

This is a summary of the commenter's previous statements. Please see Responses to Comments Grp 16-1 through Grp 16-15. The County acknowledges the comment and notes it provides concluding remarks that do not raise new or additional environmental issues concerning the adequacy of the DEIR.

Group Letter 17

March 30, 2022

To: Matt Kelley, Senior Planner
Nevada County Planning Department Staff
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
Email: matt.kelley@co.nevada.ca.us
DEIR Comment Email: idaho.mmeir@co.nevada.ca.us

Re: Idaho-Maryland Mine Project Draft Environmental Impact Report
To Matt Kelly

Comments submitted by Don Rivenes
On Behalf of Nevada County Climate Action Now

Our organization also has signed on to group comments submitted by Community Environmental Advocates Foundation

Re: Section 4.3 Air Quality, Greenhouse Gas Emissions, And Energy

The DEIR report reaches the following conclusion:
Page 4.3-92 - 4.3-7 "Generation of GHG emissions that may have a significant impact on the environment. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to global GHG emissions and climate change is *less than cumulatively considerable*.
Table 4.3-23 Estimated Annual Greenhouse Gas Emissions (Metric Tons) shows the analysis.
Page 4.3-94 - "As shown in Table 4.3-23, the project would not exceed the applied threshold of 10,000 MT CO2*e* per year during operations and reclamation. However, the project would exceed the 1,100 MT CO2*e* per year threshold during construction.

Grp 17-1

Dispute of the DEIR conclusions

Emergency Generators
The statement on page 4.3.94 - "The diesel emergency generators were assumed to operate up to a maximum of 100 hours per year for routine testing and maintenance, per the CARB ATCM for Stationary Compression Ignition Engines" fails to consider the operational hours of the generators under PG&E PSPS conditions and other power shutoffs due to local weather. One four- day outage would equal the hours indicated.

Off-road equipment
Page 4.3-51 Table 6. Operational Off-Road Equipment Assumptions
The only changes noted between the February 2020 Dudek report and the December 2021 DEIR are that the following equipment went from diesel to electric:

Grp 17-2

		Qty	Usage per day	Days per week
Jumbo drill carrier	Diesel	3	4	7
LHD units	Diesel	6	20	7
Personnel all-terrain vehicles	Diesel	10	12	7

All other equipment remained the same.
And yet the Co2e emissions for 2022-2032 went from 2130 metric tons in Table 17 on page 73 of the February 2020 report to 755 metric tons in Table 4.3-23. The total hours for this electric equipment in 2022-2032 are just a small part of the off-road equipment and shouldn't account for the difference going from 2130 metric tons in the February 2020 report to 755 metric tons in the DEIR. The DEIR must account for this difference.

On-road equipment – off and on site

Grp 17-3

The Co2e emissions for 2022-2026 went from 1528 metric tons in Table 17 on page 73 of the February 2020 report to 923 metric tons (off-site) and 75 (on-site) in Table 4.3-23. The On-road vehicles exact difference is explained due to a change to the figure for cement vehicles. February 2020 report shows 649.4 for CO2e emissions while December 2020 report shows 64.94. Based on the factor used it appears the decimal correction is justified. However, it doesn't give us confidence for any other figures where a decimal can be misplaced, in this case bringing down the total but perhaps in other case the number could go up. The DEIR must show the factors used when converting miles driven to CO2 emissions for each of the vehicles.

We also ask what factors were used to relate miles travelled with emissions generated. This must be provided.

Cement Vehicles

Grp 17-4

Page 4.3-53 Table 4.3-11 Operations Off-Site On-Road Vehicle Trip Assumptions in a explanatory point states: "Freight, cement, and explosives trucks were assumed to have an average 60-mile distance assuming that these materials would come from distribution facilities in Sacramento California."

The CalPortland website states: "CalPortland in Stockton California manufactures Portland cement in three cement plants located in Mojave, CA; Oro Grande, CA; and Rillito, AZ. Their state of the art distribution system features the operation of a deep water international import terminal located in Stockton, CA with an additional transfer terminal in Stockton, CA."

Table 4.3-11 figures do not include the CO2 emissions from transporting the cement from production point to Sacramento (for example from Oro Grande in the desert to Stockton and from Stockton to a pickup point for the truck).
We assume that the cement is not manufactured in Sacramento. The DEIR must state where the Portland cement is manufactured and include the transportation miles to get the cement to Sacramento.

Emission standards

Appendix E Table 22 page 83 shows for the years 2033-2102, the DEIR shows 9,041 metric tons of Annual Greenhouse Gas Emissions and declares them under the threshold of significance.

The DEIR seeks to justify its chosen significance threshold of 10,000 MT CO_2e for operational GHG emissions by looking to other air district standards. This standard from other air districts was based on old California requirements and is not consistent with the S.B. 32's statewide GHG reductions goals for 2030 and beyond.

Grp 17-5

The DEIR must use a significance threshold that will achieve California's new statewide GHG reductions goals over the proposed 80-year lifetime of the Project. Considering state goals and the severity of climate change, ***any*** operational GHG emissions over existing conditions are significant.

The California Air Resources Board 2017 Climate Change Scoping Plan stated: "Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.". Given these facts, the DEIR must establish a net zero threshold for new GHG emissions from the Project and declare the project has significant and unavoidable impacts.

Cement emissions from production

We feel that the embedded emissions in cement production are a legitimate concern for the county. If they were included in the total emissions, the indefensible standard of 10,000 MT CO2e would be exceeded.

In a paper entitled Production, Consumption and Lifecycle Greenhouse Gas Inventories: Association of Environmental Professionals, California Chapter, Climate Change Committee August 2017" it was stated:

Grp 17-6

"There have been a few CEQA analyses for projects that have included estimates of emissions associated with certain construction materials, such as concrete. While it is feasible to estimate upstream emissions associated with cement manufacturing (provided reasonable and non-speculative assumptions can be made about cement source, and production emissions data is available), the emissions associated with cement manufacturing by non-project entities are accounted for in project inventories for the cement plant, and by the jurisdiction containing the cement plant.
Thus, inclusion of such emissions would result in double-counting of emissions. Furthermore, in the case of cement, manufacturing is directly regulated by the state, both as a point source and under the California cap and trade regulation, and thus such emissions can be presumed to be controlled sufficiently through state regulation to meet the state's legislated GHG reduction goals. While one could include cement manufacturing emissions associated with project concrete use, the addition of such emissions would not add any information necessary to make conclusions about the significance of project emissions compared to statewide reduction goals."

We are interested in these emissions because the County has created an Energy Action Plan whose goal is the reduction of GHG emissions. They may already have been counted at the plant level and for state goals, but we are including them for this project as avoidable emissions in that the emissions would not have occurred if this project were not done.

Therefore, to calculate the GHG impact from the Idaho-Maryland mine, one must include the embedded impact from the manufacture of the Portland cement. Embedded cost, in the context of energy costing, refers to the full amount required for a certain amount of energy to be provided.

To calculate the amount of cement used by the mine, Page 4.3-53 Table 4.3-11 Operations Off-Site On-Road Vehicle Trip Assumptions Table shows 936 cement truck trips each year over the 80 year lifetime. Each employee and truck are assumed to generate two one-way trips or 468 actual round trips per year with cement.

A cement truck on the average carries 8 cubic yards of cement weighing 2,538 pounds per cubic yard (Portland Cement Conversion Amount: 1 cubic foot of volume equals: 94.00 pounds (lb) in mass (source Traditionaloven) or about 20,300 pounds of cement or 9.2 metric tons.

We ask that the DEIR provide the projected yearly amount of cement. For these comments, we will use the more conservative number based on tonnage carried in a cement truck.

Grp 17-7

Carbon dioxide intensity is measured in metric tons of CO2 emitted per metric ton of cement produced. Manufacturing a ton of cement releases 0.73–0.99 tons of CO2 [6] *[6] WBCSD, Getting the numbers right: cement industry energy and CO2 performance, World Bus. Counc. Sustain. Dev. (2011) 42. [7] CEMBUREAU - the European Cement Association*

The performance in the Annex 1 regions is largely a result of the fairly high CO2 intensity of the cement industry in North America, at 760 kg net and 790 kg gross CO2 emissions per tonne of cementitious product, significantly higher than any other region. *A decision support tool for cement industry to select energy efficiency measures Alireza Mokhtar a,*, Mohsen Nasooti b*

The national weighted average carbon intensity for cement production is estimated at 0.97 metric ton CO2/ton cement. Thus, each cement truck would contain cement that released about 8.3 metric tons of CO2 when it was produced. Operationally, 468 truck trips would mean 3,884 metric tons of CO2 were released in a year of cement production for the mine.

The revised DEIR should provide adequate information to quantify these GHG emissions and include the quantities in their emission totals for significant impacts.

Grp 17-8

Mitigation suggested for construction phase

Page 4.3-96 4.3-7(b) ***Carbon Offsets – Construction Emissions.***
"Rise Grass Valley Inc. (Rise) shall retire carbon offsets in a quantity sufficient to offset the project's construction greenhouse gas (GHG) emissions to below the 1,100 metric ton carbon dioxide equivalent (MT CO2e) per year construction threshold, consistent with the performance standards and requirements set forth below."

The DEIR proposes to mitigate only 68 percent of the Project's construction-related GHG emissions and the entirety of that mitigation will rely on offsets.

The proposed GHG offset mitigation measure is impermissibly deferred without adequate performance standards, in violation of CEQA. The EIR fails to evaluate the foreseeable environmental impacts of offset projects. The DEIR fails to analyze additional feasible on-site mitigation for GHG emissions.

Grp 17-9

Mitigation of operation phase

The DEIR's GHG offset mitigation measure is unenforceable, delegates verification and enforcement to private third parties, and lacks specific performance standards essential to ensure the effectiveness of the mitigation. We are not in favor of the County allowing for ongoing emissions for this project over the next 80 years. It will be difficult enough to reach the California goal of net-zero carbon by 2045 without adding more unnecessary carbon in the atmosphere.

These operational emissions are a significant and unavoidable impact that calls for rejection of the Plan.

Grp 17-10

Nevada County Energy Action Plan

In 2018 Nevada County adopted an Energy Action Plan to assist the County in implementing the energy goals and policies in the County's General Plan and inform the community of best practices that will help them save energy and money.

The Plan calls for a 51% reduction in greenhouse gas emissions for electricity use by 2035, which is in close alignment with state goals. The Plan forecasts residential energy reduction savings from building efficiency of 42 million kilowatt hours per year.

The DEIR states the amount of electricity required to operate the mine would be approximately 49 million kilowatt hours per year, which would erase any residential electricity savings attained by the Plan.

It is even more stunning when you know that the total non-residential electricity use of the county in 2017 was 53 million kWh/Yr. So, this one mining project would almost

match all other non-residential electricity use in the County and wipe out the projected 9 million kWhYr non-residential efficiency savings.

Asking residents and business owners to cut down their use of electricity while allowing the electricity use of the mine would be highly counter-productive. The DEIR must explain how the project intends to comply with the goals of the Nevada County Climate Action Plan. These goals approximately match SB32 goals

Thank you for consideration of my comments.

Donald J Rivenes

Don Rivenes, Coordinator
Nevada County Climate Action Now
rivenes@sbcglobal.net

GROUP LETTER 17: DONALD RIVENES, NEVADA COUNTY CLIMATE ACTION NOW

Response to Comment Grp 17-1

The commenter acknowledges that their organization has signed on to comments provided by Community Environmental Advocates. Please see responses to Group Letters 7 and 8.

The commenter suggests that emergency generator usage for Power Safety Power Shutoffs (PSPS) and other local weather condition should have been accounted for. Given that it is unknown if/ when a PSPS would occur, it is considered a speculative event, and per the CEQA Guidelines, if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). California courts have consistently held that "an EIR is not required to engage in speculation in order to analyze a worst-case scenario." (See Napa Citizens for Honest Government v. Napa County Bd. of Supervisors (2001) 91 Cal.App.4th 342, 373.). The use of emergency generators is speculative and beyond the reasonable control of the applicant. However, criteria air pollutant emissions associated with 24-hour operation of the emergency generators is provided in Table 4.3-25 of the DEIR on page 4.3-104 for informational disclosure purposes only.

Response to Comment Grp 17-2

The commenter identifies differences between the analysis in the DEIR and a draft version of the Air Quality and GHG Report. Notably, the DEIR is based on the most recent Air Quality and GHG Report (dated November 2021) included as Appendix E.1 of the DEIR. Numerous revisions were made to the Air Quality Report during the preparation of the DEIR. The report presented in Appendix E.1 of the DEIR is the final version of this report. The analysis presented in the DEIR uses the final version of the report and reconciliation to draft versions of this report is not relevant to the analysis of the DEIR.

Response to Comment Grp 17-3

The commenter identifies differences between the analysis in the DEIR and a draft version of the Air Quality and GHG Report. Please see response to comment Grp 17-2 regarding draft versions of the air quality report. Emission factors for conversion of miles driven to carbon dioxide (CO_2) and other emissions are already included in Appendix E.1 of the DEIR.

Response to Comment Grp 17-4

The commentator suggests that GHGs associated with the transport of cement by third parties should have been included in the DEIR. This comment pertains to a "lifecycle" analysis, which is not required under CEQA. Please see Master Response 26 – Life Cycle GHG emissions.

Response to Comment Grp 17-5

The commenter asserts that the project's DEIR should have evaluated emissions against a net zero GHG threshold based on the 2017 Scoping Plan and statewide GHG reduction goals. The commenter's opinion that any project that results in GHGs above net zero should be considered significant is inconsistent with the statewide guidance, as described in the DEIR on page 4.3-29:

> The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

The lead agency has determined that the threshold of significance for the project is 1,100 MT CO_2e per year for construction and 10,000 MT CO_2e per year for operations, based on substantial

evidence provided in the DEIR (please see Master Response 27 – GHG Thresholds). These thresholds are the metric used to determine if the project results in a substantial contribution to the cumulative GHG impact. Given that the project would result in GHG emissions below the applied construction threshold (after mitigation) and below the applied operational threshold (no mitigation required), and because the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, the project would not result in a cumulatively considerable GHG impact.

Response to Comment Grp 17-6

The commenter suggests that GHGs associated with the manufacture of cement should have been included in the DEIR. This comment pertains to a "lifecycle" analysis, which is not required under CEQA. Please see Master Response 26 - Life Cycle GHG emissions. In addition, as stated on page 4.3-89 of the DEIR, the referenced Energy Action Plan (EAP) is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(D); therefore, no CEQA document can tier from the County EAP. Nevertheless, the compliance of the project with EAP strategies has been analyzed and found to be consistent with the EAP. Please see Master Response 25 - Nevada County Energy Action Plan.

Response to Comment Grp 17-7

The commenter suggests that GHGs associated with the manufacture and transport of cement by third parties should have been included in the DEIR. This comment pertains to a "lifecycle" analysis, which is not required under CEQA. Please see Master Response 26 - Life Cycle GHG emissions. Regarding quantity of cement required for the project, Portland cement use of 25 tons per day (5% cement content in cemented paste fill) is assumed, as disclosed on page 295 of Appendix E.1.

Response to Comment Grp 17-8

With regard to the validity of Mitigation Measure 4.3-7(b), which requires carbon offsets to reduce the project's construction emissions of GHG below the applicable threshold, please see Master Response 28 - Greenhouse Gas Credits.

The commenter does not provide explanation of how the GHG offset mitigation measure is impermissibly deferred without adequate performance standards. In fact, the GHG offset mitigation measure includes a section on "Reporting and Enforcement Standards" to ensure that the mitigation is feasibly enforced. Nonetheless, as shown in Master Response 28 - Mitigation Measure 4.3-7(b) has been revised in the Final EIR to further aid the County in enforcement of the mitigation measure, as currently set forth in the DEIR. The changes do not alter the conclusions of the DEIR.

Of note, CEQA Guidelines section 15097(a) allows lead agencies to delegate mitigation monitoring: "A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program." A GHG credit registry serves as the delegated entity. GHG offset credits recognized by a registry represent GHG emission reductions that *have already occurred in the past*; therefore, by purchasing an offset credit, the reduction in GHG emissions has been completed, and the impact has been mitigated.

GHG offset projects avoid, destruct, or sequester CO_2e emissions. GHG offsets projects may be subject to environmental review such as CEQA or NEPA; however, most GHG offset projects do not require environmental analysis as they do not result in adverse environmental impacts. For example, landfill gas destruction and beneficial use carbon offsets collect and combust landfill gas at an existing landfill and do not generate adverse environmental impacts. The commenter fails to provide any evidence that GHG offset projects result in foreseeable environmental impacts. Accordingly, no further response can be provided.

The commenter states that the DEIR fails to analyze additional feasible on-site mitigation for GHG emissions, but neglects to provide any recommendations for feasible mitigation. At this time, feasible construction GHG emissions mitigation is very limited given the state of technology and available GHG reduction strategies for offroad equipment and heavy-duty trucks. As the commenter does not provide onsite mitigation to be evaluated, no further response can be provided.

Response to Comment Grp 17-9

With regard to the validity of the Mitigation Measure 4.3-7(b), which requires carbon offsets to reduce the project's construction emissions of GHG below the applicable threshold, please see Master Response 28 - Greenhouse Gas Credits.

The commenter states that the operational GHG emissions are a significant and unavoidable impact and the associated GHG offset mitigation has various issues. However, as demonstrated in the DEIR, estimated operational GHG emissions are below the applied numeric threshold of 10,000 MT CO_2e per year. The DEIR determined that project-generated construction GHG emissions would exceed the applied GHG threshold of 1,100 MT CO2e per year, as addressed above. As such, the commenter incorrectly summarizes the draft GHG emissions analysis findings; instead, the project's operational GHG emissions are below the applied threshold of significance and is not the source of GHG emissions that was the basis of the less than significant with mitigation finding for threshold GHG-1.

Response to Comment Grp 17-10

The commenter states that the project would consume a substantial amount of electricity and would be inconsistent with the County EAP. Of note, projects that consume electricity do not necessarily conflict with the County energy reduction goals. Additionally, although the EAP is not a Qualified GHG Emissions Reduction Plan under CEQA pursuant to the requirements outlined in the CEQA Guidelines, Section 15183.5(D), the project was nevertheless determined to be consistent with the EAP (see Table 4.3-22 of the DEIR). Please see also Master Response 25 - Nevada County Energy Action Plan.

The commenter also asserts that "the DEIR must explain how the project intents to comply with the goals of the Nevada County Climate Action Plan". However, Nevada County has not adopted a Climate Action Plan.

Group Letter 18

NEVADA COUNTY DEMOCRATS

March 22, 2022

Dear Nevada County Planning Commissioners'

Grp 18-1 The Nevada County Democratic Central Committee passed a resolution opposing the reopening of the Idaho Maryland Mine. The local Democratic party has not been one to spend much time writing resolutions, but this proposal is too risky for the environment and public health to keep silent on it. Even if you accept the findings of the DEIR released on January 4th, Rise Gold Grass Valley's track record shows they cannot be trusted to implement the mitigation measures. They have a history of leaving waste to be cleaned up, had 35 charges filed against them in various courts, and a local bankruptcy judge, in evaluating the economic reports published by the company, thinks bankruptcy is likely."

Grp 18-2 Proponents of the mine often cite the possible 300 new jobs that could come with it. This job gain would likely be offset by the big risks for the tourism industry, high tech, and medical industry that won't be able to work in a situation where they are vibrations from underground blasting, the possible loss of hundreds of wells, and lowering of property values. However, right now Nevada County has more jobs available than workers, and very low housing stock.

Grp 18-3 The loading and dumping of rock would add tremendous pollution to the "F' Nevada County already earns from the American Lung Associations grading system due to the ozone in our air at times during the heat of the summer.

Grp 18-4 We could go on but we included the text of the resolution.

Sincerely,

Eric Robins
Chair, Nevada County Democrats
Office
1721 E Main Street, Ste.6
Grass Valley, CA 95945
ericwrobins@gmail.com
530-305-9223

Nevada County Democratic Central Committee

Resolution

Opposing Rise Gold's proposal to re-open the Idaho Maryland Mine

Grp 18-5 **Whereas,** the proposal by Rise Grass Valley, a subsidiary of Rise Gold Corp., for an 80 year, 7 day a week, 24 hour operation of mining machinery and trucking of mine materials will create negative impacts to the air quality, water quality, ambient light and noise levels far beyond the scope of what we believe the citizens of Nevada County can or should tolerate; and

Grp 18-6 **Whereas,** the proposal to open the mine has severely undercounted the number of private wells that will be impacted and potentially contaminated. Local well professionals estimate the number of affected parcels will be in the hundreds, not the handful identified by Rise Gold; and

Grp 18-7 **Whereas,** the potential economic losses to homeowners within the mineral rights area have been estimated to exceed $5 million in reduced market value, even rendering many homes unsellable; and

Grp 18-8 **Whereas,** the jobs Rise Gold purports to be creating to stimulate the local economy will need to be filled by outside labor, as Nevada County no longer has a pool of trained underground miners; and

Grp 18-9 **Whereas,** Nevada County and California suffer from a severe housing shortage both in rental and sale properties, leaving imported workers unhoused locally; and

Grp 18-10 **Whereas**, the proposed energy use of the mine would be in direct and fatal conflict with our county's existing Energy Action Plan (EAP), which was unanimously approved by the Nevada County Board of Supervisors in 2019, and which directs an urgent countywide decrease in energy use, Rise Gold's proposal actually doubles the county's annual non-residential energy consumption; and

Grp 18-11 **Whereas,** Rise Gold's promises to inject money into the local economy may sound attractive, but the Economic Policy Institute Brief cited by Rise Gold actually shows that other industries can produce far better job numbers than mining, including eight industries we already have in Nevada County today; and

Grp 18-12 **Whereas**, the CEO of Rise Gold, Ben Mossman, is currently awaiting a retrial on Canadian Environmental Rights Act and Fisheries Act violations allegedly committed by his former company, Banks Island Gold Ltd., at the Yellow Giant gold mine site in British Columbia. Banks Island Gold faces 35 provincial and federal charges after enforcement officers found evidence that they were dumping waste from the Yellow Giant gold mine into the surrounding woods and wetland in 2015, and Mr. Mossman, the responsible party as CEO, did not report any spills; and

Grp 18-13

Whereas, California Judge Randall J. Newsome has said, "My experience as a U.S bankruptcy judge for 28 years leads me to believe that this company, now Rise Grass Valley (a wholly owned subsidiary of Rise Gold) is destined for financial failure."

Now, Therefore, be it Resolved, that the above recitals are true and correct to the best of our knowledge and shall serve as findings of the Nevada County Democratic Central Committee.

Grp 18-14

Be it Further Resolved, that the Nevada County Democratic Central Committee calls upon the Nevada County Board of Supervisors to deny any and all permits for opening and operating the Brunswick/Idaho Maryland Mine, thereby protecting the citizens of Nevada County and our environment from the potential damages, losses and hardships this proposal will cause.

Be it Further Resolved, that the Nevada County Democratic Central Committee opposes the proposal to allow Rise Gold to open the Brunswick/Idaho Maryland Mine and further opposes Rise Gold to operate in Nevada County.

PASSED AND ADOPTED by the membership of the Nevada County Democratic Central Committee at its meeting held on the 18th Day of November, 2021.

References: www.MineWatchNC.org

www.mynevadacounty.com/documentcenter/view/35183
www.mynevadacounty.com/2882/Application-Documents---Rise-Grass-Valley

https://www.theunion.com/opinion/columns/randall-j-newsome-rise-gold-show-me-the-money/

https://www.todayinbc.com/news/court-assesses-15000-penalty-in-banks-island-mine-case/

https://www.cbc.ca/news/canada/british-columbia/b-c-s-high-court-upholds-new-trial-for-two-managers-after-spill-at-mine-1.5784666

GROUP LETTER 18: ERIC ROBINS, NEVADA COUNTY DEMOCRATIC CENTRAL COMMITTEE

Response to Comment Grp 18-1

The commenter states that its organization passed a resolution opposing the project. The commenter also states that even if the conclusions of the DEIR are accepted, the Project Applicant's CEO "cannot be trusted." The commenter's opposition to the project is noted for the decisionmakers. The commenter is referred to Master Response 1 – Non-EIR/Administrative Issues. Even though the Project Applicant's prior business dealings are not relevant to the adequacy of the DEIR, these types of comments are addressed in Master Response 3 – Operator Responsibility.

Response to Comment Grp 18-2

The commenter states that any economic gain to the community will be offset by environmental impacts, but does not offer any specifics as to why the DEIR is inadequate. The commenter is referred to Master Response 1 – Non-EIR/Administrative Issues, and Master Response 2 – Social and Economic Impacts.

Response to Comment Grp 18-3

The commenter asserts that the placement, grading, and compaction of engineered fill would further degrade the community's poor air quality but does not assert any deficiency in the DEIR. The DEIR evaluates the project's potential air quality impacts in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, and finds that impacts to air quality after mitigation would be less than significant.

Response to Comment Grp 18-4

The comment does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 18-5

The commenter generally states that the project would create negative impacts to air quality, water quality, ambient light, and noise levels beyond the scope of what the community would tolerate. Please see Master Response 1. The DEIR identifies and evaluates each of the project's potential environmental impacts in accordance with CEQA. The commenter is referred to DEIR Chapter 4.1 (Aesthetics), Chapter 4.3 (Air Quality, Greenhouse Gas Emission, and Energy), Chapter 4.8 (Hydrology and Water Quality), and Chapter 4.10 (Noise and Vibration).

Response to Comment Grp 18-6

The commenter states that the DEIR underestimates the number of private wells that the project would impact and potentially contaminate. The commenter references "[l]ocal well professionals" but does not identify these individuals or the basis for their findings that the DEIR underestimates the number of wells impacted. The DEIR discusses the project's potential impacts on groundwater levels and recharge in Impact 4.8-2. (DEIR, p. 4.8-54–68.) The Impact 4.8-2 analysis is based on the groundwater modeling report prepared by Itasca Denver Inc. and peer reviewed by the County's independent expert West Yost Engineering (DEIR Appendix K.3). The DEIR describes the methodology used in the modeling. (DEIR, p. 4.8-36–37.) The commenter is also referred to Master Response 14 – Adequacy of Groundwater Model, and Master Response 15 – Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 18-7

The commenter states that the project would result in the cumulative loss of $5 million to nearby residential home values, but provides no basis for this finding. The commenter is referred to Master Response 2 – Social and Economic Issues.

Response to Comment Grp 18-8

The commenter states that the project will create demand for outside labor only because Nevada County does not have a pool of trained underground miners. While impacts to jobs are not an impact under CEQA, the DEIR establishes recruitment targets for local candidates with no previous mining experience, and will provide training for jobs at the project site. (DEIR, p. 4.9-26.) The DEIR estimates the project will create approximately 162 positions for local candidates with no previous mining experience and approximately 51 additional positions for candidates with some previous mining experience or other applicable trade experience. The commenter is also referred to Master Response 2 – Social and Economic Issues.

Response to Comment Grp 18-9

The commenter states that Nevada County and California suffers from a severe housing shortage which would leave any out-of-County workers unhoused. The DEIR evaluates the project's potential effects related to population growth and housing, which is provided in Chapter 4.9 (Land Use and Population and Housing). The DEIR specifically finds that the project would lead to indirect population growth by bringing approximately 312 persons to the area. (DEIR, p. 4.9-25.) Nevada County has 53,745 total housing units with a vacancy rate of 22.5 percent (12,098 vacant housing units.) (*Id*.) It is reasonably anticipated that the addition of 312 persons, as a result of the project, can be absorbed by the existing housing stock in Nevada County. (*Id.*)

Response to Comment Grp 18-10

The commenter states that project's proposed energy use would conflict with Nevada County's Energy Action Plan (EAP.) The commenter is referred to Master Response 25 – Nevada County Energy Action Plan.

Response to Comment Grp 18-11

The commenter states that there are alternative projects that will yield better economic benefits to the region. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, and Master Response 2 - Social and Economic Impacts. The comment is noted for the decisionmakers.

Response to Comment Grp 18-12

The commenter discusses the CEO of the Project Applicant and his prior project in Canada. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility. The comment is noted for the decisionmakers.

Response to Comment Grp 18-13

The commenter discusses the opinion of the Honorable Judge Randall J. Newsome (Ret.) regarding the economic viability of the Project Applicant. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility. The comment is noted for the decisionmakers.

Response to Comment Grp 18-14

The commenter opposes the project and calls on the Nevada County Board of Supervisors to deny the Project Applicant any permits or approvals needed to reopen the Idaho-Maryland Mine. The commenter's opposition to the project is noted for the decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues.

Group Letter 19

Matt Kelley, Senior Planner

Nevada County Planning Department

950 Maidu Avenue, Suite 170 Nevada City, CA 95959-7902

Phone: 530-265-1423

Email: Idaho.MMEIR@co.nevada.ca.us

April 4, 2022

Dear Matt Kelly, Nevada County Planning Commission and Board of Supervisors,

Grp 19-1

The Nevada County Food Policy Council (NCFPC) is a collaboration of 55+ agencies, organizations, businesses, farmers, ranchers and individuals with a mission to cultivate and promote a local, Whole-sum Food system (local and community-based, fair, ecologically sound and humane) that readily provides health and vitality to every member of our community; that protects, stewards, and regenerates our land and our natural resources; that serves and honors our local interests and creates wealth and prosperity for every link in the food chain; and more meaningfully connects us as humans with one another, with the land, its occupants and its cycles, and the bounty, creativity, and sacredness of life.

Community Alliance with Family Farmers (CAFF) is a statewide non-profit that has been providing technical assistance to family farmers across the state since 1978. CAFF's mission is to build sustainable food and farming systems through policy advocacy and on-the-ground programs to create more resilient family farms, communities, and ecosystems. We often partner with local organizations throughout the state, including Sierra Harvest and the NCFPC. CAFF has dozens of farmer members located within Nevada County. While we are a statewide organization, we strongly support the NCFPC and the comments in this document.

Grp 19-2

Our council and CAFF are deeply concerned that the impacts of this proposed mine would have detrimental effects on Nevada County agriculture and food production and that the issues listed in the DEIR haven't addressed our concerns listed below regarding water quality and water supply.

Grp 19-3

The NCFPC recently published a comprehensive assessment on current food system challenges and strengths. A food system encompasses all the stages of keeping us fed: growing, harvesting, packing, processing, transforming, marketing, consuming and composting or disposing of food.

It is estimated that Nevada County residents buy over $340 million in food annually. The value of food produced in the county is roughly $16 million, less than 5 percent of our annual purchases.

Local food production contributes to keeping our food dollars recirculating in our local economy, as well as creating tax revenues, increases food resilience, and meaningful jobs for our farmers and ranchers. From a health standpoint, local food purchases will likely equate to fresher, more nutritious, less processed foods. In addition, local food is transported from farms a shorter distance thus reducing fuel and refrigerant use, causing less pollution, packaging, and waste.

The study conducted in Central Oregon [Rahe 2017] found that $0.76 of every dollar spent on a local food product stays in the community compared to $0.28 of every dollar spent on food from outside the region. That means for every dollar you spend buying from your local farmer or rancher, an additional $0.48 is circulated through your local economy not only fueling jobs, but helping to make your community more resilient to external economic forces. Additionally, for every 5 farm jobs, an additional 2 off-farm jobs are created within the community.

Our locally produced food is a tiny part of our food market, leaving us vulnerable to a national food system that is fraying at the edges. Food can become unavailable, overpriced, and quality-compromised at any point. But our county has the water, land, and expertise to become more self-reliant.

Based on the 2020 Nevada County Agriculture Report https://www.mynevadacounty.com/ArchiveCenter/ViewFile/Item/1318,

Grp 19-4

"The 2020 COVID-19 pandemic highlighted the importance of our local food production as evident by empty produce shelves at national chain supermarkets during the beginning of this pandemic. Farmers that sold directly to restaurants were forced to quickly pivot and find other customers and many residents began growing their own vegetable garden. Throughout these uncertain times, our farmers fulfilled their role as essential workers and fed our community. The total value in 2020 of fruit and vegetable crops increased almost 7%, or $175,900. The total gross value of all agricultural commodities produced in 2020 was $19,725,200. Nevada County has in production 365 Farms with 3,313 acres of harvested cropland, 133,393 acres of grazing land and 7,760 acres of farmland," stated Chris de Njis, Nevada County Agricultural Commissioner.

Grp 19-5

The situation our agricultural system is facing due to drought is dire. New research shows California and the West are in a megadrought, the worst drought in 1,200 years. (CA Food and Farming Network, 2022). Our local farms and ranches rely on water to produce the food we consume.

It is imperative that we need to protect the water and land necessary to preserve our farm and ranchland that produce our local food and strengthen our local economy.

Specifically, we are concerned about the following 2 areas:

- **Downstream water quality**: How do you ensure that the downstream farms and ranches that have the South Fork of Wolf Creek running through their land continue to have excellent water quality? Their land may be certified Organic and cannot have high levels of chemicals or metals leaching into their soil affecting their crops or land used for grazing purposes of their livestock.

Grp 19-6

- **Adequate water supply with a mega drought forecasted.**

Downstream Water Quality Issue

In chapter 4.8.4, the DEIRstates that "only full treated water meeting the State's discharge requirements will be routed to the South Fork of Wolf Creek and will submit quarterly monitoring reports to the Regional Water Quality Control Board (RWQCB). "

Grp 19-7

- We recommend that there needs to be real time monitoring due to the high variability of water levels seasonally in the South Fork of Wolf Creek and not quarterly.
- We also recommend a local independent agent as oversight for the monitoring reports. Self-reporting holds a conflict of interest that does not align with the health of the watershed. Nonprofits such as the Sierra Fund, Sierra Streams, or Wolf Creek Community Alliance have the expertise to either perform the monitoring or ensure that the monitoring is done appropriately.

Grp 19-8

In chapter 4.8-1, "The treatment process would also reduce the concentrations of arsenic and ammonia, both of which have been detected in low concentrations in surface seeps near the mine."

Grp 19-9

- Is the water treatment process adequate to ensure that the arsenic levels never go above an unsafe level? If the water is being tested only quarterly, this issue might not be detected. According to a study completed in 2021 on the effect of arsenic-contaminated irrigation water on growth and elemental composition of tomato and cabbage cultivated in three different soils, and related health risks, "The Arsenic (As) threshold for drinking water is 10 µg/L (WHO, 2001), and for irrigation water is 100µg/L (FAO, 1994), but there is currently no recommended As limit value for vegetables." Again, we recommend that there needs to be real time, DAILY, water quality monitoring to ensure the downstream land holders of the South Fork of Wolf Creek have excellent water quality running through their land at all times, not just 4 times a year. Additionally, these reports need to be accessible to the public in real time so that any downstream users can monitor the situation themselves and be alert of an issue immediately and take necessary

Grp 19-10

actions to ensure their food production or grazing animals are safe and that their organic certifications are not in jeopardy.

Grp 19-11

- Is there a mitigation plan, in case the metals or other contaminant levels are detected above the allotted amount determined by the RWQCB? What is the mitigation plan?

Grp 19-12

- Is there a plan if the holding ponds have a break in the liner or berm and there is a flood allowing toxins to flow into the creek?

Grp 19-13

There also seems to be inadequate baseline mine water testing. The testing completed from the Brunswick shaft is inadequate in that it doesn't give enough data about the diversity of water quality within the vast underground sections containing old shafts and projected to have new exploration. Four current seeps emptying into Wolf Creek itself off Idaho-Maryland Road are probably more indicative. They contain high concentrations and greater numbers of heavy metals.

- Therefore, the DEIR needs additional study to create a better baseline for predicting the level of contamination in the mine groundwater. The results of that study need to be explicitly incorporated into water treatment design.

Grp 19-14

Adequate water supply

In Chapter 4.11 the DEIR states that "Water demand within Nevada Irrigation District's (NID) service area is expected to exceed the District's supplies by more than 45 percent from 2025 to 2040 in Single Dry Years and by less than 10 percent from 2025 to 2040 during the first and second years of a Multiple Dry Year period. However, this mining project is not expected to exacerbate NID's water supply shortages during dry years and the project will supply water into South Fork Wolf Creek, and into the NID water conveyance system, at volumes exceeding the project water demand for potable water from NID that there is sufficient water supply available to serve the project during normal, dry and multiple dry years."

NID is in the early stages of a long-term visioning and planning effort to better understand potential future conditions and needs and identify management and operational practices to meet those needs. **In 2021, NID was barely able to meet the needs of the existing ag customers and at one point discussed cutting off all agricultural users in August.** This Plan for Water process will take a minimum of 2 years to complete. https://www.nidwater.com/plan-for-water. From the 2020 Agricultural Water Management Plan NID also states that they have roughly 5,600 agricultural customers. "***About ninety percent of all the water delivered by NID is for agricultural use giving life to approximately 32,000 acres of irrigated land in Nevada and Placer Counties.*** Most agricultural water customers purchase water seasonally, from mid-

April through mid-October. NID's raw water is conveyed to customers through a unique network of over 500 miles of canal. The ag water is used to grow multiple crops including wine grapes, nursery stock, apples, rice, plums, citrus, grass, alfalfa hay, as well as to irrigate pasture." https://www.nidwater.com/ag-urban-water-management-plans

Grp 19-15

- The data compiled in the DEIR thus far about water supply is extremely inadequate based on information about drought conditions in CA and the fact that NID has not completed its Plan for Water to determine its needs for its present customers for the next 50 years. Therefore, we recommend that more specific water analysis be completed AFTER the Plan for Water is completed by NID to ensure that there truly is enough water for the existing Nevada County agricultural users now and into the future.

Grp 19-16

- IF there truly is excess water supplied by the mining project into the South Fork of Wolf Creek, that water still does not assist any upstream users that may be without enough water during a drought year. Statements about water supply need to be stated as conditional and uncertain until the full Plan for Water by NID is completed. The DEIR should emphasize the uncertainty and unresolved nature of water supply and NOT state that there is enough water for the project.

Grp 19-17

- The following statement contradicts itself by implying that there is plenty of water available from NID, yet, you state that there isn't enough for 15 years for its own customers – if NID does not have enough for its customers, how can they have enough for this project? Please explain this in clearer terms. "Water demand within Nevada Irrigation District's (NID) service area is expected to exceed the District's supplies by more than 45 percent from 2025 to 2040 in Single Dry Years and by less than 10 percent from 2025 to 2040 during the first and second years of a Multiple Dry Year period. However, this mining project is not expected to exacerbate NID's water supply shortages during dry years."

Grp 19-18

In Chapter 4.11, the DEIR states that "it is anticipated to receive potable water from Nevada Irrigation District (NID) for dust control, sanitary uses and reliable water supply to some nearby residences whose wells may be impacted by the mining operations." And Chapter 4.8 suggests that mine dewatering will impact only a few wells. Yet it only includes tests for a few wells and suggests that possibly up to 30 wells could be impacted. Previous studies suggested a larger area of impact.

- The DEIR states that NID would have more than adequate water to supply the 30 wells, but what if it's 100 wells? Therefore, we recommend a larger

and more comprehensive well study to be completed as well as new analysis of underground hydrology.

Grp 19-19

Based on what is not included in the DEIR regarding water supply, water quality and flooding possibilities, the impacts could be much more serious than suggested. Please carefully address these concerns and include the new areas of study or analysis needed to adequately assess the impacts of this project. Without these changes, the DEIR is severely flawed and inadequate.

Healthy food is critical to our lives. However, the future of our food supply is in jeopardy, threatened by erratic weather events, environmental degradation, drought and now a global pandemic. The COVID-19 pandemic pushed our fragile food system to the limit and supply for many products was disrupted. We must ensure that Nevada County has a thriving food supply system to weather future challenges. Please consider these issues when weighing the impacts of the proposed mine on the health and well-being of our Nevada County residents for the next 80 years and beyond!

Thank you for your consideration of our concerns.

The Nevada County Food Policy Council

Miriam Limov, Nevada County Food Policy Council Coordinator – miriam@sierraharvest.org

Jonathan Collier, Briarpatch Food Co-op Board of Director

Heidi Garrett, Small business owner, Nevada City

Deborah Gibbs, NC Climate Action Now Steering Committee

Bob Thurman, Interfaith Food Ministry Board President

Community Alliance with Family Farmers

Kali Feiereisel, Farmer Services Director – kali@caff.org

GROUP LETTER 19: MIRIAM LIMOV, NEVADA COUNTY FOOD POLICY COUNCIL COMMUNITY ALLIANCE WITH FAMILY FARMERS

Response to Comment Grp 19-1
This comment is introductory in nature. The comment is noted.

Response to Comment Grp 19-2
The commenter generally states that the DEIR does not address their concerns regarding water quality and water supply. Please see Master Response 1 - Non-EIR/Administrative Issues. Responses to specific comments are provided below.

Response to Comment Grp 19-3
The commenter provides a general discussion of the agricultural industry and its importance in Nevada County. The comment is noted. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues.

Response to Comment Grp 19-4
The commenter highlights the importance of producing food locally, especially in light of the COVID-19 public health emergency. The comment is noted. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues.

Response to Comment Grp 19-5
The commenter states that the local agricultural system is strained by the current drought and that water resources must be protected. The comment is noted. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues.

Response to Comment Grp 19-6
The commenter is concerned about downstream users the water quality of South Fork Wolf Creek and an adequate water supply in light of the drought. The commenter is referred to Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 16 - Drought and Climate Change.

Response to Comment Grp 19-7
The commenter requests that water quality monitoring of South Fork Wolf Creek be conducted in real time. Monitoring will be done in accordance with the approved Notice of Intent and requirements and oversight of the Central Valley Regional Water Quality Control Board. The commenter is referred to Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 19-8
Monitoring would be done in accordance with the approved Notice of Intent and requirements and oversight of the Central Valley Regional Water Quality Control Board. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 19-9
The commenter is referred to Master Response 35 - Discharge to South Fork Wolf Creek. Effluent limitations in the treated water that will be discharged into South Fork Wolf Creek are set by the Central Valley Regional Water Quality Control Board through its permitting, with which the project

will be required to comply, as verified and monitored by said state agency. Please refer to Chapter 4.8 of the DEIR for additional detail (cf. Table 4.8-2).

Response to Comment Grp 19-10

The commenter reiterates its request for daily water quality monitoring of South Fork Wolf Creek and requests the monitoring data be publicly available. Monitoring will be done in accordance with the approved Notice of Intent and requirements and oversight of the Central Valley Regional Water Quality Control Board. The commenter is referred to Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 19-11

The commenter asks if there is a mitigation plan in place to address any contaminants that exceed RWQCB thresholds. A mitigation monitoring and reporting program has been prepared and is included as Chapter 4 to this Final EIR. The mitigation measures and conditions of approval will be enforced by the County. To the extent the applicant receives permits from other state and federal agencies, those agencies will be responsible for their enforcement.

Response to Comment Grp 19-12

The commenter is concerned that the wastewater treatment pond may fail and asks if there is a contingency plan in the event of such failure. The geotechnical stability of the treatment pond is analyzed in Chapter 4.6 of the DEIR and required mitigations would reduce the impact to a less than significant level. (DEIR, p. 4.6-41.) The commenter is also referred to Appendix H.1 of the DEIR. Failure of the water treatment plant is speculative and is not required to be analyzed under CEQA.

Response to Comment Grp 19-13

The commenter states that the DEIR's analysis of the water in the mine is inadequate. The commenter is referred to Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment 19-14

The commenter is concerned about drought and NID's ability to meet future water demands. The commenter is referred to Master Response 16 - Drought and Climate Change, and the following responses to more specific comments.

Response to Comment Grp 19-15

The commenter states that the DEIR's analysis of water supply is inadequate. The commenter is referred to Master Response 16 - Drought and Climate Change and Appendix N (Water Supply Assessment) of the DEIR.

Response to Comment Grp 19-16

The commenter states that the added water supply to South Fork Wolf Creek does not benefit any upstream users. As stated on page 4.11-37 of the DEIR, the possibility exists for NID to utilize the excess treated mine water discharged to South Fork Wolf Creek. If desired, NID could adjust its flows upstream to use the extra water available downstream.

Response to Comment Grp 19-17

The commenter states that the language from Appendix N (Water Supply Assessment) is inconsistent in that it states water demand would exceed NID supplies in dry years but that the project would not exacerbate NID's water supply shortage during dry years. This statement is

made in part based on the fact that, as discussed in the WSA (page 2), the potable water demands for buildout of the proposed project are already included in the District's projected 2040 water demands. In addition, as stated on page 4.11-37 of the DEIR, notwithstanding the potable demand of 26.4 acre-feet per year associated with the project, the project would be a net contributor of water to the NID water system as a result of the project's ongoing discharge of treated mine dewatering water to South Fork Wolf Creek (850 gpm or about 1,371 ac-ft/yr). The possibility exists for NID to utilize the excess treated mine water discharged to South Fork Wolf Creek. If desired, NID could adjust its flows upstream to use the extra water available downstream. The commenter is also referred to Master Response 16 - Drought and Climate Change.

Response to Comment Grp 19-18

The commenter states that the DEIR underestimates the number of potentially impacted private wells. The commenter is referred to Master Response 13 - Historic Hydrogeologic Assessments, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 19-19

The commenter summarizes its primary concerns with project stated throughout the letter. Responses to specific concerns with the project are provide above. The commenter's opposition to the project is noted for the decisionmakers (please see Master Response 1).

Group Letter 20

RUDDER LAW GROUP
NAVIGATING THROUGH ENVIRONMENTAL REGULATION
JILLIAN B. BLANCHARD
415.867.8769
JBLANCHARD@RUDDERLAWGROUP.COM

Mr. Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-8617
matt.kelley@co.nevada.ca.us;
Idaho.MMEIR@co.nevada.ca.us

April 4, 2022

Re: Idaho-Maryland Mine DEIR Comment Letter

Dear Mr. Kelley:

I appreciate the opportunity to share my grave concerns regarding the Draft Environmental Impact Report ("DEIR") for the Idaho-Maryland Mine Project ("Project") from the perspective both as a land use and natural resources attorney for over two decades and a resident of Grass Valley. Based on an extensive review of the DEIR, it is clear that the DEIR must be revised and recirculated to comply with the requirements of the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 et seq., for the reasons outlined below.

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An EIR is required to correctly inform the public and trustee and responsible agencies of all potential environmental impacts of a proposed action, to list ways in which the significant effects of such a project might be minimized, and to indicate alternatives to address impacts that cannot be mitigated. (CA Pub. Res. Code § 21061.) Unfortunately, the DEIR fails on all three requirements. First and foremost, the DEIR fails to accurately describe the Project and all potentially significant impacts. In particular, it fails to identify potentially significant and unavoidable biological, hazards, air quality, and hydrological impacts that may not be mitigated. Second, the DEIR fails to identify feasible and achievable mitigation measures to minimize such impacts to less than significant levels. And finally, this DEIR fails to identify alternatives to address the potentially significant impacts identified in the report. The DEIR deprives the public of a meaningful opportunity to comment upon substantial environmental impacts of the project and fails to identify feasible mitigation measures for such effect, and accordingly, requires recirculation a revised DEIR. (CEQA Guidelines § 15088.5(a)(4).)

1. The Project Description is Inadequate Under CEQA

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The Project Description in the DEIR is inadequate under CEQA because it fails to include the cleanup of the Centennial Site, which is an integral component of the Project. In doing so, the DEIR fails to provide the public with an accurate accounting of all Project impacts, including potentially significant and unavoidable biological, hydrological, hazards, air quality and cumulative impacts.

California courts make it clear that ""The scope of the environmental review conducted for the initial study must include the entire project." (*Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1222) *Nelson v. County of Kern*, 190 Cal.App.4th 252, 267 (Cal. Ct. App. 2010) A project is defined under CEQA to include "*the whole of an action*, including everything that has a potential to result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment and which is undertaken, supported or approved by a public agency. (CEQA Guidelines, § 15378(a), italics added.)

CEQA Guidelines further clarifies that the term "project" refers to "the activity which is being approved and which *may be subject to several discretionary approvals by governmental agencies*. The term 'project' does not mean each separate governmental approval." (CEQA Guidelines, § 15378 (c), italics added.) This definition "ensure[s] that a project proponent does not file separate environmental reports for the same project to different agencies thereby preventing 'consideration of the cumulative impact on the environment. . . .' [Citation.]" (*Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1190, fn. 5, quoting *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1452; *Nelson*, 190 Cal.App.4th at 271.)

CEQA's conception of a project is applied broadly "to maximize protection of the environment" to "prevent a proponent or a public agency from avoiding CEQA requirements by dividing a project into smaller components which, when considered separately, may not have a significant environmental effect." *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730, *Nelson*, 190 Cal.App.4th at 271. Unfortunately, the DEIR does exactly this by segmenting out the Centennial cleanup from this Project rationalizing that such remediation efforts are being reviewed and approved by another agency, the Department of Toxic and Substance Control ("DTSC").

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The Notice of Preparation ("NOP") for the Project originally identified the Centennial cleanup an essential "part of the proposed project." (NOP, p.7) and confirmed for the public that the cleanup would be reviewed as part of this CEQA document. The NOP is required to provide "sufficient information describing the project and the potential environmental effects to enable the responsible agencies to make a meaningful response." (CEQA Guidelines, 14 CCR § 15082(a)(1).) The resulting Project description in the DEIR should never be smaller than the scope identified in the NOP. To the extent that the County wanted to reduce the scope of the Project so significantly as to remove an extensive cleanup effort at the Centennial Site, the County should have issued a revised NOP and received feedback from both the public and responsible agencies on this revised approach. It did not.

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Moreover, Centennial cleanup is an essential part of the stated Project Objectives in the DEIR. Two of the ten project objectives are directly tied to the cleanup of Centennial. (DEIR, p. 3-11-3-12.)

- Increase the usable land area at the Centennial Industrial Site to allow its future use as industrial land.
- Minimize impacts to wetlands, vernal pools, and other special-status species habitat located on the Brunswick and Centennial Industrial sites, and, to the extent feasible, mitigate any such impacts identified.

California courts make it clear that if a component is dependent upon and closely related to an objective of the project, it must be included. See *Tuolumne County Citizens* at pp. 1225-1231 [where the success of the overall objective depends on the inclusion of certain action, the distinct actions are viewed as parts of a larger whole — the same project].)" *Nelson v. County*

of Kern, 190 Cal.App.4th 252, 272. Here, the success of these two objectives depend on the remediation of the Centennial Site, and accordingly, it must be included as part of the same Project.

The County acknowledges throughout the DEIR that actual impacts are dependent on the design of the Centennial cleanup (DEIR, p. 1-6, 4.0-2, 4.1-2, 4.2-1, 4.4-2, etc.) and that such designs have not yet been approved (DEIR, p. 3-10), but then fails to include such work as part of the Project. The Project will result in impacts to over 44 acres of the Centennial Site, which may or may not be on top of an engineered cap post cleanup or pristine wetlands, depending upon the outcome of the DTSC process. To suggest that these two projects have independent utility and do not impact one another, defies logic and results in an analysis that does not comply with CEQA requirements.

The Water Board agreed with this analysis and requested that the Centennial cleanup be analyzed with the Idaho-Maryland Mine as part of its comment letter to DTSC on the IS/MND for the Centennial cleanup. The Water Board stated that

> the cumulative impacts to water quality incurred by the project described in the RAP and potential future discharge of mine waste generated by the proposed Idaho-Maryland Mine-Rise Grass Valley project **should be considered in a single environmental document**. This seems particularly relevant considering the potential use of the Centennial Property for management and reuse of mine waste generated by the proposed Idaho-Maryland Mine-Rise Grass Valley project.

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(*Water Board Comment Letter to DTSC on the Centennial IS/MND*, September 24, 2021, p. 5, included as Attachment A hereto.) The Water Board concluded that because the two projects have been separated "staff are unable to assess the cumulative impacts to water quality or whether the existing environmental document prepared for the RAP is adequate to support future WDRs for Waters of the State (see Permitting Requirement 2)." (Id.) In other words, as a result of separating out the two projects, the Water Board is currently unable to rely on the IS/MND to issue permits for the Centennial cleanup.

The Centennial cleanup is an integral part of the Project, as referenced in the NOP and the Project objectives, and must be analyzed in this DEIR to provide the public with an accurate picture of all potential impacts associated with the Project. The Centennial cleanup must be added to the analysis and the DEIR must be recirculated.

2. CEQA Does Not Allow Use of a Future Baseline That May or May Not Happen

The inconsistent treatment of the Centennial cleanup not only leads to an inaccurate Project description, but violates the CEQA Guidelines related to the environmental baseline and analysis of impacts. CEQA Guidelines require the DEIR to describe physical environmental conditions as they exist at the time the notice of preparation ("NOP") is published in order "to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts." (CEQA Guidelines § 15125(a).) The existing conditions at the time of the NOP (July 17, 2020), reflect a Centennial Site contaminated enough to be considered a superfund site in need of remediation of existing mine waste including contaminants that cause a significant risk to human health like arsenic, lead, thallium, mercury, and other metals (DEIR, p. 4.7-3). According to the Water Board, these metals and contaminants "present a potential human health risk resulting from routine, long-term exposures including ingestion, inhalation of dust or vapors, and dermal contact. In

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addition, contaminated mine waste presents potential risks to ecological health and water quality." (*Water Board Comment Letter*, p. 1, Attachment A.) As indicated in the DEIR, such cleanup must be addressed to protect the health of the community and to allow any future uses on the site, including the placement of mine waste. (DEIR p. 3-10.)

Unfortunately, the DEIR does not identify the existing contaminated site as part of the environmental baseline for purposes calculating impacts. Instead, the DEIR assumes that the Centennial remediation has been fully completed by the start of the Project and applies anticipated conceptual future conditions to complete the analysis of aesthetic impacts, agriculture, biological resources, hazards and hazardous materials, and wildfire risk. (DEIR, pp. 1-6 to 1-7.) Not only is this approach inconsistent with CEQA, but it is not supported by substantial evidence in the record.

The Centennial cleanup *may* happen as the result of a Voluntary Agreement that involves Rise Gold working with DTSC to prepare a draft and then a future final Remedial Action Plan ("RAP") describing the methods for remediating the Centennial Site. Each remediation approach results in varying levels of ground disturbance, depending upon how much contaminated soil is removed from the site and how much is placed onsite on existing wetlands and sensitive resources. The RAP describes the various remedial alternatives and then ultimately, DTSC will select one that reduces the risks associated with environmental conditions identified at the Site. The RAP also outlines procedures for excavation, on-site treatment, and consolidation of mining waste as engineered fill in an area that will be subject to land use controls at the Site. The remedial alternative will be selected based on its effectiveness, feasibility, and cost as part of a Final RAP, which has not yet been developed.

The draft RAP along with an Initial Study/Mitigated Negative Declaration ("IS/MND") for the cleanup work are currently out for public review. DTSC has <u>not yet selected a preferred remedial alternative</u> which means that the exact level of ground disturbance associated with the Centennial cleanup is not yet known. The latest communication with the DTSC project manager for the Centennial cleanup highlights just how far off the decision is at this point. In response to a request for a status update regarding the Final RAP, Dean Wright, the Project Manager at DTSC in charge of the Centennial cleanup said "I've almost given up anticipating a decision on the Centennial M-1 RAP. Typically, the RAP review and especially CEQA reviews are where project schedules can go off the rails and that has certainly happened in this case." (Email communication from Dean Wright, March 21, 2022, italics added.) While DTSC anticipates finalizing a remedial alternative soon, there is no clarity on which remedial alternative will be selected and when work would actually begin.

After the Final RAP is provided for public review, the applicant is then required to produce a more detailed Remedial Design Implementation Plan ("RDIP") with additional design details, which also could affect the footprint of ground disturbance at the Centennial site.

The DEIR cannot rely on the draft RAP that is still under review by DTSC as substantial evidence of likely future conditions because such decisions have yet to be made. DTSC may ultimately not approve the RAP as proposed and require an entirely different design based on public input. Accordingly, speculating on the specific levels of disturbance associated with the cleanup in the DEIR would be inaccurate, misleading, and not supported by substantial evidence because they are still under review and may change significantly.

As just one example, the draft RAP proposes to potentially impact almost five acres of existing wetlands on the Centennial site, but several commenters have asked DTSC to revise the approach to reduce the level of impacts on wetlands, which would significantly change the ground conditions post remediation and significantly alter the resulting impacts from placement of mine waste from the Idaho-Maryland Mine.

Moreover, as acknowledged in the DEIR, it's possible that the remediation may never occur (DEIR, p. 3-26). Accordingly, the use of conceptual future baseline conditions that have not been approved and may never take place is wholly inappropriate for calculating environmental impacts associated with this Project.

CEQA Guidelines only grant authority to change the environmental baseline from existing physical conditions in very limited circumstances. Where absolutely necessary to provide the *most accurate picture practically possible of the project's impacts*, a lead agency may define existing conditions by referencing historic conditions, or conditions expected *when the project becomes operational*, or both, that are supported with substantial evidence. (CEQA Guidelines § 15125(a)(1).) Here, there is insufficient evidence to confirm that the cleanup will be remediated, much less by the time the Project becomes operational. Indeed, the County is so unsure of the potential future conditions of the Centennial cleanup, and the timing thereof, that the DEIR includes an alternative (Alternative #2) design that could become necessary if the Centennial cleanup is never completed. This approach completely undermines the DEIR assertion that there is substantial evidence supporting the assumption that Centennial cleanup will be completed when the Project becomes operational. The County cannot have it both ways. Either the Centennial cleanup *is certain* enough to be expected to be in place when the Project becomes operational *OR uncertain* enough as to require a separate alternative excluding use of the site. It cannot be both. Given the questionable timeline of DTSC's approval process, the responsible and appropriate approach would be to describe the existing environmental baseline at the time of the NOP, without any remediation of the Centennial Site, to get an accurate picture of all Project impacts.

The brief discussion in the DEIR ostensibly supporting the wholly unique baseline approach (pp. 1-3-1-7) suggests that the DEIR is not using a projected future baseline, which is false. The DEIR acknowledges that Centennial cleanup may not occur until after Project operations have begun (DEIR p. 3-26), which means the DEIR must meet the strict legal standard for using a future baseline, which it does not. The CEQA Guidelines limit use of such a future speculative baseline to those instances in which the DEIR "demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record." (CEQA Guidelines § 15125(a)(2).)

The DEIR does not provide any evidence to suggest that assumption of the Centennial site is necessary to avoid misleading the decision-makers or the public. On the contrary, the use of the future conceptual baseline that may or may not happen prior to Project operations results in a very misleading analysis of impacts that fails to identify all potential and likely impacts of the Project at the Centennial location. As described above, such projections are not supported by substantial evidence. On the contrary, the substantial evidence in the record in the DEIR, the Water Board's Comment Letter, and the DTSC Draft RAP, suggest that the Centennial remedial design has not yet been selected and could change significantly. It is far from a reliable projection. Accordingly, the DEIR must be revised and recirculated to identify the existing physical conditions of the Centennial Site and to provide a comprehensive analysis of impacts to give both the public and decision-makers an accurate picture of all potential impacts.

CEQA prohibits such assumptions of Project approval before DTSC has completed its review and requires the DEIR to identify existing environmental conditions, not a future baseline based on speculation. CEQA strictly prohibits the use of a future baseline, particularly when projections are unreliable and not supported by substantial evidence in the record.

The DEIR selectively uses a future baseline for certain resource areas that result in an underestimation of potential impacts, which is prohibited under CEQA. The last thing the County should be doing for a Project that could cause 80-years of community impacts is underestimating potential issues to expedite approval. While the DEIR sites all of the aspects of the Centennial Site, never does it provide clear substantial evidence to support the assumption that Centennial will be cleaned up in a certain way, and certainly should not make such assumptions before DTSC has completed its CEQA and approval process.

To protect the County from legal challenge, the DEIR must be revised to address existing conditions on the unremediated Centennial Site and be recirculated to provide the public and decision makers with an accurate picture of all potential impacts.

3. Inconsistent Approach Leads to Undercounting of Impacts Violating CEQA

Grp 20-7

The DEIR must be revised and recirculated to address the various flaws in the analysis that result from assuming the Centennial cleanup as part of the baseline. In particular, the failure to adequately address the Centennial cleanup leads to flaws in the biological, hazards, geology, aesthetics, and cumulative impact analysis among other resource areas.

a. Undercounting of Biological Impacts In Connection with Centennial

The DEIR arbitrarily assumes the level of biological impacts associated with the Project will be less than significant because it assumes that the Centennial cleanup, which has not yet been approved (and has been challenged by the public) will be completed before Project construction. As described above, this assumption is not supported by substantial evidence, and even if it were, the DEIR cannot rely on a remedial design that has not yet been selected or approved by DTSC. The DEIR acknowledges that potential biological impacts would vary significantly depending on the remedial design chosen for the Centennial cleanup. (DEIR, p. 2-2.) The DEIR also describes the Centennial cleanup inconsistently stated that the remediation may impact some amount up to 28 acres chapter two, but then assuming that all 28 acres will be disturbed in certain sections (DEIR, p. 4.4-2.) The DEIR is riddled with these kinds of inconsistencies that must be addressed in a revised DEIR.

Grp 20-8

In the biology chapter, the DEIR acknowledges that the exact number of impacts from Centennial "cannot be precisely established for the baseline condition" because DTSC has not approved the Final RAP (DEIR, p. 4.4-3), but then includes a map identifying a massive whole in the center concluding that this entire area will be impacted by the Centennial cleanup. (Figure 4.4-1, p. 4.4-4.) This map is not supported by substantial evidence and provides the public with a misleading impression that this entire area will be wiped clean of all environmental resources prior to Project implementation, including four acres of existing wetlands and other sensitive habitat, when this design has not been approved by DTSC. Using such an approach, conveniently cuts out over four acres of potential impacts to wetlands and leads the DEIR to conclude that biological impacts will be less than significant.

As shown in the DTSC IS/MND, most of the 'blank' area on Figure 4.4-1 is currently home to a variety of sensitive resources including wetlands, and a large number of commenters have asked DTSC to revise the RAP to avoid these resources, which would significantly alter the footprint of this 'disturbed area' and thereby significantly change the number of impacts that the mine waste would cause. As a result of the DEIR's assumption, the estimated impacts go from 5 acres of permanent impacts to wetlands down to 0.03 acres. This is a gross underestimate of existing conditions and likely biological impacts at Centennial from the Project. The result is a significant undercounting of wetland impacts resulting in an inappropriate conclusion of less than significant impacts. When impacts are speculative or

unknown, the DEIR must conservatively assume the most impacting result, which here, would involve placement of mine waste on the existing 4-5 acres of wetlands. This should be identified as a significant impact that requires at the very least, a one to one mitigation ratio for wetlands.

Given the speculative nature of the analysis and the likelihood that the Centennial cleanup design will change, biological impacts should be assumed to be significant and unavoidable. The goal of CEQA is to conservatively identify, in an accurate, transparent, and user-friendly way, ALL of the potentially significant impacts associated with the Project, which very easily could include several additional biological and hazardous materials impacts if DTSC chooses a different alternative for the Centennial clean up.

Accordingly, the DEIR must incorporate the Centennial cleanup to provide a clear and accurate picture of impacts and identify this impact as potentially significant.

b. Geology Analysis is Flawed Based on the Centennial Approach

Moreover, the vegetated communities post remediation are not handled consistently throughout the document leading to an undercounting of geological impacts. For example, the DEIR assumes that approximately half of the Centennial Site will have been disturbed by the remediation, leading to a much smaller footprint of impacts associated with the subsequent engineered fill and placement of mine waste. But the opposite is anticipated in the geology chapter. In the geology analysis, the DEIR assumes that the erosion concerns associated with future mine waste will be avoided because the area will be revegetated after remediation in accordance with DTSC oversight pursuant to the Final RAP. (DEIR, p. 4.6-35.) The DEIR assumes in the biology analysis the vegetated areas will be gone – thereby avoiding significant impacts to special status species habitat, but for geology, the area will be revegetated to avoid erosion. The DEIR cannot have it both ways. The remediated Centennial Site will either be revegetated and address erosion, thereby resulting in additional biological impacts from the placement of new mine waste OR the area will remain disturbed and therefore must be identified as a geological impact. This is just one example of the flawed analysis that results from the inconsistent use of the Centennial cleanup as part of the baseline and highlights why the cleanup must be part of the Project, incorporated into all impact areas, and the DEIR must be recirculated. The current draft simply does not provide the public or decision-makers with an accurate picture of impacts.

Grp 20-9

c. Hazard Impacts Are Undercounted As a Result of Centennial

Similar to biology, the DEIR assumes that all contamination at the Centennial Site will be magically cleaned up by the start of Project impacts and thereby concludes that potential contaminants "do not exist under the adjusted baseline condition." (DEIR, p.4.7-3.) The approach avoids any analysis of the various remedial designs being considered in the draft RAP and undercounts any potential remaining contamination that could be impacted by the placement of additional mine waste and construction efforts. As described above, the ultimate remedial action does not guarantee that all contaminants will be removed as the design will be chosen based on feasibility, implementability, and cost, and may not address all contaminants. The DEIR must conservatively assume that some contaminants may remain at Centennial that could be impacted by the placement of additional mine waste. Once again, the DEIR has used the creative future baseline to magically erase potentially significant impacts associated with hazards that could pose a significant risk to health and human life.

Grp 20-10

The Centennial Site is a superfund site that only avoided formal designations as a result of the Voluntary Cleanup Agreement agreed to by Rise Gold; however, the site remains significantly contaminated. These existing conditions cannot be glossed over in the DEIR, and the hazards

section must conservatively analyze potential additional impacts of placing mine waste on an area that has not been fully remediated. Indeed, all substantial evidence suggests that the RAP has not been completed, has not been shared with the public, and may not address all potential and future contaminants that could exist at the site post cleanup.

d. Cumulative Impacts Are Underestimated As a Result of Centennial

Grp 20-11

Perhaps the most egregious issue with the Centennial baseline approach is the resulting Cumulative Impact analysis, which inconceivably fails to include Centennial cleanup one of the projects that must be viewed cumulatively with other Projects to conservatively identify all cumulative impacts. CEQA defines "Cumulative impacts" as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." (CEQA Guidelines §15355.) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related *past, present, and reasonably foreseeable probable future projects*. If not included as part of the Project, the Centennial cleanup should at the very least be included in the cumulatives analysis to give the public an accurate picture of all potential impacts occurring at the Centennial Site, including air quality and traffic impacts from truck hauling, hazard impacts from contaminant exposure, etc. Yet, incredulously, the cumulative projects list does not include the Centennial cleanup, which is – depending upon how you look at it- either a past, present, or future project that will cause cumulative impacts when considered with this Project. In removing the Centennial cleanup from this critical part of the analysis, the DEIR avoids identifying potentially significant and unavoidable cumulative biological, air quality impacts, hazards, geological, aesthetics, among others. This section must be revised to include the Centennial Site and to identify potentially significant cumulative impacts.

By excluding the Centennial cleanup work from the Project and from the analysis, the DEIR woefully undercounts cumulative impacts and fails to provide the public with an accurate accounting of likely Project impacts. This section must be revised and the DEIR must be recirculated.

4. Biological Analysis is Flawed

In addition to the above, the biological analysis must be revised to address the following flaws in the analysis:

Grp 20-12

a. Pinehill Flatbush

The DEIR identifies potentially significant impacts to the Pinehill Flatbush on the Centennial site, but cannot possibly know the exact level of potential impacts without first confirming the design of the Centennial clean up. (DEIR, p. 2-37). The County makes an assumption that the clean-up will impact 28 acres, but also admits that such numbers may be different if DTSC chooses a different clean up alternative. (DEIR, p. 2-2) Again, highlighting the failures of the analysis. There are significant populations of this plant species that must be adequately analyzed and protected by incorporating the Centennial cleanup.

b. Foothill Yellow-Legged Frog (FYLF)

Grp 20-13

The FYLF frog is state listed under the California Endangered Species Act ("CESA") and was proposed to be listed as endangered under the Federal Endangered Species Act ("FESA") on December 28, 2021 (86 FR 73914, December 28, 2021). The DEIR identifies potentially significant impacts to this species, which impacts are, as described above, not correctly quantified as a result of the Centennial baseline issue, and may be far more significant than currently

described. Any impacts to a CESA listed species will require Section 2081 Permit from the California Department of Fish and Wildlife ("CDFW") prior to construction, and may require an Incidental Take Permit under the FESA from the US Fish and Wildlife Service ("USFWS") if the proposed rule becomes final. Rather than require that the applicant consult with the CDFW and USFWS now to ensure protection of this endangered species, the DEIR fails to mitigate this risk and requires agency consultation only after construction starts. (See DEIR, Mitigation Measure 4.4-2(a).) At this point, the Project would be underway, and it may be too late for Rise Gold to obtain either a Section 2081 Permit from CDFW or an ITP from the USFWS. Indeed, there is no guarantee that such permits would be granted by either CDFW or the USFWS.

Section 2081 Permits regularly take 1-3 years to obtain. Mitigation Measure 4.4-2(a) must be revised to require Rise to consult with both CDFW and USFWS prior to the start of construction to obtain any necessary take permits for the FYLF. In the alternative, the mitigation measure must require Rise to halt all construction if and when the species is found until Rise has obtained an ITP or 2081 Permit for the species. The DEIR cannot assume that CDFW would issue such a permit as such authorizations are completely discretionary and regularly denied. Accordingly, such impacts must be mitigated up front to reach a less than significant conclusion or identified as potentially significant and unavoidable.

The failure of the DEIR to include such protective measures, which are regularly required by CDFW as a responsible and trustee agency under CEQA, raises the issue of whether CDFW was appropriately consulted in the preparation of this DEIR as required under CEQA to ensure that the proposed mitigation measures are viable. (*See SCVWater District v SFRWQCB* 59 Cal.App.5th 199 2020.) Any mitigation measure that requires input and approval from CDFW, should involve direct consultation between CDFW and the County before finalizing the CEQA document.

Accordingly, we respectfully ask for clarification in the response to comments document clarifying the consultation with CDFW in the preparation of this DEIR.

c. California Red-Legged Frog (CRLF)

Grp 20-14

The CRLF is a federally listed endangered species that may be significantly impacted by this Project, but the DEIR offers only deferred mitigation to ensure its protection. (DEIR, MM 4.4-2(c), p.2-41.) Similar to the YLF, the DEIR cannot cross its fingers and hope that the species is not there, only then require consultation with the USFWS after the fact. The DEIR must identify any potential impacts to federally listed species as potentially significant, must require the applicant to consult with USFWS, identify impacts, and complete Section 7 or Section 10 consultation to ensure that impacts to RLF are mitigated to less than significant levels. Without such assurances, the DEIR should identify these impacts as significant and unavoidable.

d. California Black Rail (CBR)

Grp 20-15

The California Black Rail is not only state-listed as threatened, but is also a fully protected species under the California Department of Fish and Game Code. Fully protected species cannot, under any circumstances, be taken or impacted without violating state law. No permits can be given by CDFW to impact fully protected species. The DEIR incorrectly suggests that if a CBR is identified, Rise can obtain a take permit from CDFW for this species. (See DEIR, MM 4.4-2(d).) CDFW cannot grant any take permits for fully protected species. Accordingly, MM 4.4-2(d) is not feasible and must be revised. Had the County consulted with CDFW prior to issuing the DEIR, CDFW would have clarified such issues and ensured feasible mitigation. The Project must be designed to to avoid all impacts to fully protected species such as the CBR. Not only should CDFW weigh in on potential impacts as both a trustee and responsible agency under CEQA, but the County must revise the determination to call out this impact as potentially significant and unavoidable.

Moreover, the impacts to the CBR and other bird species must be revised to analyze the potential long-lasting impacts to sensitive species habitats from long-term vibration and noise from the 80-year operation of the mine, including mine blasting, truck trips, hauling mine waste, etc. Such noise impacts have been known to cause long-term harassment of bird species.

e. Biological Impacts Should be Identified as Significant and Potentially Unavoidable.

Grp 20-16

Given the unknown impacts associated with the Centennial cleanup, the potential for take of state and federally listed species, and the potential for impacts to fully protected species that cannot be authorized by permit, such impacts should be identified as significant and potentially unavoidable.

5. Air Quality Analysis is Flawed

Many others in the community have provided detailed comments on the air quality analysis that we support, including the Baseline Environmental Consulting Report, February 15, 2022, included with comments from Shute, Mihaly, and Weinberger, March 30, 2022, which we will not restate here, but fully support.

Grp 20-17

The air quality analysis fails to include the significant impacts associated with the Centennial cleanup, and must be revised for that reason alone. In addition, the air quality, greenhouse gas and energy use analysis must be revised to address a more accurate project timeline. The Project description suggests a construction timeline of 18 months. (DEIR at 3-37.) But, the DEIR's air quality analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. (DEIR, pps. 4.3-44 to 4.3-46, 4.3-66 to 4.3-67, 4.3-74. Moreover, the DEIR fails to address significant air quality emissions from operation of the mine for the next 80 years, including emissions of criteria air pollutants that must be mitigated. The DEIR currently relies on mitigation offsets that lack performance standards and therefore cannot be relied upon to mitigate significant impacts to less than significant levels. Moreover, the DEIR relies on mitigation measure 4.3-1(b) which requires Tier 4 engines to reduce significant emissions when 'commercially reasonable' which is defined vaguely to mean 'available taking into consideration factors such as critical path timing of construction and geographic proximity of the equipment location to the project sites.' With language this vague, the applicant can claim that tier 4 engines are not 'commercially available', leaving this impact unmitigated. Tier 3 engines will not be sufficient to mitigate this impact to less than significant levels, as a result this impact should be identified as potentially significant and unavoidable.

6. Hydrology Analysis is Flawed

Many experts in the community have highlighted significant concerns with the hydrological analysis (see Baseline Report referenced above), which comments we fully support. In addition, we highlight the following major concerns with the hydrology analysis.

Grp 20-18

a. Analysis of 31 wells is a gross underestimate.

The DEIR concludes that the significant discharges, hydromorphology, and dewatering (of at least 300 wells) associated with this Project can be mitigated to less than significant levels, mostly by relying on general permits issued by the Water Board and using insufficient modeling data (DEIR, p. 2-78.) In 1996, the County approved a much smaller project at the mine for only 5 years that was estimated to impact 101 wells. The DEIR and the Water Supply Assessment ("WSA") for the

Project conclude, with no evidence to contradict the County's previous studies, that the much larger mine Project – which will continually pump 2,500 gallons per minute for the first 6 months, 850 gallons per minute over the next 80 years – will impact only 7 wells, at most 31. Experts in the community have reviewed the hydrology report that supports the WSA, and have identified extensive errors, including issues with the groundwater modeling and underlying assumptions. (See Baseline Report for additional details.)

Grp 20-19

During its public meeting to review the WSA on February 9, 2022, the Nevada Irrigation District ("NID") the agency responsible for providing additional hookups to residents that lose their well water supply highlighted their concern about the veracity of these conclusions and subsequently asked the Planning Commission on March 24, 2022, to revise the DEIR to require Rise to provide a security bond of up to approximately $14 million to support likely future hookups that likely will be required as a result of this Project's impacts to groundwater wells. This requested mitigation measure from the expert agency on water supply should be incorporated, and this should be identified as a potentially significant and unavoidable impact that requires recirculation of the DEIR.

b. Mitigation Measures Are Insufficient to Reduce Well Impacts to Less than Significant Levels

Grp 20-20

CEQA requires mitigation measure to be fully enforceable through permit conditions, agreements or other legally-binding instruments (CEQA Guideline 15126.4). Mitigation Measure 4.8-2 requires Rise to provide 31 new water connections by constructing a water line along Bennet Road, but NID has not committed to granting such new connections. These connections will be subject to discretionary approvals that may not be granted. Accordingly, this mitigation measure cannot be deemed fully enforceable or achievable and the DEIR must identify potential impacts to groundwater wells as significant and unavoidable, which triggers a recirculation of the DEIR. Even if such a measure were enforceable by the County, which it is not, the mitigation measure does not mitigate the impact to less than significant levels. People could potentially lose access to water supplies forever, rendering their property essentially worthless. This potentially significant and unavoidable impact needs to be identified in the DEIR.

7. Permitting Overview is Flawed and Leads to Insufficient Mitigation

a. Water Board Permitting is Flawed and Leads to Deferred Mitigation With the Incorrect Performance Standard

Grp 20-21

The DEIR repeatedly and falsely claims that this Project, which will involve the pumping of 2,500 Gallons per minute for initial dewatering (815 Million gallons over 6-month period) and 850 gpm over the life of the 80-year project will fall under the State Water Board's General Permit for Limited Threat Discharge Permit (General Order R5-2016-0076; NPDES No. CAG995002) ("Limited Threat General Order"). The DEIR explicitly relies on the use of this General Order to ensure that hydrology impacts from discharges will be less than significant. (DEIR, pp.2-78, 3-15 to 3-18, 4.8-28) The extensive discharges this Project would cause for the next 80 years do not pose a 'low threat', but rather pose a significant threat to groundwater resources and the hydromorphology of Wolf Creek and the surrounding sensitive resources, and will not qualify under the Limited Threat General Order for many reasons, including but not limited to the fact that the proposed discharges:

i. Will exceed discharge limitations;

ii. Will not meet the required effluent limitations in the Limited Threat General Order based on the levels of ammonium, manganese, and likely other metals in the discharged effluent;
iii. Likely will violate the Basin Plan by impacting beneficial uses of receiving waters;
iv. May contain acid mine drainage;
v. May exceed TMDLs at the point of discharge;
vi. Will alter temperature > 5 degrees;
vii. May cause acute or chronic toxicity in receiving water; and
viii. May a nuisance under 13050 of the Water Code.

Grp 20-22

For all of these reasons, it would be highly inappropriate for the Water Board to allow this applicant to use the Limited Threat General Order to permit these extensive discharges, which will last 80+ years. Similarly, it also inappropriate for the DEIR to rely on the use of such a General Order to conclude that the Project will result in less than significant impacts under CEQA. (DEIR, pp.2-78, 3-15 to 3-18, 4.8-28; Mitigation Measure 4.8-1(a).). The DEIR should be revised to clarify that the Project will require an individual NPDES permit for proposed water discharges. Moreover, Mitigation Measure 4.8-1(a) should be revised to require an individual NPDES Permit under Section 402 of the Clean Water Act and an individual Waste Discharge Requirement ("WDR") under the California Porter-Cologne Act for such extensive discharges to ensure that discharges proposed for this Project will be mitigated to less than significant levels. The current mitigation measure relies on the use of an inapplicable permit to the Project, and accordingly, does not currently reduce the significant impacts from discharges to less than significant levels. The measure must be revised and the DEIR must be recirculated.

Grp 20-23

Based on this underestimate of permitting requirements, it is not clear whether the Water Board was consulted in the preparation of this DEIR as a responsible agency under CEQA as required under the CEQA Guidelines. Similar to the request regarding CDFW, we respectfully request that the County include in the response to comments document a description of its consultation with responsible and trustee agencies in the preparation of this DEIR.

Grp 20-24

8. Conclusion

For all of the reasons stated above, the DEIR is not adequate under CEQA and cannot be certified. It is imperative that the County revise and recirculate this DEIR to provide the public and decision makers with an accurate picture of all impacts that will be caused by this Project. To protect itself from legal liability and to protect this beautiful community, the DEIR must be revised and recirculated.

Thank you for your careful attention to this Project of critical concern to the residents of Nevada County.

Sincerely,

Jillian B. Blanchard
Managing Partner
Rudder Law Group, LLP

ATTACHMENT A
WATER BOARD COMMENT LETTER







Central Valley Regional Water Quality Control Board

24 September 2021

Dean Wright, Project Manager
Site Evaluation and Remediation Unit
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826

REVIEW OF DRAFT FINAL REMEDIAL ACTION PLAN CENTENNIAL M-1 PROPERTY, NEVADA COUNTY

Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff has reviewed the 25 January 2021 *Draft Final Remedial Action Plan* (RAP) for the Centennial M-1 Property (the Site) located at 10344 Centennial Drive in Grass Valley, Nevada County. The RAP was prepared pursuant to a Voluntary Cleanup Agreement (VCA; Docket No. HSA-FY18/19-014) between Rise Grass Valley Inc. (the Proponent) and the California Department of Toxic Substances Control (DTSC). NV5, an engineering services company, prepared the RAP on behalf of Rise Grass Valley Inc. Pursuant to the VCA, DTSC is the State lead agency for oversight of site characterization, remedy selection, and implementation of the cleanup activities. The Central Valley Water Board is a support agency for the project.

SITE INFORMATION AND DTSC RAP APPROACH:

The Site is historically associated with the Idaho Maryland Mine, a former underground hardrock (lode) gold mining operation. Historical mining and milling structures associated with the former mine were generally located to the east of the Site, and the Site was used primarily for disposal of mine waste (tailings and waste rock) to land. The historical tailings ponds comprise approximately two-thirds of the Site (37.1 acres of 56.4-acres).

Site investigation has identified mill tailings, waste rock, and impacted soil that contain lead, arsenic, mercury, and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations. Elevated metals concentrations present a potential human health risk resulting from routine, long-term exposures including ingestion, inhalation of dust or vapors, and dermal contact. In addition, contaminated mine waste presents potential risks to ecological health and water quality.

The Site is zoned for industrial development (M1). A specific development plan has not been prepared. Prior to Site development for industrial/commercial use, the contaminated mine tailings are to be remediated under DTSC oversight. The RAP was prepared to outline the proposed remedial action based on the results of the risk assessment presented in the Preliminary Environmental Assessment (NV5, 2020). The purpose of the RAP is to evaluate



remedial alternatives and to select a remedial alternative that reduces, to the extent feasible, the risks associated with environmental conditions identified at the Site. The evaluation of remedial alternatives considers the effectiveness, implementability and cost associated with each alternative. The RAP also outlines procedures for excavation, on-site treatment, and consolidation of mining waste as engineered fill in an area that will be subject to land use controls at the Site.

A Remedial Design Implementation Plan (RDIP) will follow with more specific design documents and supporting details.

CENTRAL VALLEY WATER BOARD REQUIREMENTS

The following Water Board requirements apply to the work outlined in the RAP:

Water Code 13304, subdivision (a) provides in part that:

> *A person … who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution…, shall, upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution…, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts.*

Water Code, section 13050, subdivision (q)(1) defines mining waste as follows:

> *"Mining waste" means all solid, semisolid, and liquid waste materials from the extraction, beneficiation, and processing of ores and minerals. Mining waste includes, but is not limited to, soil, waste rock, and overburden, as defined in Section 2732 of the Public Resources Code, and tailings, slag, and other processed waste materials, including cementitious materials that are managed at the cement manufacturing facility where the materials were generated.*

Title 27 California Code of Regulations (Title 27) Mining Waste Management Regulations (Cal. Code Regs., tit. 27, § 22470 et seq.) apply to all discharges of mining wastes and to owners/operators of a waste management unit for the treatment, storage, or disposal of mining waste.[1] The Mining Waste Management Regulations further define "mining waste" as:

> *waste from the mining and processing of ores and mineral commodities. Mining waste includes: (1) overburden; (2) natural geologic materials which have been removed or relocated but have not been processed (waste rock); and (3) the solid residues, sludges, and liquids from the processing of ores and mineral commodities.* (Cal. Code Regs., tit. 27, § 22480, sub.(a)).

Under Title 27, the Site constitutes an "inactive mining waste management unit," which is defined as:

> *any area containing mining wastes which is located at a present or former mining or milling site, and where all mining operations and discharges of mining waste ended*

[1] Authority cited: Water Code § 13172; Cal. Code Regs., tit. 27, § 20080(h).

and have not been resumed for 5 years, or more. (Cal. Code Regs., tit. 27, § 20164.)

Further, under Title 27 (see Cal. Code Regs., tit. 27, § 22470, subd. (a)), the Site's inactive mining waste management units are subject to reporting requirements and siting/construction standards determined to be feasible with regard to in situ containment of waste (see Section 20090, subd. (d)). Applicable and feasible requirements under Title 27 include (without limitation) those provisions pertaining to the containment, closure, and post-closure maintenance of inactive mining waste management units. (See Cal. Code Regs., tit. 27, §§22470-22510.)

The Central Valley Water Board reserves the right to designate additional Title 27 provisions to the inactive mining waste management units.

CENTRAL VALLEY WATER BOARD PERMITTING REQUIREMENTS

The following permitting requirements may apply to the project.

1. If a U.S. Army Corps of Engineers Clean Water Act Section 404 permit is required for the project, a corresponding Clean Water Act Section 401 Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

2. If the U.S. Army Corps of Engineers determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by the Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands are subject to State regulation.

   The State Board's "Procedures for Discharges of Dredged or Fill Material to Waters of the State" state that "Unless excluded by section IV.D, applicants must file an application with the Water Boards for any 111 activity that could result in the discharge of dredged or fill material to waters of the state in accordance with California Code of Regulations, title 23, section 3855." (p. 4)

   For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:.
   https://www.waterboards.ca.gov/centralvalley/help/permit/#wqcapp

3. Dischargers whose projects disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ, and 2012-0006-DWQ, NPDES No. CAS000002. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground (such as stockpiling or excavation) but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit

requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/construction_general_permits/

4. Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

5. If the proposed project includes dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are covered under the *General Waste Discharge Requirements/NPDES Permit for Limited Threat Discharges to Surface Waters* Order R5-2016-0076-01/NPDES Permit No. CAG995002 (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/

6. If post remediation use of the Site includes placement of soil/waste rock (i.e. mining waste) from the proposed Idaho-Maryland Mine-Rise Grass Valley project, site activities will require Title 27 waste discharge requirements. See Specific Comment #1 for further discussion.

CENTRAL VALLEY WATER BOARD COMMENTS

General Comments:

1. Information provided in the RAP is comparable with information which would be submitted to a Regional Board in a Report of Waste Discharge (Water Code §13260) for Title 27 waste discharge requirements for discharges of mining waste and contains similar information required by the Title 27 Mining Waste Management Regulations. As required by Title 27, sections 22480 through 22510, the RAP has:
    a. characterized and classified the mining waste,
    b. identified the potential risk of water quality degradation for both surface water and groundwater,
    c. identified treatment and containment strategies, and
    d. specified mining unit siting and construction standards, monitoring requirements, and closure and post closure maintenance requirements, including financial assurances.

2. The term "engineered fill" discussed throughout the RAP is considered a "mining unit" as defined in Title 27, section 22470 because the engineered fill material is derived from material classified under Title 27 as mining waste. As such, Title 27 regulations pertaining to mining units are applicable.

3. The terms "chemical stabilization", "cement stabilization", and "stabilization" are viewed as referring to "treatment" as identified in Title 27, section 22480, subdivision (d).

4. To the extent feasible, the cumulative impacts to water quality incurred by the project described in the RAP and potential future discharge of mine waste generated by the proposed Idaho-Maryland Mine-Rise Grass Valley project should be considered in a single environmental document. This seems particularly relevant considering the potential use of the Centennial Property for management and reuse of mine waste generated by the proposed Idaho-Maryland Mine-Rise Grass Valley project. Given the information currently available to us, staff are unable to assess the cumulative impacts to water quality or whether the existing environmental document prepared for the RAP is adequate to support future WDRs for Waters of the State (see Permitting Requirement 2).

Specific Comments:

1. **Section 1.4.1 DTSC Comments on Draft RAP**
   4. *DTSC has been made aware that post remediation use of the property may include additional soil/waste rock being brought on the Site from the nearby mine if/when it reopens. If such a post remedial use of the property is envisioned, DTSC believes its potential impacts on the remedy or maintenance of the remedy should be briefly discussed in the RAP in the interest of full disclosure to the public.*

   Comment: If post remediation use of the Site includes placement of soil/waste rock (i.e. mining waste) from the proposed Idaho-Maryland Mine-Rise Grass Valley project, the Central Valley Water Board would exercise its Water Code section 13172 authority and Title 27, section 20080, subdivision (h) to regulate the discharges of mining waste. Additionally, the discharge of mining waste at the remediated Site will require submittal of a Report of Waste Discharge and issuance of Waste Discharge Requirements from the Central Valley Water Board (Water Code §13260).

2. **Section 2.6.3 Intended Use of the Property**
   The remedy described in this RAP includes the consolidation of mine waste as engineered fill, and placement of clean engineered fill as a cap over the consolidated mine waste.

   Comment: The use of clean engineered fill as a cap over the consolidated mining waste may be appropriate for Group C mining waste (see Cal. Code Regs., tit. 27, §22490, subd. (c) and Table 1.3). However, the following details are needed, either in the final RAP or RDIP:
   a. run-on/run-off controls (Cal. Code Regs., tit. 27, §22490, subd. (h)(3) and §20365, subd. (e)),
   b. the source or origin, soil properties, and stability of the clean engineered fill,
   c. whether the cap will be vegetated or stabilized to prevent erosion as required by California Code of Regulations, title 27, section 22510, subdivision (m), and
   d. specific plans to keep the mining unit "high and dry".

3. **Section 3.4.4 Summary of Water Quality Evaluation**
   Laboratory results indicate that the potential for acid generation is low and the potential for discharge or leaching of heavy metals at concentrations that would significantly impact surface water or groundwater quality is low. Based on these results the mine waste excluding the TP19 hot spot, when considered as a whole, can be managed as Group C mine waste as defined in CCR Title 27 Section 2248(b).

Comment: Central Valley Water Board staff concurs with the characterization and classification methodology for the mining waste and the proposed treatment of the TP19 Hot Spot material (see General Comment 2 above). We also concur with the RAP's assessment, that when considered as a whole, the waste can be managed as Group C mining waste in accordance with Title 27 Mining Waste Management Regulations.

4. **Section 7.7.5 Characterization for On-Site Placement**
Characterization of affected mine waste and soil was performed as part of the site investigation. Mine waste and affected soil that is (sic) *to be placed on-site will not require further characterization.*

Comment: The RAP does not propose any confirmation sampling to demonstrate removal of mining waste. Typically, these types of projects include confirmation sampling (e.g., field characterization such as X-ray fluorescence with a subset of laboratory samples) to demonstrate achievement of cleanup goals. Why is this not needed for this project and what method(s) will be used as the basis for evaluating that contaminated soil (mining waste) has been removed?

5. **Section 7.8.1 Deed Restriction**

Comment: Is it reasonably anticipated that soil/waste rock (i.e. mining waste) from the proposed Idaho-Maryland Mine-Rise Grass Valley project could in the future encroach upon or cover the deed restricted engineered fill? If so, is this a cause for concern?

CLOSING

The draft Final RAP should be revised to address Central Valley Water Board staff's comments. Staff understands that a RDIP will follow with more specific design documents and supporting details. We request the opportunity to review and offer further comments on the Final RAP and RDIP.

Please contact Jeff Huggins at (916) 464-4639 or Jeff.Huggins@waterboards.ca.gov with any questions regarding the contents of this letter. We are available to meet with you if you would like to discuss the applicable Water Board requirements or potentially applicable permits.

Jeff S. Huggins





JEFF H. HUGGINS
Water Resource Control Engineer

JOE MELLO, PG 6091, CHG 545
Senior Engineering Geologist
Central Valley Water Board

cc: (via email only)

Matt Kelley, Senior Planner Nevada County Planning Department, Nevada City
Ben Mossman, Chief Executive Officer, Rise Grass Valley
Jason Muir, NV5, Nevada City

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JOE MELLO, PG 6091, CHG 545
Senior Engineering Geologist
Central Valley Water Board

cc: (via email only)

Matt Kelley, Senior Planner Nevada County Planning Department, Nevada City
Ben Mossman, Chief Executive Officer, Rise Grass Valley
Jason Muir, NV5, Nevada City

GROUP LETTER 20: JILLIAN BLANCHARD, RUDDER LAW GROUP, LLP

Response to Comment Grp 20-1

The commenter generally asserts that the DEIR is inadequate and should be revised and recirculated. The commenter states that reason for recirculation is the DEIR's failure to describe the project, identify significant impacts, identify feasible mitigation measures to minimize impacts and failure to identify alternatives that would avoid impacts. This comment is general in nature and does not specifically identify any defect in the DEIR. Accordingly, no further response is required. Responses to the commenter's specific concerns are provided below.

Response to Comment Grp 20-2

The commenter asserts that the DEIR is deficient because it does not include the Centennial site cleanup project. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-3

The commenter asserts that the Notice of Preparation (NOP) states that the Centennial Cleanup Project was "part of the proposed project" and that now the project description has been changed to remove the cleanup work from the scope of the project, requiring a new NOP to be released. However, the commenter mischaracterizes the text of the NOP, which clearly states that, "The Project Applicant is working with the California Department of Toxic Substances Control (DTSC) to develop a plan to consolidate and cap the contaminated soils in a manner consistent with current federal and State regulations, separate from the proposed project." (NOP, p. 5.) The language cited by the commenter is provided out of context, as the referenced sentence states that the engineered fill will be placed on the Centennial site as part of the project *after* the DTSC cleanup is completed as follows: "The environmental cleanup work at the Centennial Industrial Site will be completed under the DTSC voluntary cleanup program. After such environmental cleanup work is completed, as part of the proposed project, engineered fill from the Brunswick Industrial Site would be placed, graded, and compacted on the Centennial Industrial Site." (NOP, p. 7.) As such, the Project Description in the DEIR is consistent with the NOP. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-4

Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-5

Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-6

As discussed in Section 1.3 of the DEIR, the baseline for the Centennial Site was adjusted because the proposed project could not possibly impact that site until and unless the DTSC cleanup project has already been completed. As such, presenting the project's impacts to the Centennial Site based on the pre-DTSC Project conditions would be misleading to the public and decision-makers and would not represent the actual project impacts. This adjusted baseline is appropriate under CEQA Guidelines Section 15125(a)(1), and is supported by substantial evidence in the record. Please see Section 1.3 of the DEIR and Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

The commenter incorrectly asserts that the Centennial Site is a "Superfund" site. The Centennial Site has never been on the National Priorities List[8] (A "Superfund site"). The Centennial Site has never been proposed to be placed on the National Priorities List (NPL). The USEPA has prepared a Site Inspection Report in 2019 for the Centennial site but did not score the site using the Hazard Ranking System (HRS). The HRS is the primary method used to place sites on the NPL[9].

Response to Comment Grp 20-7

The commenter asserts that the DEIR must be revised to include the DTSC project in the Project Description. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-8

The commenter asserts that the project should assume that the DTSC project will not impact the wetlands on the Centennial Site and that all wetlands should be assumed to be impacted by the project, as the impact is speculative. As such, the commenter asserts that the DEIR must conclude that the impact to wetlands is significant and unavoidable, and at the very least, wetlands mitigation at a 1 to 1 ratio should be provided. The remaining wetlands that could be onsite after the DTSC cleanup project is complete are calculated in the EIR based on the expected impact under DTSC's existing remedial action plan, not on mere speculation. As shown in Figure 4.4-9 of the DEIR, most of the existing wetlands that will be removed in the cleanup project are directly on top of the historic mine tailings and therefore must be removed in order to excavate the historic tailings as part of the cleanup project. Rather, the commenter's assertion that public comments on DTSC's IS/MND, asking DTSC to revise the RAP to avoid more wetlands, could significantly alter the footprint of the disturbed area on the Centennial Site, is speculative. The DEIR's reliance on the RAP and the IS/MND for the DTSC cleanup project is substantial evidence, while reliance on the commenter's arguments would be speculation. Further, Mitigation Measure 4.4-3(c) already requires coordination with the Corps and mitigation of wetlands in accordance with the Corps' no-net-loss policy, which therefore already requires at least a 1 to 1 mitigation ratio. As such, the impact analysis is based on substantial evidence and the mitigation would fully address additional wetlands impacts, even in the case where there were more wetlands existing onsite after the DTSC cleanup project than anticipated in the DEIR. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-9

The commenter suggests that the portions of the Centennial Site that are revegetated after Centennial cleanup will contain biological resources. The commenter does not provide evidence that biological resources protected pursuant to federal, state, or local laws will be supported by revegetation efforts with erosion control seed mixes. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-10

The commenter asserts that the Centennial site is a superfund site; however, this is not correct. The Centennial site is the subject of a separate DTSC cleanup project, not a superfund cleanup. After the DTSC cleanup project is complete, the Centennial Site would be subject to restrictions imposed by DTSC such as restrictions on penetration of the protective cap placed on any capped contaminated soils, with which the project would need to comply to avoid release of those capped contaminated soils. As stated in Section 7.11 of the Remedial Action Plan, an Operation and Maintenance Plan is required to establish procedures for long-term operation, inspection, maintenance, monitoring, and regulatory reporting that are required to preserve the engineering

[8] https://www.epa.gov/superfund/superfund-national-priorities-list-npl
[9] https://www.epa.gov/superfund/about-superfund-cleanup-process#pasi

controls associated with the mine waste consolidation area. As such, the placement of engineered fill on the Centennial Site would not result in disturbance of the capped soils and would not result in hazard impacts related to release of that soil. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-11

The separate DTSC cleanup project on the Centennial site is a temporary construction project that would not result in permanent development of land, construction of structures, or permanent contribution to traffic, noise, or air quality that would combine with the proposed project's related effects. The commenter also mentions cumulative biological resource impacts. The DEIR, Impact 4.4-6, already identifies that the project, in combination with other cumulative development, could have a significant cumulative impact, and there is no evidence to suggest that the incremental effect of the loss of wetlands on the Centennial Site, attributable to remediation, would render this impact significant and unavoidable. The DTSC project would be required to mitigate its impacts through compliance with regulatory permit requirements for those resources. All projects within the County are required to mitigate for their impacts to biological resources, and in the case of wetlands, compliance with the USACE's no-net-loss policy. Accordingly, addition of the Centennial Site DTSC cleanup project would not result in a different cumulative impact conclusion for any resource area.

As stated in the DEIR (page 4.4-97), the proposed project's incremental contribution to the significant cumulative biological effect could be reduced with implementation of the mitigation measures required in this EIR.

Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-12

The commenter asserts that the DEIR is inadequate because there may be more Pine Hill Flannelbush onsite after the DTSC Project is complete than expected by the DEIR. However, Mitigation Measure 4.4-1(a) of the DEIR would apply to the Flannelbush found onsite, even if there were more than originally anticipated, involving implementation of a Habitat Management Plan for Flannelbush, seed collection, transplantation and monitoring to ensure success of transplants. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 20-13

Please see Master Response 4 - Clean-Up Project is a Separate Project under CEQA, regarding the Centennial Industrial Site baseline conditions for DEIR impact analysis.

As explained in Impact 4.4-2, Visual Encounter Surveys were conducted for Foothill Yellow Legged Frog and none were identified onsite. The DEIR conservatively considered this a potentially significant impact and required mitigation. Mitigation Measure 4.4-2(a) requires preconstruction surveys "no more than fourteen (14) days prior to disturbance." If the species is identified, the mitigation measure then requires that the mine operator immediately contact CDFW and then requires the appropriate state and federal permitting prior to the start of construction. Contrary to the commenter's assertion, state and federal permits should not be required unless there is a potential impact to the species, which based on surveys to date, will not occur. Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

In addition, contrary to the commenter's assertion, both federal and state resource agencies (including CDFW) have been consulted throughout the environmental review including reviewing notices for both the Notice of Preparation and Notice of Availability.

The commenter also states that Foothill Yellow Legged Frog is proposed to be listed as endangered under the Federal Endangered Species Act. The project area is located within the Northern Sierra Unit, which is not proposed for listing.

Response to Comment Grp 20-14

Please see Response to Comment 13 above and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 20-15

As identified in DEIR Chapter 4.4, California Black Rail was considered to have a "very low" likelihood of being found onsite in the DEIR. Note that the DEIR reflected that California Black Rail is California Threatened, but it is also considered California Fully Protected. The DEIR has been amended to reflect the Fully Protected status for this species. Additionally, Mitigation Measure 4.4-2(d) requiring preconstruction surveys for California Black Rail, has been amended to remove reference to an ITP being obtained for take of California Black Rail if identified onsite during these preconstruction surveys. This species is considered to have a very low potential to be found onsite; nonetheless, surveys will be conducted prior to site disturbance, and consultation with CDFW and avoidance shall be required in the case of species presence, prior to commencement of on-site disturbance. For these reasons, the DEIR considered this impact less than significant after mitigation.

Noise impacts to wildlife and bird species were analyzed in Impact 4.4-2 and determined to be less than significant.

Response to Comment Grp 20-16

The commenter asserts that biological impacts should be considered significant and potentially unavoidable due to the uncertainty of impacts, the potential for take of protected species and the potential for impacts to fully protected species. However, the mitigation measures required for the project require pre-construction surveys for special-status species, consultation with state and federal resource agencies if species are present, and require take permits of special-status species if take is possible. The project would not be allowed to obtain a take permit for any Fully-protected species found onsite, so avoidance of those species would be required. For these reasons, the County reasonably concluded that the required mitigation would reduce the biological impacts to less than significant after mitigation.

Response to Comment Grp 20-17

Please see Responses to Comments Grp 21-122 to Grp 21-127 for responses to Baseline Environmental Consulting Group's air-related comments.

Regarding air emissions from the separate Centennial clean-up project, please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Regarding construction timeline, please see Master Response 24 - Project Construction Schedule.

Regarding proposed use of Tier 4 engines during operations and criteria pollutant emissions, please see Master Response 19 - NSAQMD Criteria Pollution Thresholds during Operations.

Response to Comment Grp 20-18

Please see Chapter 4.8 of the DEIR, Master Response 13 - Historic Hydrogeologic Assessments, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 – Adequacy of Groundwater Monitoring Wells.

For responses to Baseline Environmental Group's hydrology-related comments, see Responses to Comments Grp 21-110 to Grp 21-121.

Response to Comment Grp 20-19

Please see responses to NID comments in Agcy Letter 10 of the Final EIR.

Response to Comment Grp 20-20

The Water Supply Assessment relating to water supply for the project, including the connection of parcels along East Bennett Road, was approved by the Nevada Irrigation District in February of 2022. Accordingly, NID has already determined that sufficient water supply exists for these connections and has committed to providing water for the project and those connections.

Response to Comment Grp 20-21

The commenter asserts that the project's discharge of treated water from the underground mine works would not qualify for coverage under the Limited Threat General Order. However, the commenter provides no evidence that the water could not be treated to meet the standards required for the Limited Threat General Order. In fact, the nearby Empire Mine and Northstar Mine both discharge treated mine water under the Limited Threat General Order, providing evidence that treatment methods are available to meet the Limited Threat General Order standards. Additionally, the DEIR requires installation of a water treatment plant specifically designed to meet the applicable standards. (See Mitigation Measure 4.8-1(a).) The County's independent expert reviewed the water treatment plant designs and confirmed that the treatment plant could meet the applicable standards. As stated on page 4.8-41 of the DEIR, "West Yost's technical peer review of Linkan's Water Treatment Plant Design Report confirmed that the proposed method of treatment would be adequate to successfully treat the mine water to comply with RWQCB effluent limitations, and identified items for Linkan Engineering to consider during the detailed design phase."

Regarding water temperatures, please see Master Response 32 – Temperature of Mine Water Discharge.

Response to Comment Grp 20-22

Please see Response to Comment Grp 20-21 above.

Response to Comment Grp 20-23

The regional water quality control board (RWQCB) was provided notice of the project's DEIR, and provided comments on the DEIR. Notably, the RWQCB did not state that the Limited Threat General Order was inapplicable, and rather confirmed that the RWQCB would review the notice of applicability when that is submitted, as is done for any project proposing to discharge under the Limited Threat General Order.

Response to Comment Grp 20-24

The commenter asserts that the DEIR should be revised and recirculated. The County has determined that recirculation of the DEIR is not required, as the factors set forth under CEQA Guidelines 15088.5 for recirculation are not met.

Group Letter 21

SHUTE, MIHALY & WEINBERGER LLP

396 HAYES STREET, SAN FRANCISCO, CA 94102
T: (415) 552-7272 F: (415) 552-5816
www.smwlaw.com

ELLISON FOLK
Attorney
Folk@smwlaw.com

March 30, 2022

Via E-Mail

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-8617
matt.kelley@co.nevada.ca.us

Re: Idaho-Maryland Mine Project Draft Environmental Impact Report

Dear Mr. Kelley:

Grp 21-1

On behalf of Community Environmental Advocates Foundation (CEA), we respectfully submit these comments in connection with the Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine Project (Project). CEA seeks to ensure any development and operations at the Project site protects the site's unique environmental resources and addresses the community's needs and concerns. To that end, the DEIR plays a critical role in informing the public and decisionmakers about the environmental impacts of the Project and how best to avoid these impacts through mitigation and alternatives to the Project. After carefully reviewing the DEIR, we have concluded that it fails to comply with the requirements of the California Environmental Quality Act (CEQA), Public Resources Code section 2100 et seq.

The EIR is "the heart of CEQA." *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392 ("*Laurel Heights I*"; citations omitted). It is "intended to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action. Because the EIR must be certified or rejected by public officials, it is a document of accountability." *Id.* (internal quotations and citations omitted).

Grp 21-2

This DEIR's flaws prevent it from achieving its required informational purpose. An overarching defect is the DEIR's failure to accurately describe the Project. The DEIR's project description is legally inadequate because, among other things, it improperly excludes the required cleanup of existing contamination on part of the Project site (the Centennial Site) from the scope of the Project. In addition, the DEIR improperly uses post-cleanup conditions on the Centennial Site as the baseline for impact analysis instead of the existing conditions on the site.

Grp 21-3

The DEIR further violates CEQA because it fails to properly analyze or mitigate the Project's numerous significant environmental impacts. The Applicant is requesting a conditional

use permit (CUP) to operate the mine for 80 years. Yet, according to geophysicist and mineral exploration expert David M. Chambers, Ph.D., the design details of the Project, including its "engineered fill" have yet to be determined, so it is not possible to determine if the proposed design of the Project is geotechnically sound.[1] *See* Report from David Chambers, Ph.D., submitted under separate cover. Nor does the DEIR provide the necessary information on the geochemistry of the waste rock and tailings to evaluate the environmental impacts of the proposed mine's operations. *Id.*

Grp 21-4

In addition, the DEIR fails to adequately evaluate how the Project would affect hydrology and groundwater levels in the Project vicinity. The need for an accurate analysis cannot be overstated since even a slight drawdown in groundwater levels could severely affect those in the community that rely exclusively on well water. Among its many shortcomings, the DEIR fails to accurately describe the existing hydrologic conditions in the area, lacks thresholds of significance for evaluating the Project's impacts on groundwater supplies, relies on a flawed groundwater model, lacks *any* modeling of the Project's water quality impacts, and fails to identify effective mitigation capable of mitigating the few groundwater impacts the DEIR does disclose.

Grp 21-5

The DEIR fares no better in its analysis of noise and vibration impacts from on-going mining operations because it substantially underestimates the severity and extent of these impacts. The document largely relies on compliance with County standards to conclude that the Project's noise impacts would be less than significant, downplaying entirely that noise from the Project's operations could increase substantially in this quiet rural residential community. It fails to disclose the geographic extent of where noise and vibration impacts could occur and omits any analysis of noise impacts resulting from remediation of the Centennial Site. It also fails to provide an adequate analysis of noise and vibration impacts from the Project's ongoing blasting operations and disregards entirely the potential for these operations to cause sleep disturbance.

Grp 21-6

The DEIR's analysis of hazards and hazardous materials is equally deficient. Although there is no evidence that clean-up of the Centennial Site will occur prior to implementation of the Project, the DEIR simply assumes that such clean-up will occur. The document also fails to analyze or mitigate hazardous impacts relating to waste rock and mine tailings, opting instead to take a "trust us" approach when it promises to comply with environmental regulations. And

[1] The DEIR repeatedly refers to "engineered fill" but it never defines this term. The document appears to be trying to "rebrand" the prior mine's waste rock and mine tailings as "engineered fill," apparently in the hopes that the waste material can be transported off-site for use at various unspecified construction sites throughout the region as fill material, which would almost certainly result in numerous new contaminated waste sites that pose a threat to the public and the environment. Exhibit A (Baseline Environmental Report) at 3, 4.

despite the fact that the Project could cause a super-saturated plume cloud that could affect operations at the Nevada County Air Park, the DEIR fails to provide any analysis of this impact.

Grp 21-7 The DEIR's analysis of air quality, greenhouse gas (GHG) emissions, and energy use also contains numerous flaws. First, the DEIR fails to analyze the effect that the cleanup of the Centennial Site would have on air quality, GHG emissions, or energy use, or the air quality impacts, GHG impacts, or energy impacts that may result from the proposed Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of air quality impacts, GHGs, and energy use from Project construction assumes a construction timeline that contradicts the DEIR's description of the Project. Third, the DEIR improperly relies on assumed mitigation measures for air quality impacts, GHGs, and energy use, failing to acknowledge those measures as mitigation. Fourth, the DEIR fails to mitigate significant air quality impacts from operational emissions of criteria air pollutants. Fifth, the DEIR's Health Risk Assessment fails to disclose essential information and lacks substantial evidence to support its conclusions. Sixth, the DEIR's significance threshold for operational GHG emissions is unsupported. Finally, the DEIR relies on third-party GHG mitigation offsets which lack adequate performance standards and are improperly deferred.

Grp 21-8 The DEIR also fails to meet CEQA's clear mandates because it does not provide a reasonable range of alternatives. The DEIR identifies the Project's significant and unavoidable impacts as those on aesthetics, noise, and transportation. Yet, except for the "no project" alternative, which would not meet any of the Project objectives, none of the examined alternatives would reduce the Project's impacts on aesthetics, noise, and transportation to a less than significant level. Moreover, given the Project's significant impacts in a range of areas, including GHG emissions, air quality, water supply and water quality, the DEIR must be revised to include alternatives that would reduce these impacts.

Grp 21-9 Where, as here, the environmental review document fails to fully and accurately inform decisionmakers and the public of the environmental consequences of proposed actions, it does not satisfy the basic goals of CEQA. See Pub. Res. Code § 21061. As a result of the DEIR's numerous and serious inadequacies, there can be no meaningful public review of the Project. The magnitude of the revisions required to create a legally adequate EIR will require recirculation of a revised DEIR, not just publication of a Final EIR, to give decision-makers and the public an accurate understanding of the environmental issues at stake. *See* CEQA Guidelines[2] § 15088.5(a)(4).

Grp 21-10 This letter, along with the February 15, 2022 report prepared by Baseline Environmental Consulting addressing air quality, GHG emissions, energy, hydrology, water quality, and hazards (attached as Exhibit A), and the March 9, 2022 prepared by Salter addressing noise and vibration (attached as Exhibit B) constitute our comments on the DEIR. Please refer to these reports for

[2] The "CEQA Guidelines" are found at Cal. Code Regs., tit. 14, § 15000 et seq.

further detail and discussion of the DEIR's inadequacies. We request that the County respond to both the comments in this letter and to each of the comments in the attached reports.

In addition, CEA will be submitting its own letter on the DEIR. We have reviewed this letter and concur with its findings. The CEA letter is hereby incorporated by reference into this letter.

I. The DEIR's Flawed Project Description and Inaccurate Baseline Do Not Permit Meaningful Public Review of the Project.

Grp 21-11

The DEIR's project description is flawed for several reasons. First, it improperly excludes the cleanup of the Centennial Site from the scope of the Project. Second, the DEIR lacks a legally adequate baseline because it improperly uses post-cleanup conditions on the Centennial Site as the baseline for impact analysis instead of the existing conditions on the site. Third, the Project description is incomplete and unstable because it fails to adequately describe the duration of required permits and does not consistently describe the duration of Project construction or the phasing of mining and exploration activities over the entire permit period.

A. Project Background

Grp 21-12

The proposed Project would reopen the abandoned Idaho-Maryland Mine in unincorporated western Nevada County near the City of Grass Valley. DEIR at 3-1, 3-12. The Project would involve underground gold mining within a 2,585-acre mineral rights boundary owned by the Applicant, Rise Grass Valley. *Id.* at 3-1. The Project's surface components would be spread across 175.64 acres, consisting of two sites, the 119-acre Brunswick Industrial Site and the 56.41-acre Centennial Industrial Site, as well as a potable water pipeline easement connecting the sites. *Id.* at 3-1, 3-12.

The Centennial Site is located immediately adjacent to the city limits of the City of Grass Valley, and is surrounded by light industrial and commercial uses. *Id.* at 3-11. The Brunswick Site is surrounded by rural residential neighborhoods of single-family homes and undeveloped open space. *Id.* Both sites are zoned for light industrial use. *Id.* at 3-1. The South Fork of Wolf Creek runs through the Brunswick Site, and the main stem of Wolf Creek runs through the Centennial site. *Id.* at 3-13, 3-16. Wetlands and riparian habitat are located along the main stem and South Fork of Wolf Creek. *Id.* at 3-10, 3-33, 4.4-2.

Both the Brunswick and Centennial sites were part of previous mining operations prior to the closure of the Idaho-Maryland Mine in 1956. *Id.* at 3-9. The Brunswick Site contains mine shafts which provided access to the mine, while the Centennial Site was historically used for dumping mine waste. *Id.* at 3-9 to 3-10. The Centennial Site contains mine waste contaminated with arsenic, lead, thallium, mercury, and nickel. *Id.* at 4.7-3. Because of this existing pollution and unstable soil conditions, the Centennial Site cannot be redeveloped until the contamination is

remediated. *Id.* at 3-10, 3-33. The Applicant has entered into a Voluntary Cleanup Agreement with the California Department of Toxic Substances Control (DTSC) for the voluntary cleanup of soil contamination on the Centennial Site. *Id.* at 3-10. DTSC is reviewing a proposed Remedial Action Plan (RAP) under which the Applicant would excavate contaminated soils, and consolidate and stabilize contaminated materials within a 5.6-acre area where they would be mixed with cement and capped with four feet of soil. *Id.*; *see* RAP, attached as Exhibit C.

The Project would require pumping approximately 2,500 acre-feet of groundwater ("dewatering") out of the abandoned underground mine over a six-month period before mining operations could begin. *Id.* at 3-11 to 3-12, 3-15. Gold mining and mineralization would then occur over an 80-year permit period, with a planned production of 1,000 tons of gold mineralization per day (365,000 tons per year). *Id.* at 3-19. Mining would occur 24 hours per day, 7 days per week. *Id.* at 3-18. Mining would require the daily underground detonation of ammonia nitrate fuel oil and packaged or bulk emulsion explosives. *Id.* at 3-19. The mine would generate approximately 500 tons of waste rock per day, which would be transported to the surface. *Id.* In addition, approximately 850 gallons of groundwater per minute would be pumped out of the mine on a continuous basis during operations. *Id.* at 3-18. Pumped groundwater would be discharged into the South Fork of Wolf Creek after treatment. *Id.* at 3-29.

The Project proposes to construct new aboveground processing facilities for gold and mine waste as well as water treatment facilities and a wastewater pond at the Brunswick Site. *Id.* at 3-11 to 3-12. Waste rock or tailings excavated from the mine would be dumped on the Centennial and Brunswick sites, where they would be graded into "engineered fill" pads intended to support future industrial development on both sites. *Id.* The fill pad at the Centennial Site would cover an area of 44 acres and contain 1.6 million tons of mine waste, while the fill pad at the Brunswick Site would cover 31 acres and contain 2.2 million tons of mine waste. *Id.* at 3-32 to 3-33. However, remediation of the Centennial Site under a DTSC-approved RAP would need to be completed before that site could be used for dumping waste from the mine. *Id.* at 3-10.

Once dumping begins, the DEIR estimates that the Centennial Site would be completely filled with mine waste in five years, and the Brunswick Site would be filled in six years. *Id.* at 3-26, 3-28. After the dumping areas at the Centennial and Brunswick sites have reached their maximum capacity, mine waste from the Project would be trucked offsite and disposed of elsewhere for the remainder of the 80-year proposed lease term. *Id.* Mine waste would be trucked offsite along Brunswick Road to SR 20/49. *Id.* at 3-29. Following completion of mining and processing activities, the Project proposes to restore the Centennial and Brunswick sites for future industrial use as outlined in a Reclamation Plan. *Id.* at 3-12.

Grp 21-13

B. The DEIR Does Not Use the Correct Baseline of Existing Conditions at the Centennial Site.

CEQA requires that an EIR include an accurate description of a project's environmental setting, which provides "the baseline physical conditions by which a lead agency determines whether an impact is significant." CEQA Guidelines § 15125(a). This baseline "should describe physical environmental conditions as they exist at the time the notice of preparation is published." *Id.* The purpose of this requirement is "to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts." *Id.* "Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, the EIR cannot provide a meaningful assessment of the environmental impacts of the proposed project." *Save Our Peninsula Com. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 119.

Here, the DEIR lacks a legally adequate baseline because it improperly uses hypothetical future post-cleanup conditions on the Centennial Site as the baseline for impact analysis instead of the existing conditions on the site. *See* Exhibit A (Baseline Report) at 2. As the DEIR acknowledges, the Centennial Site is currently contaminated with toxic mine waste, and cannot be used for the Project until the contamination has been remediated in a DTSC-approved cleanup. DEIR at 3-10, 3-33. The correct baseline for the site therefore must reflect the current contaminated state of the property. However, the DEIR does not use these existing conditions at the Centennial Site as the baseline for impact analysis. Instead, the DEIR simply assumes that cleanup of the site will be completed, and uses expected future post-remediation conditions at the site as the baseline. *Id.* at 1-4, 1-6, 3-10. The DEIR uses this assumed post-remediation baseline for the Centennial Site in its analysis of aesthetic impacts, agriculture and forestry resources, biological resources, hazards and hazardous materials, and wildfire risk. *Id.* at 1-6 to 1-7.

Elsewhere, however, the DEIR acknowledges the possibility that the cleanup of the Centennial Site might never be approved by DTSC and might never be completed during the 80-year term of the Project permit. *Id.* at 1-3, 3-26. The DEIR asserts that in that case, the mine waste that would otherwise be dumped on the Centennial Site would be trucked offsite and disposed of elsewhere in "local and regional construction markets" after the fill area at the Brunswick Site is full. *Id.* at 1-3, 3-26.

DTSC has not yet approved the Centennial Site cleanup, which is currently undergoing a separate CEQA review. *See id.* at 1-5. Because DTSC might not approve the cleanup, and Rise Gold might not complete it, the DEIR's use of a hypothetical post-remediation baseline in its analysis of Project impacts on the Centennial Site is inappropriate. The DEIR's baseline for the site ignores this uncertainty, simply assuming the future cleanup will occur. The CEQA Guidelines clearly state that "[a]n existing conditions baseline shall not include hypothetical conditions, such as those that might be allowed, but have never actually occurred, under existing permits or plans, as the baseline." CEQA Guidelines § 15125(a)(3). An EIR's failure to accurately determine existing baseline conditions "renders the identification of environmental impacts legally inadequate and precludes a determination that substantial evidence supports" the

EIR's conclusions about the significance of project impacts or the effectiveness of mitigation. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 729. Without "an adequate baseline description . . . analysis of impacts [and] mitigation measures . . . becomes impossible." *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953. Because the DEIR's analysis of aesthetic impacts, agriculture and forestry, biological resources, hazardous materials, and wildfire risk is based on this flawed and uncertain baseline, that analysis is legally inadequate and cannot be supported by substantial evidence.

Anticipating criticism of this glaring flaw, the DEIR preemptively seeks to defend its use of the post-remediation baseline for the Centennial Site. DEIR at 1-3 to 1-7. The DEIR cites the CEQA Guidelines, which provide that "where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or *conditions expected when the project becomes operational*, or both, that are supported with substantial evidence" CEQA Guidelines Section 15125(a)(1) (emphasis added); DEIR at 1-3 to 1-4. The DEIR also cites *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority*, where the court noted that "in appropriate circumstances an existing conditions analysis may take account of *environmental conditions that will exist when the project begins operations*; the agency is not strictly limited to those prevailing during the period of EIR preparation. An agency may, where appropriate, adjust its existing conditions baseline to account for a major change in environmental conditions that is expected to occur *before project implementation*." *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 452 (emphasis added); DEIR at 1-4.

The DEIR's attempted defense is unavailing. As the italicized language makes clear, the quoted portions of CEQA Guidelines Section 15125(a)(1) and *Neighbors for Smart Rail* allow an EIR to use a baseline that consists of conditions that "will exist when the project begins operations." But here there is no guarantee that the Centennial Site cleanup will have even started—let alone been completed—before the Project begins operations. As discussed above, the DEIR expressly acknowledges that the Centennial Site cleanup may not be approved by DTSC and may *never* be completed within the entire 80-year term of the mine permit. DEIR at 1-3, 3-26. The DEIR asserts that "the Idaho-Maryland Mine Project can proceed independently from the Centennial Clean-Up Project, *even if the Centennial Clean-Up Project is not completed within the term of the mining permit*, in which case, material from the Idaho-Maryland Mine Project would not be placed on the Centennial Industrial Site." DEIR at 1-7 (emphasis added). This statement is flatly inconsistent with its assumption for baseline purposes that the Centennial cleanup would be completed before the mine begins operations.

The DEIR incorrectly asserts that it is *not* using a "future baseline" for the Centennial Site, noting that "[a] future baseline is understood to be a point in time beyond the date of project operations." DEIR at 1-4. This assertion misrepresents the relevant legal standard. A future

baseline is one that does not currently exists, but is assumed to exist in the future when the Project becomes operational. But again, the DEIR acknowledges that its chosen post-remediation baseline for the Centennial Site may not occur until after Project operations have begun. *Id.* at 1-3, 3-26 (noting possibility that "the remediation of the Centennial Industrial Site, currently under DTSC oversight, is not complete upon commencement of mining"). Therefore, in order to use post-remediation conditions as the sole baseline, the DEIR would need to satisfy CEQA's requirements for "future baselines." The Guidelines provide that "[a] lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record." CEQA Guidelines § 15125(a)(2). The DEIR fails to meet that standard here: it does not demonstrate with substantial evidence that the Centennial cleanup can be reliably projected to occur, nor does it show that using existing conditions as the Centennial baseline would be either misleading or without informative value to decision-makers or the public. The DEIR's attempted use of a future baseline therefore violates CEQA.

The DEIR must be revised to consistently use existing conditions as the baseline for the Centennial Site, and cannot merely assume that the proposed Centennial cleanup will be approved or completed. The document's analysis of aesthetic impacts, agriculture and forestry resources, biological resources, hazards and hazardous materials, and wildfire risk (which all use the assumed post-remediation baseline) must be revised to evaluate those impacts with reference to existing contaminated conditions on the Centennial Site, and must consider the possibility that the cleanup may not occur before mine operations begin, or at all.

Grp 21-14

Moreover, the DEIR must analyze other additional environmental impacts that might result from the Project if the Centennial cleanup does *not* occur. If the Centennial Site is never remediated during the term of the mine permit, the site will never become available for dumping of mine waste, and an additional 1.6 million tons of mine waste from the Project will need to be trucked offsite once the dumping area at the Brunswick Site is full. DEIR at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the potential impacts of the offsite trucking of those additional 1.6 million tons of mine waste on air quality, GHG emissions, energy use, and noise. It currently fails to do so. *See* DEIR at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68 (air quality and GHG analysis assumes dumping of fill at Centennial site); *id.* at 4.10-33, 4.10-35 (noise analysis). Furthermore, the DEIR must explain how the Applicant will meet its commitment to reclaim the Centennial Site for future industrial use (DEIR at 3-12, 3-42, 3-46) if the Centennial cleanup is not completed. The DEIR must be revised to correct these flaws and then recirculated.

Grp 21-15

C. The DEIR's Project Description Improperly Excludes the Cleanup of the Centennial Site from the Project Scope.

The DEIR also lacks an adequate project description because it wrongly excludes the Centennial cleanup from the scope of the Project. CEQA requires that an EIR contain an accurate and comprehensive project description which contains enough detail to allow informed analysis of environmental effects. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193; CEQA Guidelines § 1512. "[A] correct determination of the nature and scope of the project is a critical step in complying with the mandates of CEQA." *Nelson v. County of Kern* (2010) 190 Cal.App.4th 252, 267 (citing *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1222. "The entirety of the project must be described, and not some smaller portion of it." *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 654 ("*County of Merced*").

Under CEQA, a "project" is an activity that may cause either a direct or reasonably foreseeable indirect change in the environment, and that involves the issuance of a permit or other entitlement for use by one or more public agencies. Pub. Resources Code § 21065. The project includes the "whole of an action," and "does not mean each separate governmental approval." CEQA Guidelines § 15378(a), (c). Where two actions are integrally related or where one action is conditioned on another action, they must both be considered together as one project in a single EIR. *Nelson*, 190 Cal.App.4th at 271; *Tuolumne County Citizens*, 155 Cal.App.4th at 1222. When "an individual project is a necessary precedent for action on a larger project, or commits the lead agency to a larger project, with significant environmental effect, an EIR must address itself to the scope of the larger project." CEQA Guidelines § 15165.

Segmenting a portion of a project from the whole is forbidden under CEQA. *Assn. for Sensible Development of Bishop Area v. County of Inyo* ("*County of Inyo*") (1985) 172 Cal.App.3d 151, 165-66 (*County of Inyo*"). A project applicant cannot "file separate environmental reports for the same project to different agencies thereby preventing 'consideration of the cumulative impact on the environment.'" *Nelson*, 190 Cal.App.4th at 271 (internal citation omitted). "CEQA's conception of a project is broad," and it "prevents a proponent or a public agency from avoiding CEQA requirements by dividing a project into smaller components which, when considered separately, may not have a significant environmental effect." *Id.* (citations omitted). Such piecemeal environmental review that breaks up projects into smaller pieces to evade a complete impact analysis therefore violates CEQA. *See Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 193; *Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283.

Here, the DEIR's project description violates CEQA because it improperly excludes the cleanup of the Centennial Site from the scope of the Project, wrongly contending that this cleanup is separate from the Project. DEIR at 3-10; *see* Exhibit A (Baseline Report) at 3. The project description states that the Project would involve dumping 1.6 million tons of mine waste on a 44-acre area of the 56-acre Centennial Site over a period of five years. *Id.* at 3-32 to 3-33. However, as discussed above, the Centennial Site is currently contaminated with arsenic, lead, thallium, mercury, and nickel. *Id.* at 4.7-3. Because of this existing pollution and unstable soil

conditions, the DEIR acknowledges that the Centennial Site cannot be redeveloped until the contamination is remediated by Rise Gold in accordance with an RAP approved by DTSC. *Id.* at 3-10, 3-33. Despite this, the DEIR asserts that "[t]he environmental cleanup work at the Centennial Industrial Site [carried out by the Applicant] under the DTSC voluntary cleanup program . . . is not a component of the proposed project." *Id.* This is incorrect.

The Applicant's cleanup of the Centennial Site proposed in the RAP is a necessary first step toward using the site as a dumping ground for "engineered fill" from the Project. The DEIR acknowledges that the Project includes dumping waste rock excavated from the mine onto the Centennial Site. *Id.* at 1-3, 3-26, 3-28, 3-32 to 3-33. It states that after "environmental cleanup work is completed [at the Centennial Site] and a No Further Action letter is issued by DTSC, engineered fill from the Brunswick Industrial Site would be placed, graded, and compacted on the Centennial Industrial Site" as part of the Project. *Id.* at 3-33. The DEIR also states that one of the Project objectives is to "[i]ncrease the usable land area at the Centennial Industrial Site to allow its future use as industrial land." *Id.* at 3-12. The DEIR therefore calls for a "Reclamation Plan" in which the engineered fill at the Centennial Site would be graded into a "pad" for future industrial development after dumping is complete, and the remainder of the site would be revegetated. *Id.* at 3-42, 3-46. Since the DEIR acknowledges that the Applicant's remediation of the Centennial Site is a necessary prerequisite to the Project's proposed dumping on the site and the site's eventual reclamation for industrial use (*id.* at 3-10, 3-33), the DEIR's claim that this remediation is not part of the Project is incorrect. The Centennial Site remediation will be carried out by the Applicant to facilitate the use of the site for the proposed Project.

The Centennial RAP itself demonstrates that the RAP should be considered part of the Project. The RAP repeatedly refers to work to be done on the Centennial Site that goes beyond remediation, but rather is intended to prepare for the future stages of the IMM Project. The RAP acknowledges that "[p]ost-remediation use of the property" includes "the placement of additional mine waste . . . resulting from future mining operations." Exhibit C (RAP) at 19. It states that contaminated materials on the site "are to be reworked in place as engineered fill and covered with clean engineered fill *to prepare the site for future commercial/industrial site development*." *Id.* at XVIII (emphasis added); *see also id.* at 39, 45. Because the RAP is not solely focused on remediating the Centennial Site, but rather is intended to prepare the site for future use in the IMM Project, the RAP is a part of the IMM Project. Recognizing that the two actions are integrally related, DTSC acknowledges that it is considering "combining the [environmental review for the Centennial RAP] project with the IMM EIR." *See* Email from Dean Wright, Project Manager, DTSC, to Ralph Silberstein, February 4, 2022, attached as Exhibit D. Moreover, the Central Valley Regional Water Quality Control Board (RWQCB) has called for exactly that approach, commenting that "the cumulative impacts to water quality incurred by the project described in the [Centennial] RAP and potential future discharge of mine waste generated by the proposed Idaho-Maryland Mine-Rise Grass Valley project should be considered in a single environmental document." *See* Central Valley RWQCB, Review of Draft Final Remedial

Action Plan Centennial M-1 Property, Nevada County, September 24, 2021, attached as Exhibit E, at 5.

In determining whether a particular action should be considered part of a CEQA project, courts "examine how closely related" the action is "to the overall objective of the project." *Tuolumne County*, 155 Cal.App.4th at 1226. "The relationship between the particular act and the remainder of the project is sufficiently close when the proposed physical act is among the 'various steps which taken together obtain an objective.'" *Id.* In *Tuolumne County*, because the objective of the project was to open and operate a home improvement center, and that objective was "conditioned upon the completion of the realignment of a road," the road realignment was deemed part of "a single CEQA project" with the proposed home improvement center. *Id.* at 1227. In *Nelson*, the court invalidated a mitigated negative declaration that reviewed only a mining reclamation plan for a proposed mining project while excluding the associated surface mining operations from the review. 190 Cal.App.4th at 269, 272. The court held that "the entire CEQA project that had to be reviewed by the County included *both* the mining operations and the reclamation plan," because "both aspects were integrally related and constituted the whole of the action" for which approvals were sought. *Id.* at 272. The reclamation plan "was simply the final phase of the overall usage of the land." *Id.*

Here, as in *Tuolumne County* and *Nelson*, the remediation of the Centennial Site is an essential step which the Applicant must take in order to accomplish the objectives of the IMM Project. The DEIR acknowledges that the IMM Project's proposed dumping of engineered fill on the Centennial Site cannot occur until the site is remediated under the RAP. DEIR at 3-10, 3-33. The Centennial cleanup is also necessary to achieve the stated IMM Project objective to "[i]ncrease the usable land area at the Centennial Industrial Site to allow its future use as industrial land." *Id.* at 3-12. Accordingly, the Centennial RAP is an integral part of the IMM Project, and the RAP's exclusion from the Project description (*id.* at 3-10) violates CEQA.

The DEIR argues that the Centennial RAP should not be considered a part of the IMM Project for several reasons, all of which are meritless. *Id.* at 1-7 to 1-8. First, the DEIR asserts that "the Idaho-Maryland Mine Project can proceed independently from the Centennial Clean-Up Project, even if the Centennial Clean-Up Project is not completed within the term of the mining permit, in which case, material from the Idaho-Maryland Mine Project would not be placed on the Centennial Industrial Site." *Id.* at 1-7. The DEIR thus denies that the RAP is an essential prerequisite to the IMM Project. *Id.* at 1-8. But while it may be true that the IMM Project does not need the Centennial Site for disposal of waste rock from the mine, since that material can be dumped on the Brunswick Site or disposed of elsewhere, the same is not true for the Project's other goals. The IMM Project commits to reclamation of the Centennial Site for future industrial use. *Id.* at 3-42, 3-46. As noted above, the Centennial RAP is a necessary prerequisite to achieving the IMM Project objective to "[i]ncrease the usable land area at the Centennial Industrial Site to allow its future use as industrial land." *Id.* at 3-12. Even if the Applicant never

dumps any mine waste on the Centennial Site, the Applicant cannot abandon its commitment to reclaim the Centennial Site without altering the basic nature of the IMM Project.

Second, the DEIR argues that "[t]he utility and purpose of the Centennial Clean-Up Project is to ensure timely and efficient cleanup of the Centennial Industrial Site due to existing site conditions, and is required under both California and federal environmental regulations—not because it would benefit the Idaho- Maryland Mine Project. . . the Centennial Clean-Up Project would happen whether or not an underground mine is approved by Nevada County for the Brunswick Industrial Site." DEIR at 1-7. But as discussed above, the Centennial RAP itself clearly indicates that it is intended to prepare the site for future placement of engineered fill as part of the IMM Project, and eventual reclamation for industrial use. Exhibit C (RAP) at 19, 39, 45. One of the purposes of the RAP *is* to benefit the IMM Project. Moreover, the DEIR notes that the Applicant, Rise Gold, has entered a "Voluntary Cleanup Agreement" with DTSC "for the voluntary cleanup of soil contamination on the Centennial Industrial Site," and that the RAP has been prepared pursuant to that agreement. DEIR at 1-4, 3-10; *see* Exhibit C (RAP) at xii. The Voluntary Cleanup Agreement states that the Applicant "reserves the right to unilaterally terminate this Agreement for any reason" after 30 days' notice. Voluntary Cleanup Agreement at 5, Section 18.1, attached as Exhibit F. Rise Gold would not have entered the Voluntary Agreement to undertake the Centennial cleanup and its associated costs if it did not serve the Applicant's ultimate goal of dumping fill on the site as part of the IMM Project. If the IMM Project does not go forward, the Applicant could withdraw from its commitment to the Centennial cleanup.

The DEIR argues that the Centennial RAP should be analyzed separately because the situation here allegedly resembles that in *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1223. DEIR at 1-7 to 1-8. But that case is factually inapposite. In *Banning Ranch*, a City proposed building a park and associated access road, which was reviewed in one EIR, while another EIR reviewed a residential subdivision proposed by a private developer on adjacent property, which called for a much larger access road in the same location. 211 Cal.App.4th at 1216-17. While the projects would share the same access road, neither project depended on or assumed completion of the other project. *Id.* at 1218-19. The court found that there was no piecemealing because these two projects had different proponents and served different purposes, and because the park's smaller access road was only a "baby step" towards the residential project. *Id.* at 1225-26. Here, by contrast, both the Centennial cleanup and the remainder of the IMM Project have the same project proponent, Rise Gold, and share the objective of making the Centennial Site suitable for industrial development, as discussed above. Unlike *Banning Ranch*, the Centennial cleanup is a necessary prerequisite to the dumping of engineered fill from the IMM Project, and the DEIR assumes that the cleanup will occur.

Grp 21-16

Segmenting the IMM Project from the Centennial RAP also prevents a full environmental analysis of the combined impacts of the RAP and the subsequent dumping of fill on the site. For example, this piecemeal approach risks understating the impacts to wetlands on the Centennial

Site. The Centennial RAP plans to excavate clean fill from portions of the Site that are not contaminated and to use this fill to cap the contaminated areas. Exhibit C (RAP) at xx, 63. The RAP states that it could destroy up to 4.35 acres of wetlands on the site, which may be mitigated via onsite wetland restoration or creation. *Id.* at 60. The Initial Study/Mitigated Negative Declaration (MND) for the RAP contends that impacts on these wetlands will be less than significant following mitigation. MND at 29, attached as Exhibit G. The IMM Project, in turn, plans to dump mine waste on 44 acres of the 56-acre Centennial Site, avoiding only 12 acres that include Wolf Creek, a 100-foot setback from the Creek, and areas containing certain sensitive plant species. DEIR at 3-15. Because the IMM Project and Centennial RAP are analyzed piecemeal in separate documents, it is impossible for the public to determine whether wetlands impacted by the RAP would be further impacted by the dumping of fill from the IMM Project, or whether that dumping would destroy or impair wetland mitigation proposed as part of the RAP.

Grp 21-17

The DEIR ignores the reality that the Centennial RAP is an integral part of the IMM Project, and improperly segments the Project by excluding the cleanup. This piecemeal description prevents an analysis of the IMM Project as a whole, and therefore violates CEQA. The DEIR's project description must be revised to recognize the cleanup of the Centennial Site as an integral part of the Project, and DEIR must analyze all of the environmental effects of the RAP as part of the Project.

D. The DEIR Lacks a Stable and Complete Project Description.

Grp 21-18

In addition to omitting the Centennial RAP and equivocating as to whether the cleanup will happen, the DEIR's project description is also unstable and incomplete in other respects. An accurate, stable and finite project description is an essential component of an informative and legally sufficient EIR. *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 730. Here, the Project description is incomplete because it fails to adequately describe the duration of required water quality permits, and the DEIR fails to consistently describe mining and exploration activities over the entire permit period. Moreover, the DEIR does not consistently describe the duration of Project construction.

The Conditional Use Permit (CUP) for the Project would span 80 years. DEIR at 3-12, 3-28, 3-47. The Project also requires several different types of Water Board permits (*see id.* at 3-15, 3-18, 3-52), none of which would have anything approaching an 80-year time frame. For example, under the federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) permits for discharges to surface water expire every five years unless renewed. 40 C.F.R. § 122.46. As discussed in the hydrology and water quality section of this letter, Section II.A, *infra*, the DEIR relies on compliance with these regulatory requirements and permits to conclude that the Project's impacts would be less than significant. Yet the DEIR fails to clearly describe the timeframe of these Water Board permits, nor does it make any attempt to reconcile

an 80-year CUP with Water Board permits that may expire every five years. This informational deficiency makes the project description inadequate.

Grp 21-19

The DEIR also relies on a shifting project description. Despite the DEIR's clear statement that the Project's permitted mining operations would span 80 years (DEIR at 3-12, 3-28, 3-47), the DEIR's hydrology and water quality analysis refers to a 2045 "base-case" mining scenario. It states that the proposed mining plan or "base-case" scenario evaluated by the Applicant's consultant Itasca Denver, Inc. represents the exploration target over a 25-year period based on historic mapping and drill core sampling conducted to date. *Id.* at 4.8-55. Neither the Project description nor the hydrology chapter explain the basis for this "base-case scenario" or how it is compatible with the Project's 80-year timespan. Relatedly, the DEIR's hydrology and water quality chapter contains a section on "potential future exploration and mining" that discusses "possible future mining scenarios" that would extend from 26 years to 60 years after Project approval. This "additional, deeper exploration and mining" may occur as part of the Project within the 2,585-acre mineral rights boundary owned by Rise. *Id.* at 4.8-62. Once again, the DEIR's project description makes no mention of this potential future exploration and mining. The DEIR fails to explain where exactly this future exploration and mining would occur, what it would entail, and how it would relate to the 80-year conditional use permit for the Project. This omission violates CEQA. *See San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 730.

Grp 21-20

Finally, the DEIR provides an inconsistent description of the Project construction period. The DEIR's project description states that Project construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's air quality, GHG, and energy chapter assumes that Project construction would last for only 12 months, and bases its impact analyses on that assumption. *Id.* at 4.3-44 to 4.3-46, 4.3-66 to 4.3-67, 4.3-74, 4.3-92. The DEIR is therefore internally contradictory and improperly minimizes the Project's significant impacts. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 284. The DEIR must be revised so that the project description and the impact analyses consistently describe the duration of construction activities.

II. The DEIR's Fails to Adequately Analyze and Mitigate the Project's Environmental Impacts.

Grp 21-21

The discussion of a proposed project's environmental impacts is at the core of an EIR. *See* CEQA Guidelines §15126.2(a) ("[a]n EIR shall identify and focus on the significant environmental effects of the proposed project"). As explained below, the DEIR's environmental impacts analysis is deficient under CEQA because it fails to provide the necessary facts and analysis to allow the County and the public to make informed decisions about the Project. An EIR must effectuate the fundamental purpose of CEQA: to "inform the public and responsible

officials of the environmental consequences of their decisions before they are made." *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123 ("*Laurel Heights II*"). To do so, an EIR must contain facts *and* analysis, not just an agency's bare conclusions. *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 568. Thus, a conclusion regarding the significance of an environmental impact that is not based on an analysis of the relevant facts fails to fulfill CEQA's informational mandate.

Additionally, an EIR must identify feasible mitigation measures to mitigate significant environmental impacts. CEQA Guidelines §15126.4. Under CEQA, "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." Pub. Resources Code § 21002.

Although it is clear that the proposed Project has the potential to cause extraordinary environmental degradation, neither the public nor decisionmakers have any way of knowing the magnitude of this harm. As we explain below, the DEIR fails to provide detailed, accurate information about the Project's significant environmental impacts and to analyze mitigation measures or project alternatives that would reduce or avoid such impacts.

A. The DEIR Fails to Adequately Analyze and Mitigate the Project's Hydrology and Water Quality Impacts.

1. The DEIR Does Not Adequately Analyze or Mitigate the Project's Impacts on Domestic Water Supply Wells.

Grp 21-22

The proposed Project would intentionally affect local groundwater resources by dewatering the aquifer in the Project vicinity to lower groundwater levels. According to Baseline's hydrogeologist, Bruce Abelli-Amen, mine workings would essentially act as an enormous groundwater extraction well that would be pumped continuously for the Project's duration, i.e., 80 years. Exhibit A (Baseline Report) at 4, 5. The mine's groundwater levels would be lowered by over 3,000 feet. DEIR at 4.5-55. Despite this massive dewatering operation, the DEIR fails to accurately evaluate how this loss of water would affect groundwater levels. Consequently, the document also fails to adequately evaluate the effect on residences and businesses in the Project vicinity that rely solely on private groundwater wells for their water supply.

(a) The DEIR Fails to Accurately Describe Existing Hydrologic Conditions in the Project Study Area.

Grp 21-23

The DEIR's analysis of impacts on domestic water supplies fails from the outset because it lacks an adequate description of existing hydrological conditions. As discussed above, an accurate depiction of existing environmental conditions is critical to a complete assessment of

project impacts. First, as the DEIR admits, "baseline groundwater levels" have yet to be established. *See* DEIR Mitigation Measure 4.8-2(a) (p. 4.8-67), stating "[F]or each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings." Until the DEIR identifies baseline groundwater levels absent the Project, it is not possible to evaluate how mining operations will impact groundwater levels and domestic water supply wells.

Grp 21-24

Second, the DEIR provides no evidence that the hydrologic analysis covers the full geographic area where impacts might occur. CEQA requires that an EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 721-23. This principle stems directly from the requirement that an EIR analyze all significant or potentially significant environmental impacts. Pub. Resources Code §§ 21061, 21068. An EIR cannot analyze all such environmental impacts if its study area does not include the geographical area over which these impacts will occur. Here, the DEIR states that "drawdowns of the water table are *generally* within the mineral rights boundary." DEIR at 4.8-58 (emphasis added). By including the word "generally," the DEIR admits to being uncertain about the geographic extent of where drawdowns might occur. Moreover, the DEIR provides no explanation as to how it determined that drawdowns would likely be limited to the area within the mineral rights boundary. As discussed below and as elaborated on in the Baseline Report, the area surrounding the Project site contains a fractured bedrock system which affects groundwater occurrence and flow. Exhibit A (Baseline Report) at 6, 7. Due to this complex hydrogeologic environment, it is certainly possible for drawdowns of the water table to extend beyond the mineral rights boundary. Until the DEIR accurately identifies where drawdowns would occur, the DEIR cannot provide a full and accurate accounting of the Project's hydrologic impacts.

Grp 21-25

Baseline Environmental echoes this concern, explaining that the Applicant does not intend to monitor water levels in the actual water supply wells at overlying and nearby residences and businesses that may be affected by the Project. Instead, the Applicant proposes to install 15 monitoring wells across the Project site. Exhibit A (Baseline Report) at 11. According to Baseline, there are likely hundreds of supply wells in the region. It is possible that some of these wells are just barely satisfying the well owners' needs under existing conditions, and that any reduction to their water level caused by the Project's operations could lead to water levels dropping below the well pump intake. *Id.* at 10. However, because the DEIR does not cast its geographic net widely enough, the potential impacts to well users caused by the Project's operations remain undisclosed. The DEIR must be revised to correct these deficiencies and then recirculated for public review and comment.

(b) The DEIR Lacks Thresholds of Significance for Evaluating the Project's Impacts on Groundwater Supplies.

CEQA's most basic purpose is to inform governmental decisionmakers and the public about the potentially significant environmental effects of a proposed project. CEQA Guidelines § 15002 (a) (1); 40 C.F.R. § 1500.1(b). Determining whether a project may result in a significant adverse environmental effect is one of the key aspects of CEQA. Guidelines § 15064(a) (determination of significant effects "plays a critical role in the CEQA process"). CEQA specifically anticipates that agencies will use thresholds of significance as an analytical tool for judging the significance of a Project's impacts. *Id.* § 15064.7. The determination of significance "is critical, because once 'significant effects' have been identified in the EIR, an agency must explore implementing feasible mitigation measures or alternatives to avoid or reduce the effect." *Berkeley Keep Jets Over the Bay Com. v. Bd. of Port Comrs.* (2001) 91 Cal.App.4th 1344, 1373.

Thus, one of the first steps in any analysis of an environmental impact is to select a threshold of significance and to support this threshold with substantial evidence. CEQA Guidelines § 15064.7 (b). Here, the DEIR contains no thresholds of significance for the Project's impacts on groundwater supplies. This flaw leads to a cascade of other failures: without a threshold, the DEIR cannot identify whether a particular effect will be significant and it cannot identify adequate mitigation to address that impact. In short, the DEIR cannot do its job. Thus, although the DEIR ultimately asserts that the Project would potentially impact groundwater supplies, the document provides no standard by which to evaluate this impact's significance.

Grp 21-26

This defect becomes most apparent when reviewing Mitigation Measure 4.8-2 (b): "If, based on the [Groundwater Monitoring Plan], it is determined that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted." DEIR at 4.8-68.

Although the DEIR never states this, it appears that the authors are relying on this 10 percent reduction figure as an ad hoc threshold of significance. The problem is that the DEIR provides no justification for this arbitrary number. Exhibit A (Baseline Report) at 10. Indeed, although Mitigation Measure 4.9-2(b) references Nevada County General Plan Policy 17.12, nothing in this policy mentions a 10 percent reduction criterion. This 10 percent figure is almost meaningless because, as discussed above, it is certainly possible that of the hundreds of supply wells in the region, some of them are just barely satisfying the well owners needs under existing conditions, and *any* reduction could lead to adverse impacts on area wells.

It is therefore critically important that the revised DEIR identify thresholds of significance, based on substantial evidence (i.e., data related to the characteristics and function of

the existing domestic wells in the Project study area). The DEIR's failure to include this information is fatal flaw requiring that the DEIR be revised and recirculated.

(c) The DEIR Does Not Accurately Evaluate the Project's Impacts Because It Relies on a Flawed Groundwater Model.

The DEIR relies on a numerical groundwater model to assess the Project's impacts on groundwater levels and specifically to determine which private wells would experience excessive drawdown. Experts agree that these models can be inaccurate and unreliable under the best of circumstances. As Baseline explains,

> Accurately characterizing the flow patterns and behavior of groundwater using mathematical equations (models) is a challenging endeavor in any geologic environment. The types of hydrogeologic systems that are most readily modeled accurately are uniform (homogeneous), isotropic (consistent structure from place to place) rock and or sediments, like a uniform unfractured sandstone where water flows slowly through pore spaces around the grains of the geologic material.
>
> Groundwater occurrence and flow within complex fractured bedrock systems, like those that occur at the project site, are exceedingly difficult to model with accuracy or reliability. It is widely known by practitioners in the hydrogeologic community that accurate prediction of groundwater behavior in fractured bedrock using groundwater models, where most of the flow occurs within the unknowable sets of primary and secondary fracture patterns, rarely occurs.

Grp 21-27

Exhibit A (Baseline Report) at 6, 7.

In addition to the inherent uncertainties of relying on models to predict groundwater impacts in a complex hydrogeologic environment such as this one, Baseline identified numerous deficiencies in the DEIR's groundwater model. For example, the model was calibrated based on pumping rates from the historical Idaho-Brunswick Mine and only one water level measurement was collected from the flooded (i.e., inactive) Union Hill shaft in 1956. Using only one water level measurement to calibrate a complex bedrock aquifer system over a large region introduces a significant amount of uncertainty to the model. Exhibit A (Baseline Report) at 7. Moreover, as Baseline explains, based on the DEIR's appendix, there is a poor hydraulic connection between the two mines, which suggests the water level measurement collected from the Union Hill Shaft is not ideal for calibrating the groundwater model. *Id.*

Grp 21-28

Nor does the model describe how drawdown would be determined relative to baseline conditions. Private domestic wells in the Project vicinity have seasonal fluctuations that may vary from 10 to 50 feet between wet and dry seasons. Exhibit A (Baseline Report) at 11 (citing DEIR Appendix K.3 at 7).The DEIR provides no explanation as to how these seasonal water fluctuations would be distinguished from Project-related drawdown.

Grp 21-29

Nor does the groundwater model accurately account for the groundwater depression that will be created by the constant drainage from the existing mine workings. As Baseline explains, calibrating the groundwater model without incorporating the proper mechanisms to simulate the drainage of groundwater from existing mine workings could introduce substantial error to the overall modeling results. Exhibit A (Baseline Report) at 8.

These and other deficiencies identified in the Baseline Report demonstrate that the DEIR's groundwater model likely does not accurately and reliably predict the Project's groundwater impacts. Indeed, even the water resources expert retained by the Applicant expressed concerns about the reliability of the DEIR's groundwater model's results. *See* Exhibit A (Baseline Report) at 7.

Grp 21-30

Finally, the DEIR calls for a Groundwater Monitoring Plan (GMP) that calls for the collection of groundwater-level information. DEIR at 4.8-67. But the GMP does not propose to monitor water levels in the actual water supply wells at overlying and nearby residences and business that may be affected by the Project. Instead, as discussed above, it proposes to install monitoring wells across the Project site at 15 different locations. Exhibit A (Baseline Report) at 11, 12 (citing the GMP at 1). The DEIR never explains how the placement of 15 monitoring wells in complex fractured bedrock spread over thousands of acres of land could provide sufficient data to evaluate the Project's impacts on residences and businesses. As Baseline explains, a monitoring well could be placed in proximity to an existing supply well and respond very differently to changing water levels in the mine during dewatering if a water-bearing bedrock fracture intersects one of the wells, but not the other. Exhibit A (Baseline Report) at 12.

Grp 21-31

Based on the flawed groundwater model output, the DEIR concludes that wells only within the East Bennett area could be affected and that impacts in all other areas would not be significant. DEIR page 4.8-62. Specifically, the DEIR determines that the Project would impact just seven supply wells in the East Bennett area during the 80-year life of the mining operation. DEIR at 4.8-66. The DEIR further notes that while only seven wells are projected to be affected, the Project would install a potable water supply line and connect up to 30 properties in the same area to the Nevada Irrigation District potable water as part of a Well Mitigation Plan. DEIR at 4.8-66, 4.8-68 (Mitigation Measure 4.8-2(c).

However, for the reasons discussed above, and as Baseline confirms, the DEIR lacks evidentiary support that the Project would not significantly impact residences and businesses (i.e., beyond the impacts to the seven supply wells that the DEIR does disclose or the 30

properties that may be retrofitted with a water supply line). Exhibit A (Baseline Report) at 12. And as discussed below, the DEIR's mitigation measures are flawed and incapable of lessening the Project's significant impacts.

2. The DEIR's Mitigation Measures Would Not Mitigate the Project's Groundwater Impacts.

Grp 21-32

The primary goal of an EIR is to identify a project's significant environmental impacts and find ways to avoid or minimize them through the adoption of mitigation measures or project alternatives. Pub. Resources Code §§ 21002.1(a), 21061.The lead agency must adopt all feasible mitigation measures that can substantially lessen the project's significant impacts, and it must ensure that these measures are enforceable. *Id.*, § 21002; CEQA Guidelines §§ 15002(a)(3), 15126.4(a)(2); *City of Marina v. Bd. of Trustees of the Cal. State Univ.* (2006) 39 Cal.4th 341, 359, 368-69. The requirement for enforceability ensures "that feasible mitigation measures will actually be implemented as a condition of development, and not merely adopted and then neglected or disregarded." *Federation of Hillside and Canyon Assns. v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261 (italics omitted); CEQA Guidelines § 15126.4(a)(2). The DEIR fails to comply with these requirements.

The DEIR relies on three mitigation measures to conclude that the Project's impacts on groundwater supplies would be less than significant. None of these measures would effectively reduce the Project's impacts. Mitigation Measure 4.8-2 (a) calls for the Project's GMP to be implemented prior to the dewatering of the mine. Mitigation Measure 4.8-2(b)calls for the provision of supplemental water from the Nevada Irrigation District if any wells experience a 10 percent reduction in water. Mitigation Measure 4.8-2(c) calls for the connection of 30 properties to the Nevada Irrigation District (NID) potable water system. DEIR at 4.8-67 to 4.8-68. For the reasons discussed below, all three measures are deficient.

Grp 21-33

The DEIR explains that in order to implement the GMP, the Applicant must collect additional groundwater level data and then perform a water-level assessment for individual wells. These steps are necessary in order to evaluate *baseline* groundwater level conditions and to determine the Project's impacts on individual domestic wells. DEIR at 4.8-67. This post-approval data collection and impact analysis constitutes an inappropriate deferral of mitigation. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines § 15126.4(a)(1)(B). However, where mitigation for an impact "is known to be feasible," but where "practical considerations prohibit devising such measures early in the planning process," an agency "can commit itself to eventually devising mitigation measures that will satisfy specific performance criteria articulated at the time of project approval." *Cleveland Nat. Forest Foundation v. San Diego Assn. of Govs.* (2017) 17 Cal.App.5th 413, 442-43. In order to defer formulation of mitigation measures, therefore, an agency must demonstrate (a) that mitigation of the impact is feasible; (b) that practical considerations preclude devising measures at the time of review; (c) specific, articulated performance criteria that will avoid or lessen the

impact; and (d) a binding commitment to adopt measures that will meet or exceed those performance standards. Here, the DEIR does not meet these criteria.

Of paramount concern is the DEIR's failure to include performance criteria that will avoid or lessen the Project's impacts. As discussed above, the DEIR lacks thresholds of significance. Without thresholds of significance, the DEIR is unable to identify performance standards. To the extent that the DEIR preparers intend to suggest that Mitigation Measure 4.8-2(b) (Applicant will supply water to those wells that experience a 10 percent or greater reduction in water), constitutes a performance standard, it cannot do so. As discussed above, and as elaborated fully in the Baseline Report, the DEIR does not provide any factual support for its 10 percent figure. Exhibit A (Baseline Report) at 10-11. And, again, until the DEIR accurately describes existing conditions for the properties that rely exclusively on well water, the DEIR has no basis to conclude that any reduction in the amount of water caused by mining operations would not result in significant impacts. *Id.*

Mitigation Measure 4.8-2 (c) is equally problematic. Here, the DEIR calls for the connection of 30 properties to the NID water system. Again, this measure fails at the outset because there is nothing in the DEIR to suggest that the Project's impacts would not exceed 30 properties. Nor does the DEIR provide any evidence as to how this measure would reduce impacts. Courts will not defer to an agency's conclusions about the effectiveness of a mitigation measure where, as here, the measure's efficacy in reducing an impact is not apparent and there is no evidence in the record showing that it will be effective. *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 866, 875-76. As Baseline explains, to effectively ensure there is no discontinuation of water service to potentially affected users, this mitigation measure should include, at a minimum, the following components:

Grp 21-34

- Completion of a detailed water supply well inventory for all wells within the Mineral Rights Boundary, plus a substantial buffer zone;
- Investigation of all available details about each potentially affected well such as the construction design (i.e., depth, diameter, screened interval); type and use of the well (e.g., domestic, irrigation, industrial, etc.); water demand (installing totalizer meters if necessary to determine water use); and recharge rates (installing pressure transducers if necessary to monitor drawdown and recharge); and seasonal variations in water levels; and
- Development of a plan for each well to ensure that an immediate alternate water supply can and will be provided should an impact to that well occur. This plan must include provisions to ensure alternate water supplies will be provided throughout the 80-yearlife of the Project and beyond.

Grp 21-35

In addition, we direct the County to Safeguards for Well Owners and the Idaho-Maryland Mine, CEA Foundation, December 1, 2021, attached as Exhibit H. This document outlines recent permitting history at the Idaho-Maryland Mine and raises additional deficiencies in the DEIR's flawed approach to groundwater protection. This document explains that the 1996 Emperor Gold project was less impactive than the proposed Project but offered far more substantive protections for area wells. Mitigation Measure 4.8-2 must be revised to include, at a minimum, the safeguards identified in this document.

Grp 21-36

Finally, it is important to note that, because Baseline has determined that the Project would threaten water supplies in the area, the Project is inconsistent with Nevada County General Plan Policy 17.12. This policy places the burden of proof on the Applicant to show that a mining operation did not create the water problem and requires the Applicant to remedy the water problem.[3]

3. The DEIR Does Not Adequately Analyze or Mitigate the Project's Groundwater Quality Impacts.

Water samples from the New Brunswick shaft and drains reveal that groundwater and surface water quality are already severely degraded. *See* DEIR at 4.8-21, 4.8-22 stating that primary constituents of interest from these water samples are iron and manganese. Arsenic has also been detected above regulatory limits as has the compound cis-1,2- dichloroethylene (DCE). *Id.* Other contaminants of concern include ammonia, hexavalent chromium, pH, total suspended solids, antimony, copper and nitrate. *See* David M. Chambers' Report, submitted under separate cover.

Grp 21-37

The Project's construction and operations involve multiple activities that could result in adverse effects to water quality, including but not limited to the discharge of mine water containing iron and manganese, discharge of construction area dewatering water, erosion and sedimentation associated with the placement of engineered fill at the Centennial and Brunswick Sites, and use of cemented-paste backfill in the underground workings. DEIR at 4.8-51.

Instead of fully evaluating the Project's water quality impacts, which would require a detailed analysis of the operational water quality treatment processing, including modeling water quality, the DEIR effectively assumes that no such impacts would occur because the Applicant would be required to comply with water quality standards and waste discharge requirements.

[3] *See* Chapter 17, Mineral Management, of the Nevada County General Plan; available at: https://www.mynevadacounty.com/DocumentCenter/View/12589/Chapter-17-Mineral-Management-1995-PDF; accessed March 3, 2022.

DEIR at 4.8-45, 4.8-52, 4.8-53.[4] This "trust us" approach is not sufficient to mitigate a potentially significant impact. Under well-established case law, compliance with existing policies and regulations does not excuse the agency from describing project activities or from analyzing resulting impacts. *See Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1108-09 (environmental effect may be significant despite compliance with such requirements). To simply assert that water quality standards will be met is not sufficient for the public or decisionmakers to assess either the adequacy of water treatment methods proposed or the adequacy of the standards proposed for the discharge permit.

Grp 21-38

Moreover, although the Project entails a conditional use permit (CUP) that will span 80 years, the DEIR makes no attempt to reconcile the timeframe of the CUP with water quality permitting. As discussed above, the Applicant will need to obtain several different types of Water Board permits, none of which would have anything approaching an 80-year time frame. For example, NPDES permits for discharges to surface water expire, unless renewed, every five years per the federal Clean Water Act. 40 C.F.R. § 122.46. The DEIR provides no evidence that water quality will be protected for the entire 80-year Project duration given the timeframes of the various Water Board permitting requirements.

The extensive flaws in the DEIR's analysis of groundwater supply and groundwater quality impacts requires that the DEIR be comprehensively revised and recirculated.

B. The DEIR Fails to Adequately Analyze and Mitigate the Project's Noise and Vibration Impacts.

Grp 21-39

The Project's activities are expected to generate substantial noise levels. Many of these operations would generate noise levels of 85 dBA and begin early in the morning and extend into the evening. Certain operations would occur 24 hours per day for 80 years (*see e.g.*, above ground facility operations (gold mineralization processing)). Other operations, including the offsite hauling of gold concentrate and "engineered fill," would begin at 6:00 a.m. and run until 10:00 p.m. seven days a week. DEIR at 3-26; 3-37; 4.10-31. Although tunneling and blasting would occur throughout the Project's 80-year duration, the DEIR does not identify the hours of these operations. All of these mining operations would occur in a rural residential area and as close as 300 feet from the nearest residence. DEIR at 3-11, 3-15, 4.10-33.

Grp 21-40

Despite the potential for severe noise and vibration impacts, the DEIR's analysis of and mitigation for these impacts is utterly deficient. The DEIR's failure to accurately account for and disclose all of the Project's noise and vibration impacts prejudicially impairs the ability of

Grp 21-37

[4] Although DEIR Chapter 4.8, Hydrology and Water Quality, includes numerous references to the groundwater supply model, we could find no indication that any modeling was conducted to evaluate the Project's impacts on water quality.

decisionmakers and the public to understand how the Project would affect the surrounding community.

1. The DEIR Declines to Conduct Impact Analyses Relying on the Flawed Premise that the Project Would Be Required to Comply with County Standards.

The DEIR repeatedly asserts that the Project would not have significant noise impacts because it would be required to comply with generalized County noise standards. *See* Tables 4.10-12, 4.10-13, 4.10-14. Yet, mere compliance with the County's standard does not necessarily mean noise impacts are insignificant. *Oro Fino Gold Mining Corporation v. County of El Dorado* (1990) 225 Cal.App.3d 872, 881-82. The proper question is not the relative amount of noise resulting from the Project, but "whether any additional amount of [] noise should be considered significant" in light of existing conditions. *Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1025-26. In *King and Gardiner Farms*, the court recently rejected a noise analysis that concluded that a project's impacts would be insignificant simply because they complied with the County's noise ordinance and general plan. Of particular importance here, the court found the "conclusion that conformity with the absolute or maximum noise level specified in a general plan does not prevent a fair argument from being made that the proposed project will generate environmentally significant noise impacts." 45 Cal.App.5th 814, 887. Rather, as established in *Keep Our Mountains Quiet v. County of Santa Clara*, "the lead agency should consider both the increase in noise level and the absolute noise level associated with a project." (2015) 236 Cal.App.4th 714, 733.

Grp 21-41

Here, the rural-residential noise setting is exceptionally quiet. The median/L50 noise levels indicate that people in the area enjoy noise levels below 40 dBA to 50 dBA 50% of the time (specifically, 50% of each hour). Exhibit B (Salter Report) at 4. In addition, residents in the area are currently located away from notable sources of ambient noise and thereby currently enjoy very low nighttime background noise levels between 30 dBA and 45 dBA. *See Id.* at 2, (citing DEIR Appendix L, Appendix B-1).

In light of this very quiet ambient environment, the DEIR should have thoroughly examined the Project's potential to generate nighttime noise. Unfortunately, it does no such thing. The DEIR asserts that because the Project's on-site noise sources must comply with the County's nighttime noise level standards, an evaluation of sleep disturbance is not warranted. DEIR at 4.10-23. This assertion is absurd. The Project includes many operations that will occur during early morning or nighttime hours, including dewatering, indoor facility construction, truck loading/unloading and off-site hauling mineralization processing, and water treatment. DEIR at 3-37. The combination of morning and nighttime industrial activities and low background/ambient noise levels represent a significant risk for Project-related noise to impact the community, annoy residents, and cause sleep disturbance. The revised DEIR must evaluate these impacts and identify and implement appropriate mitigation.

Grp 21-42

Grp 21-43

The DEIR also fails to take into account the absolute increase in noise levels compared to ambient background conditions. As the Salter Report explains, certain operations could be 25-35 dB above background ambient noise levels. These noise levels would be perceived as more than four times as loud as the median ambient noise levels and would be expected to result in an aggressive community response and complaints. Yet here too, the DEIR incorrectly determines such impacts would be less than significant because overall noise from these operations would not exceed the County's standards. Exhibit B (Salter Report) at 4. The revised DEIR must evaluate both the increase in noise level and the absolute noise level associated with the Project.

2. The DEIR Fails to Disclose the Geographic Extent of the Project's Noise and Vibration Impacts.

Grp 21-44

The DEIR defines the Project as consisting of two separate project sites; the Centennial and Brunswick Sites totaling 175 acres. DEIR at 4.9-1. The DEIR identifies the noise and vibration measurement locations occurring solely at the Centennial Site, the Brunswick Site and along the proposed pipeline location between the two sites. *See* DEIR Figure 4.10-3 (p. 4.10-6).

It appears the DEIR is artificially restricting the geographic size of the study area. While processing would occur on the Centennial and Brunswick sites (175-acres), mine development (tunneling) and gold mineralization production (tunneling and production blasting) would occur throughout the Applicant's 2,585 acre mineral rights boundary owned by the Applicant. DEIR at 3-19, 4.9-1; *see also* Figure 3-2 (p. 3-4). Tunneling and production blasting could certainly result in excessive noise levels and vibration. Despite this fact, the DEIR provides no evidence that noise and vibration impacts were measured throughout the entire mineral rights boundary. As discussed above, an EIR must analyze environmental impacts over the entire area where one might reasonably expect these impacts to occur. *Kings County Farm Bureau*, 221 Cal.App.3d at 721-23. Contrary to this requirement, the DEIR fails to provide the required evidentiary support that the DEIR accurately accounts for the full extent of the Project's noise impacts. The revised DEIR must disclose the Project's potential for noise and vibration impacts throughout the entire mineral rights boundary.

3. The DEIR Fails to Adequately Distinguish the Project's Construction from Its Operational Activities and thus Potentially Fails to Recognize that Certain Impacts Could Be Significant Under CEQA.

Grp 21-45

The DEIR's analysis of construction-related noise raises more questions than it answers. As an initial matter, the DEIR fails to clearly distinguish the Project's construction-related noise sources from its operational noise sources. This distinction is critical because the DEIR asserts that the County's noise standards do not apply to construction-related activities. *See* DEIR at 4.10-16; *see also* Table 4.10-11 (p. 4.10-29, fn. 2) "[b]cause the Nevada County Zoning Ordinance exempts construction activities from the noise standards, these criteria are not applicable to this component of the project. Results of this analysis are provided to give an

indication as to whether or not construction noise increases would be substantial relative to existing ambient conditions at these nearest receptors." If, as appears evident, the DEIR characterizes an operational activity as a construction project it may have incorrectly determined such impacts to be exempt from the County's noise standards and also determined the impact to be less-than-significant under CEQA. For example, the DEIR states that mine development (tunneling) would be constructed throughout the life of the mine. DEIR at 3-19. This would require drilling and the use of explosives. DEIR at 3-19. Similarly, a new mine shaft would be developed on the Brunswick Site. DEIR at 3-22. These massive project components appear to be characterized as construction activities. Yet, they have the potential to be extraordinarily noisy as they would require extensive drilling and rock excavation. *Id.* If the DEIR characterizes these and other project components as construction rather than operation, it inappropriately assumes the noise from these sources would be exempt from the County's noise standards.

Grp 21-46

The first step in remedying this deficiency is to clearly categorize each Project component as either construction-related or operation-related. For each construction-related Project component, the DEIR must disclose fundamental details such as the construction-phasing plan, including the timing and duration of each and every project. This analysis must also disclose each construction-project that is expected to occur over the Project's 80-year timeframe. Finally, in order for the public and decisionmakers to verify whether the DEIR actually accounts for the increase in noise and vibration levels for each construction-related component, the DEIR must identify the location (i.e., page number) in the DEIR and/or its technical appendices depicting the results of the specific noise calculations.

Grp 21-47

Second, although the DEIR acknowledges that the Project's construction activities at the Centennial Site and Brunswick Site could result in substantial temporary increases in noise exposure at eight receptors, it incorrectly concludes that these substantial increases in noise would not result in a significant impact under CEQA. DEIR at 4.10-29, 4.10-30. As discussed above, in evaluating a project's impacts under CEQA, an agency must address the actual impacts of a project and cannot hide behind metrics obscuring evidence of those impacts. *Protect Amador Waterways*, 116 Cal.App.4th at 1110-11 (finding that narrowly designed significance standards improperly foreclose complete consideration of a project's impacts). Here, the Project would result in a substantial increase in noise levels; that these impacts may be exempt from regulation under the County's noise ordinance does not make these impacts insignificant. If anything, the County's failure to regulate these noise impacts reinforces the need to identify them as significant and adopt adequate mitigation, as required by CEQA. The revised DEIR must identify this increase as a significant impact and identify feasible mitigation measures and/or project alternatives to reduce this impact.

4. The DEIR Fails to Identify the Timing of Tunneling and Blasting Operations and Therefore Likely Underestimates the Project's Noise and Vibration Impacts.

The DEIR identifies mine development (tunneling) and gold mineralization production (tunneling and production blasting) as part of the Project, but it does not identify the hours of operation for these Project components. *See* DEIR at 3-19; Figure 3-2 (p. 3-4); Table 3-7 (p. 3-37). The DEIR states that underground exploration and mining would occur 24 hours per day, 7 days per week. DEIR at 3-37. Assuming that underground exploration and mining include mine development and gold mineralization production, tunneling and blasting could occur at night. If this is the case, the Project's noise and vibration impacts would be far more severe than the DEIR discloses.

Grp 21-48

To the extent the County intends to rely on assumptions in the DEIR's technical appendix to suggest that tunneling and blasting would only occur during the day time, it cannot. The DEIR's Appendix M (Blasting Report) states, "[t]herefore, it is assumed that on average 7 drifts round blasts will be required per day. Blasting of drift rounds is normally done between shifts and therefore, on average, 3 to 4 drifts rounds would be blasted every 12 hours between shift changes." Appendix M at 15. The DEIR indicates that the 12 hour shifts will change at 7:00 a.m. and 7:00 p.m. DEIR at 3-36. Yet, the data included in Appendix M are simply modeling assumptions. Without explicit restrictions in the DEIR's project description pertaining to the hours of tunneling and blasting, coupled with conditions of approval, the DEIR cannot simply assume that tunneling and blasting operations would not occur at night and would not adversely impact nearby receptors. The revised DEIR must clearly identify the hours of mine development and gold mineralization production. If these operations occur at night or early in the morning, the revised DEIR must evaluate the potential for noise and vibration to cause sleep disturbance.

5. The DEIR Omits an Analysis of the Noise Impacts Resulting from Remediation of the Centennial Site.

The majority of the Centennial Site cannot be developed because of unstable soils and/or contamination. DEIR at 4.9-1, 4.7-3. As discussed above, DTSC's remediation project calls for engineered fill to be transported by truck from the Brunswick Site and placed on the Centennial Site. DEIR at 2-2. As we have explained, the DEIR assumes the baseline condition at the Centennial Site is post-remediation. DEIR at 1-6. However, the DEIR also acknowledges the possibility that clean up on the Centennial Site would not be complete upon commencement of mining, in which case engineered fill would be placed at the Brunswick Site or transported offsite to be utilized in local and regional construction markets. *See e.g.*, DEIR at 4.7-37.

Grp 21-49

According to the DTSC MND for the Centennial M1 Property Clean-Up Project Remedial Action Plan, activities involved with site remediation will include site clearing, excavation, grading, material transport, and compaction. Exhibit G (MND) at 64. Although

remediation of the Centennial Site could occur during commencement of mining, the DEIR does not analyze noise from remediation-related operations or the truck trips that would occur from these remediation activities.

6. The DEIR Substantially Underestimates Operational Noise Impacts.

The DEIR's analysis of the Project's operational noise and vibration impacts fails to comply because it substantially underestimates the Project's impacts. As a result, the DEIR avoids disclosing significant impacts and avoids having to identify feasible mitigation measures. Examples of the most egregious errors are set forth below.

(a) The DEIR Fails to Adequately Analyze Noise Impacts from the Placement and Compaction of "Engineered Fill" Operations.

Grp 21-50

Placement and compaction of "engineered fill" operations are expected to occur for at least five to six years at the Brunswick and Centennial sites. These operations would require the use of bulldozers, graders, excavators, front-end loaders and compactors. The DEIR relies on a computer noise model to estimate noise levels at nearby sensitive receptors and concludes that noise from "engineered fill" activities would not exceed the County noise standards at any receptor location. DEIR Table 4.10-14 (p. 4.10-33). However, a peer review of the DEIR's analysis conducted by Salter determined that the DEIR substantially underestimates the level of noise the surrounding community would experience. In fact, many of the calculated noise levels exceed the DEIR's estimates by up to 14 dB. Exhibit B (Salter Report) at 3, 4. By underestimating the actual noise levels that would be generated by the Project's operations, the DEIR avoids identifying significant impacts at 11 receptor locations near the Brunswick Site. *Id.*

Grp 21-51

Salter determined that the DEIR further underestimates the DEIR's noise impacts because it compares Project-related noise to ambient conditions near roadways. When noise monitoring devices are placed near roadways, they detect intermittent noise associated with passing cars and trucks. Yet, the median and "background" ambient noise levels indicate that much of the time people experience notably lower noise levels. Exhibit B (Salter Report) at 4. As discussed above, had the DEIR evaluated the absolute increase in projected noise levels against accurate ambient conditions, the DEIR would have determined that noise levels with the Project could increase by 20 to 35 db. As the DEIR reveals, a 5.0 dB increase in noise level is considered a significant impact.[5] *See* DEIR at Table 4.10-5 (p. 4.10-17). In addition to comparing the

[5] Inexplicably, the DEIR relies on varying thresholds for the Project's traffic and on-site noise sources. The DEIR relies on a numerical increase in noise only to determine the significance of the Project's traffic noise impacts. *See* DEIR Table 4.10-5 (p. 4.10-17), identifying +5.0 dB or more as constituting a significant traffic noise impact. For on-site noise sources, it relies on the noise limits included in the Nevada County General Plan Noise Element and the Nevada County Land Use and Development Code. DEIR Table 4.10-4 (p. 4.10-12); 4.10-15.

Project's noise levels to the County's standards, it should have evaluated the Project's impacts against ambient noise, i.e., the noise levels that people actually experience. Exhibit B (Salter Report) at 4. The revised DEIR must provide this analysis.

(b) The DEIR Relies on Flawed Assumptions Regarding Equipment "Upgrades" to Conclude the Project Would Not Exceed the County's Noise Standards.

Grp 21-52

The DEIR assumes the implementation of various "upgrades" to mechanical equipment in its calculation of projected noise levels but it fails to include any enforceable commitment to actually implement these upgrades. The DEIR concludes that with implementation of these upgraded measures, operational noise would be below County standards and the Project's impacts would be less than significant. DEIR at 4.10-41. For example, as Salter explains, the DEIR assumes the Project's metal buildings would achieve the highest possible sound insulation system and the project's ventilation fan(s) would employ high performance industrial fan silencers. Exhibit B (Salter Report) at 5-6. Yet, we can find no evidence in the DEIR or the technical appendices that the Applicant has committed to installing this equipment. Similarly, the DEIR appears to rely on specific assumptions regarding backup generators, including engine exhaust mufflers, sound isolating building construction, and radiator fan silencers, but again, the document does not identify the specific type of equipment. Nor does it identify the expected noise-attenuation of each piece of equipment. *Id.* By assuming that these "upgrades" are already incorporated into the Project when conducting the noise analysis, the DEIR obscures the true extent of the Project's noise impacts. As Salter explains, "the DEIR appears to 'promise' a less-than-significant noise impact, but omits the controls, assurances, and appropriate mitigation to ensure that this claim is actually achieved. Without requiring the aforementioned noise reducing measures, or assumed 'upgrades,' the DEIR fails to adequately protect the community from the potential for excessive noise." *Id.* The revised DEIR must evaluate the significance of the Project's noise impacts without these upgrades. *Lotus v. Dept. of Transportation* (2014) 223 Cal.App.4th 645, 655-57.

(c) The DEIR Fails to Adequately Analyze or Mitigate the Noise and Vibration Impacts from the Project's Blasting Operations.

Grp 21-53

The DEIR relies on an overly lenient threshold of significance to assert that vibration from the Project's blasting operations would be barely perceptible to nearby receptors. Exhibit B (Salter Report) at 7-8. The DEIR identifies a 0.4 in/sec peak particle velocity (PPV) vibration limit based primarily on a vibration study performed following an underground nuclear blast in Mississippi in 1964. Exhibit B (Salter Report) at 8; DEIR at 4.10-58. Salter explains that human responses to a single blast does not reflect the impact on the community from ongoing, perceptible and potentially unpleasant vibration over the 80-year lifespan of this Project. Exhibit B (Salter Report) at 7-8. Nevertheless, the DEIR references this study as it is described in a U.S. Bureau of Mines (USBM) 1971 document entitled "Blasting Vibrations and Their Effects on

Structures." *Id.* The claim extracted from the USBM document is that "less than 8% of people would complain about blasting activities if the peak particle velocity (PPV) was below 0.4 in/sec." DEIR, Appendix M, at 7. However, as Salter explains, the original chart this is drawn from provides additional context: The proposed limit of 0.4 in/sec. PPV is characterized as clearly perceptible and borderline unpleasant. Exhibit B (Salter Report) at 8. A Caltrans Manual confirms that blasting vibration of 0.4 in/sec would be considered "strongly perceptible." *Id.*

Salter explains that a 0.4 in/sec vibration limit might be appropriate in certain scenarios, such as for a short-term event. However, this Project involves ongoing mining operations for 80 years. According to Salter, this impact would be far more severe when blasting operations occur at night, especially because the DEIR does not include any restrictions on nighttime operations. Exhibit B (Salter Report) at 9. In this regard, the DEIR ignores crucial guidance set forth by the U.S. Office of Surface Mining and Reclamation and Enforcement (OSMRE):

> All blasting must take place during daylight hours unless more restrictive times are specified. If night-time blasting is approved by the regulatory authority, it must be based on evidence from the operator that the public will be protected from adverse noise and other impacts.

Exhibit B (Salter Report) at 9 (citing OSMRE Blasting Guidance Manual).

The DEIR provides no evidence that the public will be protected from adverse effects from the Project's blasting operations. It provides no special consideration and therefore no additional restrictions on blasting vibration during evening and nighttime hours. According to Salter, subjecting residents to "strongly perceptible" and borderline "unpleasant" vibration for the rest of their lives constitutes a significant impact. Exhibit B (Salter Report) at 9. Because the DEIR fails to disclose this impact, it must be revised and recirculated.

Grp 21-54

The DEIR errs further in its evaluation of noise from the Project's blasting operations. To evaluate the Project's blasting-related noise impacts, the DEIR relies on noise measurements conducted at the Sutter Gold underground mine in Amador County. DEIR at 4.10-44. The Sutter Gold study found blasting noise to be 75 dBA, on average, at a distance of 200 feet from the mine portal. *Id.* However, to translate those findings to the Project's Brunswick Site, the DEIR assumes that noise at the Project site would be reduced by 20 dB compared to the Sutter Gold mine. *Id.* Other than mentioning the difference in orientation and size of the portal, this claim of 20 dB noise reduction is unsubstantiated. As the Salter Report explains, twenty decibels of noise reduction is a substantial change in noise emission. *Id.* Without further data or evidence to back up this 20 dB claim, the DEIR cannot simply assume these lower noise levels.

According to Salter, without the unsubstantiated 20 dB of reduction, blasting noise at the nearest sensitive receptors would be between 72 and 77 dBA. Exhibit B (Salter Report) at 10. As stated above and in the DEIR, ambient median and "background" noise levels at many sensitive receptors is between 35 dBA and 50 dBA. Thus, the blasting noise could be substantially above the ambient noise levels, by approximately 25 to 40 dB. Salter determines such an event to be considered a disturbance, likely resulting in complaints, particularly at night when sleep disturbance would be expected. *Id.* This is a significant undisclosed impact requiring that the DEIR be revised and recirculated.

C. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts Relating to Hazards and Hazardous Materials.

1. The DEIR Omits an Accurate Description of Existing Conditions.

For the reasons discussed above, an accurate depiction of the existing environmental setting is critical to a complete assessment of the Project's impacts. Yet here too, the DEIR fails to provide an adequate description of the hazardous conditions on the Project's Centennial Site.

Grp 21-55

The existing waste rock and mine tailings that were generated from historic mining activities contain contaminants at levels exceeding regulatory thresholds, including California hazardous waste thresholds. Exhibit A (Baseline Report) at 2. These existing waste rock and mine tailings at the Centennial Site have been present (and have represented a persistent environmental hazard) since the former mining operation at the site shut down over 60 years ago (circa 1956). As discussed above, the owner of the Centennial Site entered into a Voluntary Cleanup Agreement with the DTSC to address the hazards associated with the legacy waste rock and mine tailings generated from previous mining operations. It should be noted that cleanup actions were not initiated by the site owner until they were ready to reopen the mine. It is also important to note that under existing conditions, the majority of the Centennial Site cannot be developed due to unstable soils and/or contamination. DEIR at 4.7-3.

Despite these circumstances, the DEIR assumes as baseline conditions that the Centennial Site will be cleaned up pursuant to the Voluntary Clean Up Agreement with DTSC. *See* DEIR at 4.7-3, 4.7-4, "this EIR does not use the existing condition at the site for the environmental baseline and instead uses an environmental baseline that reflects the anticipated conditions for the Centennial Industrial Site following implementation of the [Remedial Action Plan];" and 4.7-32, "the baseline condition for the Centennial Industrial Site has been adjusted for this analysis to reflect post-remediation condition."

The problem with this approach is that the DEIR does not provide the necessary assurance that this cleanup will occur prior to implementation of other Project components. In several instances, the DEIR acknowledges that clean up on the Centennial Site may not be complete upon commencement of mining and that it may not even be completed within the 80-

year permit life. *See* DEIR at 3-26, "[i]t is the applicant's *intent* to prioritize the placement of the engineered fill at the Centennial Industrial site" (emphasis added); *see also* DEIR at 3-26, "Notwithstanding the priority of placing engineered fill at the Centennial Site, the ultimate approach to engineered fill placement will need to remain flexible to address any potential unforeseen circumstances. One such scenario would be if the remediation of the Centennial Site, currently under DTSC oversight, is not complete upon commencement of mining, in which case engineered fill would be placed at the Brunswick Industrial Site and/or transported off-site to be utilized in local and regional construction markets."

Absent full disclosure of existing, baseline hazardous conditions on the Project site, it is impossible for decisionmakers or the public to fully evaluate the hazardous impacts associated with the Project.

2. The DEIR Fails to Analyze or Mitigate Hazardous Impacts Relating to Waste Rock and Mine Tailings.

The DEIR fails to evaluate how future waste rock and mine tailings generated by the proposed Project would be managed to ensure that they do not pose a health hazard to people or the environment. The DEIR provides almost no information that demonstrates the chemical quality of the rock proposed to be mined would differ in any way from the rock that was mined historically. According to the Baseline Report, in the absence of this information, it is reasonable to assume that any newly generated waste rock and mine tailings would have similar chemical characteristics as the rock mined in the past. Therefore, the waste rock and mine tailings generated by the proposed Project will almost certainly contain asbestos, silica, and trace heavy metal toxic air contaminants (TACs) including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium that could pose a health risk to people and the environment. DEIR at 4.3-79; Exhibit A (Baseline Report) at 3.

Grp 21-56

As mentioned above, the DEIR tries to "rebrand" the waste rock and mine tailings as "engineered fill," apparently in the hopes that the waste material can be transported off-site for use at various unspecified construction sites throughout the region as fill material. Although this material would almost certainly result in numerous new contaminated wastes sites that pose a threat to the public and the environment, the DEIR fails to provide *any* analyses of these impacts.

The DEIR suggests that any impacts would be mitigated because the Applicant will comply with RWQCB requirements. Yet, for the reasons discussed in this letter, it is not sufficient to rely on regulatory permitting to assert that impacts will be mitigated. The DEIR must first comprehensively analyze these impacts and then demonstrate how regulatory compliance will ensure impacts are sufficiently mitigated. This analysis must take into account the fact that similar historic actions have been demonstrated to result in environmental harm that has persisted for decades.

3. The DEIR Fails to Evaluate or Mitigate Flight Hazards at Nevada County Air Park.

Grp 21-57

The closest public use airport to the Project site is the Nevada County Air Park, less than one-mile (approximately 4,000 feet) northeast of the Brunswick Site. DEIR at 4.7-36. When the weather is cool, the Project will cause saturated air to become super-saturated and create a continuous plume cloud. *See* Report prepared by CEA Foundation, submitted under separate cover. A southwest breeze will move this plume towards the airport and potentially obstruct the airspace surrounding the airport. *Id.* This large volume of heated air will updraft, possibly causing turbulence for air traffic. It could also develop into a standing cloud or fog that will impede visibility for aircraft and/or the tower and thus pose a hazard to flight. *Id.* Because the DEIR neither discloses, analyzes or mitigates this impact, it must be revised and recirculated.

4. The DEIR Fails to Adequately Analyze the Project's Cumulative Impacts Relating to Hazards and Hazardous Materials.

Grp 21-58

The DEIR fails to analyze cumulative hazards to the public and environment related to increases in the transport, storage, and use of hazardous materials. The DEIR suggests there would be no cumulative impacts because no other cumulative projects are anticipated to haul hazardous materials along Brunswick Road on an ongoing basis. DEIR at 4.7-39. This is incorrect. As discussed above, DTSC's RAP would require transporting by truck "engineered fill" from the Brunswick Site to the Centennial Site. DEIR at 2-2; Exhibit G (MND). The MND clearly acknowledges that implementation of the RAP may temporarily increase the risk of exposure of soil contaminants to the public. Exhibit G (MND) at 50. Consequently, the DEIR should have analyzed how the transport, storage and use of hazardous materials from the proposed Project together with the RAP would affect public health and safety. To the extent that the DEIR preparers might suggest that the cleanup of the Centennial Site would occur prior to the proposed Project, it cannot do so. Again, as discussed above, according to the DEIR, the possibility exists that clean up on the Centennial Site would not be complete upon commencement of mining. DEIR at 4.7-37. It also acknowledges the possibility that clean up on the Centennial Site would not be completed within the 80-year permit life of the proposed mine Project, and that "engineered fill" would be placed at the Brunswick Site and/or transported off-site to be utilized in local and regional construction markets. *Id.* The revised DEIR must analyze the cumulative effects of the RAP along with the proposed Project.

D. The DEIR Fails to Adequately Analyze and Mitigate the Project's Air Quality Impacts.

Grp 21-59

The DEIR's analysis of air quality contains numerous flaws. First, the DEIR fails to analyze the Centennial Site's cleanup's impact on air quality, or the air quality impacts that may result from the Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of air quality impacts from Project construction assumes a construction timeline that contradicts the

Project description. Third, the DEIR improperly relies on assumed mitigation measures for air quality impacts, failing to acknowledge those measures as mitigation. Fourth, the DEIR fails to mitigate significant air quality impacts from operational emissions of criteria air pollutants. Finally, the DEIR's Health Risk Assessment fails to disclose essential information and lacks substantial evidence to support its conclusions. The DEIR must be revised to correct these flaws.

1. The DEIR Fails to Analyze the Centennial RAP's Impact on Air Quality.

The Centennial RAP is an integral part of the IMM Project, as discussed in Section I.C, *supra*. Remediation of the Centennial Site is a necessary prerequisite to the dumping of mine waste from the Project on that site, and the Project's eventual reclamation of the site. *Id.* As explained above, the DEIR must therefore include the Centennial RAP as part of the Project, and must analyze all of the environmental impacts resulting from the RAP, including air quality impacts.

Grp 21-60

The Centennial RAP would involve mixing soil with over 335 tons (22 truckloads) of cement to stabilize the contaminants in that soil. Exhibit G (MND) at 3. It would require the clearing of existing vegetation, the excavation and grading of 36.7 acres of land on the Centennial Site, and the movement of 129,100 cubic yards of soil using backhoes and other heavy equipment. *Id.* at 3-4; Exhibit E (RAP) at 44. The MND for the Centennial RAP finds that the cleanup would generate potentially significant criteria air pollutant emissions that require mitigation. Exhibit G (MND) at 24-25. The DEIR improperly fails to disclose or analyze the impacts of these cleanup activities on air quality. DEIR at 4.3-66 to 4.3-102. The DEIR's omission of these impacts violates CEQA. *See County of Inyo*, 172 Cal.App.3d at 165-66; *Nelson*, 190 Cal.App.4th at 271. By failing to include this essential information, the DEIR prevents informed analysis of the Project's impacts and is therefore legally inadequate.

2. The DEIR Fails to Analyze Air Quality Impacts that May Result from the IMM Project if the Centennial Cleanup Does *Not* Occur.

The DEIR also fails evaluate air quality impacts that may result from the Project if the Centennial cleanup does not occur. The DEIR acknowledges that the Centennial Site might never be remediated during the 80-year term of the mine permit. DEIR at 1-3, 3-26. If that occurs, the Centennial Site will never become available for dumping of mine waste, and an additional 1.6 million tons of mine waste from the Project will need to be trucked offsite once the dumping area at the Brunswick Site is full. *Id.* at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the potential impacts of the offsite trucking of those additional 1.6 million tons of mine waste on air quality. The DEIR lacks this analysis. Instead, the DEIR's air quality analysis simply assumes that the Centennial RAP will be completed and that dumping of fill at the Centennial site will occur in the first five years of Project operations. *See id.* at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68, 4.3-93.

Grp 21-61

Because there is no assurance that remediation of the Centennial Site will be completed within the lifetime of the Project, it's speculative to assume that the site will be available for fill placement. *See* Exhibit A (Baseline Report) at 12-13. If the Centennial RAP is never completed and no fill is ever placed at the Centennial Site, that fill must be trucked offsite for an additional five years, resulting in additional air pollutant emissions not disclosed in the DEIR. The document's failure to disclose or analyze this impact deprives the public and decision-makers of essential information in violation of CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42. The DEIR's analysis for criteria air pollutants should be revised to assume that remediation of the Centennial Site may not be completed within the lifetime of the Project, and must evaluate the resulting air quality impacts of additional off-site trucking. *See* Exhibit A (Baseline Report) at 13. As demonstrated in Baseline's analysis of daily NO_x emissions, these additional off-site truck trips would result in more severe air quality impacts than those disclosed in the DEIR. *Id.*

5. The DEIR's Analysis of Construction Emissions Contradicts the Project Description.

Grp 21-62

The DEIR's analysis of air quality impacts from Project construction is unsupported because it contradicts the Project description regarding the duration of construction. The Project description states that construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's air quality analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. *Id.* at 4.3-44 to 4.3-46, 4.3-66 to 4.3-67, 4.3-74. The DEIR is therefore internally contradictory. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. The DEIR asserts that "the construction scenario assessed herein is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced, which would result in reduced max daily and annual emissions." DEIR at 4.3-44. However, the DEIR fails to provide any evidence in support of this statement, which fails to account for the fact that a longer construction period would result in a longer period of construction-related air pollution exposure for nearby receptors. The DEIR's air quality analysis must be revised to assume the same construction duration as the Project description.

3. The DEIR Improperly Relies on Assumed Air Quality Mitigation Measures, Preventing Informed Impact Analysis.

Grp 21-63

The DEIR lists three "applicant-proposed emissions reduction measures" intended to reduce the Project's air quality impacts. DEIR at 4.3-65. However, the DEIR does not classify these measures as mitigation, explaining that "[t]he analysis presented within this chapter *assumes* that all of the applicant proposed measures (APMs) presented below would be implemented." *Id.* (emphasis added). The DEIR assumes the APMs will be incorporated into the Project, but the APMs were not identified as Project features in the Project description, and there

is no assurance that these measures will be implemented as a part of the Project. *See* Exhibit A (Baseline Report) at 14. These applicant-proposed measures are in reality mitigation measures, which the DEIR improperly fails to recognize as such. This approach violates CEQA. In evaluating a project's impacts, an agency may not "compress[] the analysis of impacts and mitigation measures into a single issue" by incorporating an assumed mitigation measure into a project's features. *Lotus*, 223 Cal.App.4th at 656. A project's significant impacts must be determined first, and then the CEQA document must identify enforceable mitigation that will address those impacts. *Id.* at 656, 658.

Grp 21-64

Here, applicant-proposed measure APM-AQ-1 (Exhaust Emission Controls) requires that "[a]ll off-road diesel-fueled equipment and emergency generators owned by Rise Grass Valley Inc. shall be equipped with Tier 4 Final engines." DEIR at 4.3-65. It also requires that "[u]nnecessary construction vehicle idling time shall be minimized" and that "[a]ll off-road equipment shall be maintained in accordance with manufacturer's specifications." *Id.* APM-AQ-2 (Surface Fugitive Dust Controls) calls for wetting or covering of "all exposed soil surfaces (e.g., unpaved disturbed areas, unpaved parking areas, and unpaved staging areas, and soil piles)" to prevent fugitive dust emissions during construction and operations, and calls for construction techniques to minimize dust from roadways. DEIR at 4.3-65. APM-AQ-3 calls for the Applicant to implement an "ASUR Plan, which incorporates measures designed to minimize asbestos in engineered fill produced by the project, as well as minimize the emission of asbestos-containing dust from the underground mine." *Id.*

Each of these three measures are de facto mitigation measures, as they are clearly intended to minimize the Project's air quality impacts by reducing emissions sources. *See* CEQA Guidelines §15370 (defining "mitigation"); DEIR at 4.3-81 (asserting that APM-AQ-2 would reduce the fugitive dust generated by the Project); 4.3-82 (finding that APMs would reduce Project emissions of criteria pollutants); 4.3-87 (noting that APM-AQ-1 would reduce air pollution). However, the DEIR's calculation of "unmitigated" emissions of criteria air pollutants expressly assumes that APM-AQ-1 and APM-AQ-2 have already been implemented. DEIR Table 4.3-17 (p. 4.3-70); 4.3-73. The DEIR makes no attempt to calculate what the Project's emissions would be without the APMs, and does not separately quantify the emission reductions that would result from these measures. By assuming that these measures are already incorporated into the Project when conducting its air quality analysis, the DEIR obscures the true extent of the Project's air quality impacts. The DEIR must be revised to classify the APMs as mitigation measures, and must evaluate their effectiveness in reducing air quality impacts. The DEIR must evaluate the significance of the Project's air quality impacts without these mitigation measures, *before* considering the effectiveness of mitigation and the significance of Project impacts after mitigation. *Lotus*, 223 Cal.App.4th at 656, 658; *see* Exhibit A (Baseline Report) at 14. Only then can decisionmakers and the public fully understand the Project's impacts.

4. The DEIR Fails to Mitigate Significant Air Quality Impacts from Operational Emissions of ROG, NO_X And PM_{10}.

The DEIR concludes that the Project would not conflict with or obstruct implementation of an applicable air quality plan, and that this impact would be less than significant after mitigation. DEIR at 4.3-66. However, the DEIR's proposed mitigation fails to account for the Project's operational emissions of criteria air pollutants. The DEIR concludes that daily operational emissions of ROG, NO_X and PM_{10} are significant under Northern Sierra Air Quality Management District (NSAQMD) significance criteria and require mitigation. *Id.* at 4.3-67 to 4.3-70, 4.3-73; *see* Exhibit A (Baseline Report) at 14. It finds that without mitigation, these significant operational emissions could conflict with or obstruct implementation of the NSAQMD's Ozone Attainment Plan. DEIR at 4.3-70; *see id.* at 4.3-66.

Grp 21-65

Despite finding that operational emissions of ROG, NO_X, and PM_{10} require mitigation, the DEIR does not propose any mitigation measures to address operational emissions of those pollutants. *Id.* at 4.3-77 to 78. The DEIR includes two mitigation measures (Mitigation Measures 4.3-1(a) and 4.3-1(b)) which exclusively address *construction* emissions. *Id.* at 4.3-77 to 78. As written, nothing in Mitigation Measures 4.3-1(a) and 4.3-1(b) would do anything to reduce the Project's operational emissions. *See* Exhibit A (Baseline Report) at 14. Mitigation Measure 4.3-1(a) states that it contains measures "for use during construction," including the use of grid power where feasible "during construction" and temporary traffic control "during all phases of the construction." DEIR at 4.3-77. Mitigation Measure 4.3-1(b) calls for a "Construction Exhaust Emissions Minimization Plan" which applies to equipment used during construction. *Id.* at 4.3-77 to 4.3-78.

Inexplicably, however, the DEIR claims that *operational* emissions of ROG, NO_X, and PM_{10} would be mitigated to a less than significant level after implementation of these purely construction-related mitigation measures. *Id.* at 4.3-75 to 4.3-76 (Table 4.3-19, showing "mitigated" operational emissions levels for those pollutants as not significant). The DEIR does not provide any evidence as to how operational emissions of ROG, NO_X, and PM_{10} —which it acknowledges are significant before mitigation—could be reduced to a less than significant level when the DEIR does not include any mitigation measures for those operational impacts. *See* Exhibit A (Baseline Report) at 14. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. Courts will not defer to an agency's conclusions about the effectiveness of a mitigation measure where, as here, the measure's efficacy in reducing an impact is not apparent and there is no evidence in the record showing that it will be effective. *King & Gardiner Farms*, 45 Cal.App.5th at 866, 875-76.

This unexplained discrepancy between the DEIR's significance conclusion for pre- and post-mitigation operational emissions of ROG, NO_X, and PM_{10} and the lack of operational

mitigation measures cannot be attributed to any impact of the applicant-proposed measures for emissions reduction identified in the DEIR. *See* DEIR at 4.3-65. In fact, the DEIR expressly notes that its calculations of "unmitigated" emissions of these criteria pollutants already reflect reductions from the assumed applicant-proposed measures discussed above in Section II.D.4, which the DEIR does not classify as mitigation. *Id.* at 4.3-73 ("The emission data presented in Table 4.3-17 (i.e., unmitigated emissions) reflect the reductions that would occur with implementation of APM-AQ-1 and APM-AQ-2."). The DEIR must be revised to fully explain the basis for its conclusion that operational emissions of ROG, NO_X, and PM_{10} would be mitigated to a level below significance, and then recirculated.

6. The DEIR's Health Risk Assessment Fails to Disclose Essential Information and Lacks Substantial Evidence to Support Its Conclusions.

The DEIR indicates that the Project would generate toxic air contaminants that could pose health risks to people in the vicinity of the Project site. DEIR at 4.3-79. However, the DEIR fails to provide sufficient information to enable informed analysis of these health impacts, and therefore lacks substantial evidence for its conclusion that these impacts would be less than significant after mitigation. *See* Exhibit A (Baseline Report) at 17-18.

Grp 21-66

The DEIR states that Project construction and operations would produce diesel particulate matter (DPM) emissions from off-road equipment, haul truck trips, and generators, while mining activities such as blasting and crushing, ore processing, and soil movement would generate emissions of asbestos, silica, and trace heavy metal TACs including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium. DEIR at 4.3-79. The DEIR includes a health risk assessment (HRA) for nearby sensitive receptors exposed to concentrations of TACs generated by the Project. *Id.* at 4.3-79 to 4.3-80; *see* DEIR Appendix E.1 (Air Quality and GHG Technical Report); Appendix B (Health Risk Assessment) at 26-27. The HRA analyzes air dispersion of 25 sources of TAC emissions during construction and operation of the Project. *See* HRA at 8-12. Based on the air dispersion model results, the HRA estimated the health risks for a sensitive receptor exposed to 33 different TACs. *Id.* at 25.

The DEIR concludes that before mitigation, the Project's effect on increased cancer risk for the "Maximally Exposed Individual Resident" would be 10.4 persons per million, exceeding the applicable NSAQMD significance threshold of 10 persons per million, resulting in a significant impact. DEIR at 4.3-80. However, with implementation of Mitigation Measure 4.3-1(b), which requires Tier 4 engines during construction, the DEIR concludes that the Project would result in an incremental cancer risk of 7.6 persons million. *Id.* at 4.3-80. The DEIR's asserted 27 percent reduction in cancer risk is surprising, because Mitigation Measure 4.3-1(b)

only reduces emissions during the one-year Project construction period,[6] and does not reduce any emissions over the remaining 80 years of Project operations. *Id.* at 4.3-77 to 4.3-78. The DEIR finds that after mitigation, the Project's impacts on increased cancer risk and other health risks would be less than significant. *Id.* at 4.3-79, 4.3-80, 4.3-82. This conclusion is not adequately supported, because the DEIR fails to provide essential information about how health risks were calculated, making it impossible to evaluate the effectiveness of Mitigation Measure 4.3-1(b).

Grp 21-67

The DEIR fails to adequately disclose or document the results of the HRA for the numerous sources of TAC emissions associated with the Project. *See* Exhibit A (Baseline Report) at 17-18. The DEIR only presents the total cancer risk, chronic health risk, and acute health risk for a sensitive receptor, despite finding that receptors could be exposed to 33 different TACs from 25 different sources at different times over a 30-year period. DEIR at 4.3-80; *see* HRA at 8-12, 25-27. The individual health-risk contributions from each emission source, TAC, and year of exposure are not documented or summarized anywhere in the DEIR or HRA. In addition, no graphics are provided to show the location of the modeled emission sources, sensitive receptors, and results of the air dispersion modeling. As a result, the DEIR fails to provide sufficient information for the public or decisionmakers to review the findings of the health risk assessment and evaluate the effectiveness of the proposed mitigation measures. *See* Exhibit A (Baseline Report) at 17-18. An EIR must include adequate data to enable the public and decisionmakers to understand a project's impacts and draw informed conclusions. *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442. Here, because the DEIR air quality analysis fails to provide this essential information about its analytical methods, it also lacks substantial evidence to support its conclusions. The DEIR must be revised to properly document the findings of the HRA.

E. The DEIR Fails to Adequately Analyze or Mitigate the Project's GHG Emissions.

Grp 21-68

The DEIR's analysis of GHG emissions suffers from several key deficiencies. First, the DEIR fails to analyze the Centennial Site cleanup's impact on GHG emissions, or the emissions that may result from the IMM Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of GHG emissions from Project construction assumes a construction timeline that contradicts the Project description. Third, the DEIR improperly relies on assumed mitigation measures for GHG impacts, failing to acknowledge those measures as mitigation. Fourth, the DEIR's significance threshold for operational GHG emissions is unsupported. Finally, the DEIR relies on third-party GHG mitigation offsets which lack adequate performance standards and are improperly deferred.

[6] While the DEIR's air quality analysis assumes that construction would last for one year (DEIR at 4.3-44), the DEIR's project description states that construction would last for 18 months (DEIR at 3-37). The DEIR is therefore internally inconsistent, as discussed above in Section I.D.

1. The DEIR Fails to Analyze the Centennial RAP's Impact on GHG Emissions.

Grp 21-69

As discussed in Sections I.C and II.D.1, *supra*, the DEIR must include the Centennial RAP as part of the Project, and must analyze all of the environmental impacts resulting from the RAP. *Id.* Accordingly, the DEIR must evaluate the GHG emissions that result from the cleanup of the Centennial Site. The Centennial RAP would involve cement mixing, clearing of existing vegetation, excavation and grading of 36.7 acres of land, and the use of backhoes and other heavy equipment. Exhibit G (MND) at 3-4; Exhibit E (RAP) at 44. The MND concludes that the RAP's operation of off-road diesel equipment would generate approximately 1,077.25 metric tons of CO_2 equivalent in GHG emissions. Exhibit G (MND) at 47. The DEIR improperly fails to disclose or analyze the impacts of these RAP activities on GHG emissions. DEIR at 4.3-66 to 4.3-102. The DEIR's omission of these impacts prevents informed analysis and violates CEQA. *See County of Inyo*, 172 Cal.App.3d at 165-66; *Nelson*, 190 Cal.App.4th at 271. The revised DEIR must provide this analysis.

2. The DEIR Fails to Analyze GHG Emissions that May Result from the Project if the Centennial Cleanup Does *Not* Occur.

Grp 21-70

The DEIR also fails to evaluate GHG emissions that would result from the Project if the Centennial Site cleanup does not occur, as discussed in Sections I.B and II.D.2, *supra*. The DEIR acknowledges that the Centennial Site might never be remediated during the 80-year term of the mine permit, which would require trucking an additional 1.6 million tons of mine waste to offsite locations after the Brunswick Site is full. DEIR at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the GHG impacts of that additional offsite trucking, but fails to do so. Instead, the DEIR's GHG analysis simply assumes that the Centennial RAP will be completed and that fill dumping at the Centennial Site will occur in the first five years of Project operations. *See id.* at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68, 4.3-93. Because there is no assurance that remediation of the Centennial Site will be completed within the lifetime of the Project, it's speculative to assume that the site will be available for fill placement. *See* Exhibit A (Baseline Report) at 12-13. As discussed in Section I.B, *supra*, the DEIR must evaluate Project impacts relative to existing conditions at the Centennial Site, considering the possibility that the RAP may never occur and analyzing the impacts that would result in that scenario.

The DEIR finds that the Project would generate annual operational GHG emissions of 7,221 MT CO_2e in years 2022 to 2026, when it assumes fill would be dumped at the Centennial Site, 6,999 MT CO_2e in years 2027 to 2032, when fill would be dumped at the Brunswick Site, and 9,041 MT CO_2e in years 2033 to 2,102, when fill would be trucked offsite. DEIR at 4.3-93 to 4.3-94. The DEIR indicates that almost all of the variation in annual emissions between these three time periods is attributable to on-road vehicle emissions, which include emissions from trucks carrying mine waste. *Id.* If the Centennial RAP is never completed and no fill is ever

placed at the Centennial Site, that fill must be trucked offsite for an additional five years, resulting in an annual increase of 1,820 MT CO_2e for each of those years. The DEIR does not disclose this important impact. The document's failure to disclose or analyze this impact deprives the public and decision-makers of essential information in violation of CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42. The DEIR's GHG analysis should be revised to assume that remediation of the Centennial Site may not be completed within the lifetime of the Project, and must evaluate the resulting GHG impacts of additional off-site trucking. *See* Exhibit A (Baseline Report) at 13.

3. The DEIR's Analysis of Construction GHG Emissions Contradicts the Project Description.

Grp 21-71

The DEIR's analysis of GHG impacts from Project construction is unsupported because its assumptions regarding the duration of construction contradict the Project description. The DEIR's Project description states that Project construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's GHG analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. *Id.* at 4.3-44 to 4.3-46, 4.3-92. The DEIR is therefore internally contradictory. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. The DEIR asserts that "the construction scenario assessed herein is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced, which would result in reduced max daily and annual emissions." DEIR at 4.3-44. The DEIR fails to consider whether an 18-month construction period could result in greater total GHG emissions than a 12-month construction period, even if those emissions are spread out over a longer period. The DEIR's GHG analysis must be revised to assume the same construction duration as the Project description.

4. The DEIR Likely Underestimates the Project's GHG Emissions Because it Assumes the Use of Electrically Powered Equipment.

Grp 21-72

The DEIR assumes the implementation of electrically powered equipment for its construction and operations and almost certainly relies on these features in its calculations of the Project's GHG emissions. *See e.g.*, DEIR Tables 4.3-7 and 4.3-10 (pp. 4.3-46 and 4.3-51). Yet, we can find no evidence in the DEIR that this equipment would actually be electrified. Unless the Project includes electrification as a condition of approval, the DEIR cannot take credit for these features in its GHG emissions' inventories. This defect also pertains to the DEIR's air quality and energy analyses.

5. The DEIR Improperly Relies on Assumed GHG Mitigation Measures, Preventing Informed Impact Analysis.

As discussed in Section II.D.4, *supra*, the DEIR lists several "applicant-proposed emissions reduction measures" which it does not classify as mitigation, and simply assumes that those measures would be implemented when conducting impact analysis. DEIR at 4.3-65. The APMs were not identified as Project features in the Project description, and there is no assurance that these measures will be implemented as a part of the Project. *See* Exhibit A (Baseline Report) at 14. These applicant-proposed measures are in reality mitigation measures, which the DEIR improperly fails to recognize as such. As explained above, this approach violates CEQA. *See Lotus*, 223 Cal.App.4th at 656. A project's significant impacts must be determined first, and then the CEQA document must identify enforceable mitigation measures and evaluate the measures' effectiveness in addressing project impacts. *Id.* at 656, 658; *see* Exhibit A (Baseline Report) at 14.

Grp 21-73

This error invalidates the DEIR's analysis of GHG emissions, just as it does for the air quality and energy use analyses. In addition to requiring Tier 4 engines, applicant-proposed measure APM-AQ-1 (Exhaust Emission Controls) requires that "[u]nnecessary construction vehicle idling time shall be minimized" and that "[a]ll off-road equipment shall be maintained in accordance with manufacturer's specifications." DEIR at 4.3-65. APM-AQ-1 thus seeks to reduce the Project's GHG emissions as well as its air quality and energy impacts. *Id.* at 4.3-87 (noting that APM-AQ-1 would reduce GHG emissions). APM-AQ-1 is a de facto mitigation measure. *See* CEQA Guidelines §15370. The DEIR's analysis of the Project's GHG emissions impermissibly assumes that APM-AQ-1 has been implemented *before* evaluating the significance of impacts or considering mitigation. DEIR at 4.3-65; Table 4.3-23 (p. 4.3-94). The DEIR makes no attempt to calculate what the Project's GHG emissions would be without APM-AQ-1, and does not separately quantify the emission reductions that would result from that "applicant proposed" measure. This approach prevents informed analysis of Project impacts, violating CEQA. *Lotus*, 223 Cal.App.4th at 656. The DEIR must be revised to classify the APMs as mitigation measures, analyze the Project's GHG impacts without those measures, and then evaluate the APMs' effectiveness in reducing GHG missions.

6. The DEIR's Significance Threshold for Operational GHG Emissions Is Not Supported by Substantial Evidence.

Grp 21-74

The DEIR uses an unsupported significance threshold for operational GHG emissions, understating the significance of the Project's emissions and improperly avoiding mitigation for those emissions. The DEIR calculates that the Project would generate annual operational emissions of 7,221.64 metric tons of CO_2 equivalent (MT CO_2e) in years 2022 to 2026, 6,999.63 MT CO_2e in years 2027 to 2032, and 9,041.23 MT CO_2e in years 2033 to 2102. DEIR at 4.3-93 to 4.3-94. By far the largest source of the Project's operational GHG emissions would come from

consumption of grid power by electric mining equipment. *See id.* The Project would consume 49,613 MWh of PG&E-supplied electricity annually during operations, generating 4,635.82 MT CO_2e per year. *See id.* at 4.3-88, 4.3-93 to 94.[7] Once the Brunswick and Centennial sites have reached their maximum capacity for dumped fill, and mine waste is instead trucked offsite beginning in 2033, emissions from on-road vehicles would become the second-largest source of annual GHG emissions, generating over 3,123.46 MT CO_2e per year for the remaining 70 years of the permit. *Id.* Other sources of GHG emissions generated during Project operations would include off-road vehicles and equipment, emergency generator use, underground blasting, and solid waste. *Id.* The DEIR fails to adequately analyze these emissions, and lacks adequate support for the significance threshold used to evaluate them.

Grp 21-75

The CEQA Guidelines mandate that "[i]n determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change" and that "[t]he agency's analysis should consider a timeframe that is appropriate for the project." CEQA Guidelines § 15064.4(b). "[W]hen determining the significance of impacts from greenhouse gas emissions on the environment," an EIR must consider not only "[w]hether the project emissions exceed a threshold of significance that the lead agency determines applies to the project," but also "[t]he extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting," and "[t]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions." *Id.* GHG significance thresholds that are not supported by substantial evidence violate CEQA. *Golden Door Properties, LLC v. County of San Diego* (2018) 27 Cal.App.5th 892, 904-05.

Here, the DEIR relies on a significance threshold of 10,000 MT CO_2e per year to conclude that operational GHG emissions are less than significant, but fails to adequately justify its chosen threshold. While the DEIR acknowledges that the Project's unmitigated GHG emissions during Project construction would be significant (DEIR at 4.3-93), the DEIR claims the Project's much larger operational GHG emissions across the remainder of the 80-year permit period would be less than significant, with no need for mitigation (*id.* at 4.3-93 to 4.3-94). The DEIR sets a significance threshold of 1,100 MT CO_2e per year for the Project's construction emissions, and found that the Project would generate annual emissions of 3,444 MT CO_2e during construction, exceeding this threshold. *Id.* at 4.3-92. However, the DEIR found that the Project

[7] The DEIR does not discuss its assumptions regarding the current carbon intensity of PG&E's power generation mix, but concludes that the Project will not interfere with PG&E's ability to meet California's Renewable Portfolio Standard mandate that all electricity produced within the state be renewably sourced by the year 2045. DEIR at 4.3-88. The DEIR should disclose its assumptions regarding the carbon intensity of fuel used to generate electricity for the Project so that the full scope of its impacts are disclosed and mitigated.

would generate annual operational emissions of 7,221.64 MT CO_2e in years 2022 to 2026, 6,999.63 MT CO_2e in years 2027 to 2032, and 9,041.23 MT CO_2e in years 2033 to 2102, less than the DEIR's chosen significance threshold of 10,000 MT CO_2e per year for the Project's operational emissions. *Id.* at 4.3-93 to 4.3-94. As discussed below, the DEIR's 10,000 MT CO_2e threshold for operational emissions is not supported by substantial evidence. If the DEIR had applied an appropriate significance threshold for operational GHG emissions, impacts would be significant in every year of the permit period, and would require mitigation.

The DEIR states that "neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the project." *Id.* at 4.3-42. The DEIR seeks to justify its chosen significance threshold of 10,000 MT CO_2e for operational GHG emissions by looking to other air districts. The DEIR notes that the Sacramento Metropolitan Air Quality Management District (SMAQMD), Placer County Air Pollution Control District, Bay Area Air Quality Management District (BAAQMD), and South Coast Air Quality Management District (SCAQMD) use a 10,000 MT CO_2e significance threshold for operational GHG emissions from stationary sources. *Id.* at 4.3-42 to 4.3-43. The DEIR therefore concludes that it is appropriate to use the same 10,000 MT CO_2e threshold for the Project's operational GHG emissions "because the project is an industrial project that includes stationary sources." *Id.* at 4.3-43. [8]

However, the DEIR cannot simply rely on the significance thresholds chosen by other air districts, because the justifications for adopting these thresholds are unique to each air district. *See* Exhibit A (Baseline Report) at 18-19. These air districts have prepared detailed GHG inventories to identify and evaluate strategies for achieving the statewide GHG reduction goals within their air district. *Id.* The DEIR does not discuss the justifications provided by each air district for adopting the 10,000 MT CO2e significance threshold. The DEIR cannot simply assume that the justifications used by other air districts to adopt that threshold also apply in Nevada County, which has not adopted a numerical threshold. *Id.* The DEIR thus lacks substantial evidence that this significance threshold should be applied to the Project.

Moreover, the DEIR's 10,000 MT CO_2e significance threshold is not consistent with California's latest GHG-reduction targets. Other air districts referenced in the DEIR originally adopted 10,000 MT CO_2e s GHG thresholds for stationary sources to achieve the statewide GHG reduction goal set under A.B. 32 (2006), which was to reduce GHG emissions to 1990 levels by the year 2020. *Id.*; *see* DEIR at 4.3-26. Those thresholds are now outdated. In September 2016, S.B. 32 established a new statewide target, calling for reductions in GHG emissions to 40 percent

[8] The DEIR's analysis fails to acknowledge that for 70 years of the Project's 80-year lifespan, more than 35 percent of annual operational GHG emissions will come from vehicles, which are mobile sources. *Id.* at 4.3-93 to 4.3-94. Vehicles would be the second-largest GHG emissions source during that period, after electricity consumption.

below 1990 levels by 2030. *Id.* SCAQMD's GHG threshold for stationary sources was adopted in 2008 (*see* DEIR at 4.3-42), BAAQMD's threshold was adopted in 2010, and the SMAQMD threshold was adopted in 2014. None of these thresholds were designed to meet S.B. 32's more ambitious GHG reduction mandate. The DEIR's 10,000 MT CO2e significance threshold is not consistent with the S.B. 32's statewide GHG reductions goals for 2030 and beyond. *See* Exhibit A (Baseline Report) at 18-19.

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The DEIR must use a significance threshold that will achieve California's new statewide GHG reductions goals over the proposed 80-year lifetime of the Project. In light of those state goals and the severity of climate change, *any* operational GHG emissions over existing conditions should be considered significant. Since 2010, scientific research has made clear that any additional GHG emissions will contribute to the serious and growing climate crisis. *See* Intergovernmental Panel on Climate Change, Climate Change 2021: The Physical Science Basis, Summary for Policymakers (October 2021), attached as Exhibit I. Recognizing this reality, in 2018 Governor Brown signed Executive Order 55-18, calling for the state to achieve carbon neutrality as soon as possible and no later than 2045, and to achieve and maintain net-negative emissions thereafter. *See* DEIR at 4.3-29. Given these facts, the DEIR should establish a net zero threshold for new GHG emissions from the Project. *See e.g.,* CARB 2017 Climate Change Scoping Plan, attached as Exhibit J, at 101 ("Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development."). The DEIR does not explain why the Project should not be judged by a significance threshold requiring no net increase in GHG emissions.

Grp 21-77

The DEIR also fails to consider the full scope of operational emissions over the Project's 80-year lifespan. While the DEIR concludes that the Project would generate annual operational emissions of 7,221.64 MT CO_2e in years 2022 to 2026, 6,999.63 MT CO_2e in years 2027 to 2032, and 9,041.23 CO_2e in years 2033 to 2102 (DEIR at 4.3-93 to 4.3-94), it never bothers to calculate the total operational GHG emissions that will be generated from the Project over the 80-year permit period. By failing to provide this essential information, the DEIR forces the public and decisionmakers to calculate this total themselves: the Project's total operational GHG emissions over the 80-year permit period would be approximately 710,992 MT CO2e, not including construction or reclamation ((7,221.64 x 5 years)+(6,999.63 x 6 years)+(9,041.23 x 70 years)). The DEIR's failure to provide this key fact makes it inadequate as an informational document, violating CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42.

Grp 21-78

Because the DEIR does not adequately analyze operational GHG emissions, its finding that those emissions are less than significant is unsupported, and there is no basis to conclude that no mitigation is required for those emissions. The DEIR must be revised to analyze operational GHG emissions against a net zero significance threshold, and must include enforceable mitigation for any net increase in GHG emissions from the Project.

SHUTE, MIHALY
& WEINBERGER LLP

7. The DEIR's GHG Mitigation Offsets Lack Adequate Performance Standards and Are Improperly Deferred.

The DEIR relies on unenforceable, improperly deferred third-party carbon credits to offset the Project's construction-related GHG emissions.[9] The DEIR finds that the Project's GHG emissions from construction are significant and require mitigation. DEIR at 4.3-92 (Impact 4.3-7; Table 4.3-23). The DEIR sets a significance threshold of 1,100 MT CO_2e per year for the Project's construction emissions, and found that the Project would generate annual emissions of 3,444 MT CO_2e during construction, exceeding this threshold. *Id.* The DEIR proposes to mitigate the Project's construction-related GHG emissions in part by requiring the Applicant to "retire carbon offsets in a quantity sufficient to offset the project's construction greenhouse gas (GHG) emissions to below the 1,100 [MT CO_2e] per year construction threshold," mandating that "Rise shall retire carbon offsets equaling 2,345 MT CO2e" before Nevada County issues a grading permit for the Project. *Id.* at 4.3-96 (Mitigation Measure 4.3-7(b)).

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The DEIR thus proposes to mitigate only 68 percent of the Project's construction-related GHG emissions and the entirety of that mitigation will rely on offsets. (The DEIR includes another mitigation measure for construction-related GHG emissions, Mitigation Measure 4.3-7(a), but does not attempt to quantify that measure's effect on emissions). *Id.* at 4.3-95 to 4.3-96. Assuming that Project construction is projected to last for only one year (*id.* at 4.3-92),[10] Mitigation Measure 4.3-7(b) calls for a one-time purchase of GHG offsets, rather than a recurring annual commitment.

Here, the DEIR's proposed GHG mitigation offsets are inadequate for several reasons. First, the DEIR fails to ensure that the proposed offsets are additional, real, permanent, verifiable, and enforceable, as required by California Air Resources Board (CARB) regulations and the terms of the mitigation measure itself. Second, the proposed GHG offset mitigation measure is impermissibly deferred without adequate performance standards, in violation of CEQA. Third, the EIR fails to evaluate the foreseeable environmental impacts of offset projects. Finally, the DEIR fails to analyze additional feasible on-site mitigation for GHG emissions.

[9] The DEIR does not propose to mitigate the Project's (much larger) operational GHG emissions, because it relies on a higher significance threshold to find those emissions less than significant, as discussed in Section II.E.5, *supra*.

[10] While the DEIR's GHG analysis assumes that construction would last for one year (DEIR at 4.3-44, 4.3-92), the DEIR's project description states that construction would last for 18 months. DEIR at 3-37. The DEIR is therefore internally inconsistent. *See* Sections I.D and II.E.3, *supra*.

(a) The DEIR Fails to Ensure that Proposed Mitigation Offsets Are Additional, Real, Permanent, Verifiable, and Enforceable.

The CEQA Guidelines require that "lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions" from a project. CEQA Guidelines § 15126.4(c). The Guidelines authorize "[o]ff-site measures, including offsets that are not otherwise required, to mitigate a project's emissions." *Id.* § 15126.4(c)(3). However, like other mitigation measures, such offsets "must be fully enforceable through permit conditions, agreements, or other legally-binding instruments." *Id.* § 15126.4(a)(2).

Grp 21-80

Here, the DEIR's GHG offset mitigation measure is unenforceable, impermissibly delegates verification and enforcement to private third parties, and lacks specific performance standards essential to ensure the effectiveness of the mitigation. Mitigation Measure 4.3-7(b) defines an eligible carbon offset as "an instrument, credit or other certification verifying the reduction of GHG emissions" issued by one of three private, third-party registries: "the Climate Action Reserve, the American Carbon Registry, or Verra (previously, the Verified Carbon Standard)." DEIR at 4.3-96. Measure 4.3-7(b) provides that the "protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions" from those offsets "shall . . .[b]e developed by the registries" and must "[a]dhere to the principles set forth in the program manuals of each of the aforementioned registries." *Id.* at 4.3-97. The DEIR thus delegates the task of developing appropriate protocols for the mitigation offsets to the third-party registries.

Grp 21-81

The measure requires that "[e]ach carbon offset used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions." *Id.* at 4.3-97. This language parallels CARB's regulations for GHG offsets, which mandate that "[a] registry offset credit must . . . [r]epresent a GHG emission reduction . . .that is real, additional, quantifiable, permanent, verifiable, and enforceable." Cal. Code Regs., tit. 17, § 95970(a). But section 95970 is not cited or incorporated in Measure 4.3-7(b), and the mitigation measure fails to adequately ensure that these criteria will be met. The measure asserts that "[t]he protocols and methodologies of the Climate Action Reserve, the American Carbon Registry, and Verra establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions." DEIR at 4.3-98. However, there is no guarantee that the registry's protocols will achieve these standards.

Grp 21-82

Mitigation Measure 4.3-7(b) requires that the offset protocols and methodologies "shall . . . [b]e approved by the California Air Resources Board, and be compliant with 17 CCR § 95972." *Id.* at 4.3-97. Section 95972 mandates that GHG offset protocols must "[a]ccurately determine the extent to which GHG emission reductions and GHG removal enhancements are achieved by the offset project type," "[e]nsure GHG emission reductions and GHG removal

enhancements are permanent," and "[e]stablish the eligibility and additionality of projects using standard criteria." Cal. Code Regs., tit. 17, § 95972(a). However, Measure 4.3-7(b)'s mandate that offset protocols be CARB-approved and compliant with Section 95972 is *not* a sufficient basis to conclude that the GHG offsets used by the mitigation measure will be additional, real, permanent, quantifiable, verifiable, and enforceable.

In *Golden Door*, 50 Cal.App.5th at 511-15, the court invalidated an EIR's GHG mitigation measure which allowed the purchase of offset credits from any carbon offset registry approved by CARB. The court found that the mitigation measure violated CEQA because it lacked sufficient safeguards to ensure the GHG offsets were real, permanent, verifiable, and enforceable, as required under A.B. 32. *Id.* at 511. The court concluded that CARB's approval of a registry administering an offset did not necessarily mean an emissions reduction protocol developed by that registry complied with A.B. 32's realness, permanency, verifiability, and enforceability requirements. *Id.* at 511-512.

Mitigation Measure 4.3-7(b) has many of the same flaws as the measure invalidated in *Golden Door*. Like the offset measure in *Golden Door*, here the measure relies entirely on protocols adopted by voluntary market registries, which may not meet standards necessary to ensure that Project emissions actually will be reduced to a less than significant level. *See Golden Door*, 50 Cal.App.5th at 511-12. In fact, studies have shown that third-party offset registry protocols frequently fail to ensure compliance with standards necessary for offset quality, as explained in comments prepared by Dr. Barbara Haya in connection with a recent development project in San Diego County. *See* Comments of Barbara Haya, Ph.D. in Response to Additional Information Regarding Carbon Offset Protocols for Greenhouse Gas Emission Reduction (Sept. 17, 2020) ("Haya 2020 Comments"), attached as Exhibit K, at 1, 3-5.[11] Moreover, the measure outsources enforcement of offset standards to those same third-party registries. Measure 4.3-7(b)'s requirement that CARB approve the offset *protocol* does go slightly further than the measure invalidated in *Golden Door*, which simply required that a *registry* be approved by CARB. 50 Cal.App.5th at 511. However, CARB's approval of a protocol developed by a third-party registry is still not sufficient grounds to conclude that offsets generated under that protocol will be real, permanent, verifiable, and enforceable. Like the measure invalidated in *Golden Door*, Measure 4.3-7(b) relies on "unspecified and undefined offset protocols, occurring in unspecified locations." *Id.* at 520. Measure 4.3-7(b) therefore fails to satisfy CEQA's requirements for specific, effective, enforceable mitigation. *See* CEQA Guidelines § 15126.4.

[11] Dr. Haya is an expert in energy policy and carbon offsets at the University of California, Berkeley. Dr. Haya's comments on the Otay Ranch Resort Village (Village 13) project in San Diego County are directly relevant to the IMM Project because the EIR for that project similarly proposed the use of offsets to mitigate the project's GHG emissions.

Perhaps anticipating comparisons to the mitigation measure invalidated in *Golden Door*, Mitigation Measure 4.3-7(b) claims that it is "not intended to apply or incorporate the requirements of any other statutory or regulatory scheme not applicable to the project (e.g., the Cap-and-Trade Program)." DEIR at 4.3-98. But while the measure here does not purport to adhere to California's cap and trade regulations, it seeks to rely on CARB approval and CARB regulations, like the measure in *Golden Door*. Measure 4.3-7(b) expressly relies on the requirement that the offset protocols be approved by CARB and comply with the offset regulations at California Code of Regulations, title 17, section 95972 (DEIR at 4.3-97), in much the same way that the mitigation measure in *Golden Door* relied on the cap-and-trade regulations at Health & Safety Code section 38562(d)(2). The relevant substantive provisions of the regulations are similar, and the same principle applies: CARB approval and compliance with CARB regulations is not enough to ensure that GHG offsets are additional, real, permanent, quantifiable, verifiable, and enforceable.

(i) Measure 4.3-7(B) Allows Out-Of-State Offsets that May Be Unenforceable or Fall Short of California's Standards.

Like the measure invalidated in *Golden Door*, the GHG mitigation measure here also lacks adequate limits on the geographic location of GHG offsets. In *Golden Door*, the court found that the offset mitigation measure was invalid because CARB lacked the means to determine the validity of offsets located in foreign countries, including whether emissions reductions would be additional to reductions that would otherwise occur, and because CARB lacked enforcement authority over foreign offsets. 50 Cal.App.5th at 512-513.

Grp 21-83

Here, by requiring that offset protocols must comply with California Code of Regulations, title 17, section 95972 (DEIR at 4.3-97), Measure 4.3-7(b) limits offsets to those generated in the United States or its territories. (Section 95972 requires that "[a] Compliance Offset Protocol must specify where the protocol is applicable" and that "[t]he geographic boundary must be within the United States or United States Territories." Cal. Code Regs., tit. 17, § 95972(c).) However, Measure 4.3-7(b) specifies that an eligible offset "shall include, *but is not limited to*, an instrument, credit or other certification issued by [the listed] registries for GHG reduction activities within the Nevada County region." DEIR at 4.3-96 (emphasis added). Thus, the mitigation measure here does *not* require GHG offsets to be located in Nevada County or in the State of California: eligible offsets may be located in any U.S. state or territory. The measure therefore suffers from a similar problem as the one in *Golden Door*: The County lacks enforcement jurisdiction over out-of-county projects, and neither the County nor CARB has authority to enforce offsets located outside of California. Moreover, the County may lack the ability to determine the validity of offsets located in other U.S. states or territories. The mitigation measure does not require that offsets generated by out-of-state projects be subject to

laws at least as stringent as California's. The lack of narrower geographic limits on GHG offsets makes Measure 4.3-7(b) unenforceable.

(ii) Measure 4.3-7(B) Relies on Registries that Use Ineffective Protocol Methodologies.

Measure 4.3-7(b) allows the use of offsets issued by the Climate Action Reserve, the American Carbon Registry, or Verra registry, but many protocols used by those registries have been shown to be ineffective. Studies have shown that the "standardized" approach to additionality used by many Climate Action Reserve protocols has failed to ensure effective "additional" emissions reductions due to substantial "over-crediting" and leakage problems. *See* Exhibit K (Haya 2020 Comments) at 1-5. The County's reliance on registries that use Clean Development Mechanism (CDM) methodologies and additionality standards also undermines the effectiveness of proposed mitigation. *See id.* at 2. Studies have shown that offsets that rely on CDM methodologies and additionality tools do not produce additional GHG reductions. *Id.* Numerous Verra and American Carbon Standard protocols explicitly rely on CDM methodologies, CDM additionality tests, or both. *See id.* Those methodologies and tools have been imported into the named registries' manuals and protocols. Measure 4.3-7(b) provides that "[t]he Project shall neither purchase offsets from the Clean Development Mechanism (CDM) registry nor purchase offsets generated under CDM protocols." DEIR at 4.3-96. But this provision does not go far enough: while it prohibits offset purchases from the CDM registry and purports to exclude offsets generated under protocols developed by that registry, it does not expressly prohibit offsets from other registries that use equivalent methods or tools. Measure 4.3-7(b) thus fails to ensure that offsets from the Climate Action Reserve, the American Carbon Registry, or Verra will effectively mitigate Project impacts.

Grp 21-84

(iii) Measure 4.3-7(B) Relies on the County's Discretionary Review Where It Lacks Expertise.

Measure 4.3-7(b) inappropriately relies on the County's judgment to decide whether a GHG offset is adequate. DEIR at 4.3-98 to 4.3-99. The measure's "Reporting and Enforcement Standards" require that "[p]rior to issuance of requested grading permits, Rise [Gold] shall submit a report to the County that identifies the quantity of emission reductions required by this mitigation measure, as well as the carbon offsets to be retired to achieve compliance with this measure." *Id.* at 4.3-98. The County will then review the report and determine whether the project's carbon offsets meet the requirements of the mitigation measure. *Id.* at 4.3-98 to 4.3-99.

Grp 21-85

The County's judgment is not sufficient to support a conclusion that all offset credits issued under these protocols will satisfy necessary standards. Offset protocol methodologies are a highly technical field, and there is no evidence that the County has the relevant expertise to conduct such a review. Rather, it appears likely that the County will simply accept the registries' own review of their protocols and/or CARB approval of those protocols as sufficient evidence of

their adequacy. *See id.* at 4.3-96 ("offsets may be used if report is submitted to the County "demonstrating that each registry *shall continue its existing practice* of requiring [the standards listed below] for the development and approval of protocols or methodologies") (emphasis added); *id.* at 4.3-98 ("The protocols and methodologies of the Climate Action Reserve, the American Carbon Registry, and Verra establish and require carbon offset projects to comply with standards designed to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions.") The County's apparent failure to recognize that numerous protocols included in Climate Action Reserve, the American Carbon Registry, or Verra registries rely on CDM methodologies and additionality tests—even as the measure claims credits generated under CDM protocols will not be accepted—demonstrates that County officials may not be able to render an informed judgment as to whether specific protocols are adequate.

(iv) The DEIR Lacks Substantial Evidence that Measure 4.3-7(B) Would Be Effective.

Grp 21-86

When a lead agency relies on mitigation measures to find that project impacts will be reduced to a level of insignificance, there must be substantial evidence in the record demonstrating that the measures are feasible and will be effective. *Sacramento Old City Assn. v. City Council of Sacramento* (1991) 229 Cal.App.3d 1011, 1027; *Kings County*, 221 Cal.App.3d 690, 726-29. An agency's conclusion that a proposed mitigation measure will in fact reduce GHG emissions below the significance threshold must be both legally sound and supported by specific, quantitative evidence. *See Center for Biological Diversity v. California Dept. of Fish & Wildlife* (2015) 62 Cal.4th 204, 227-28.

Here, for all of the reasons discussed above, the DEIR does not provide substantial evidence to support its conclusion that GHG offsets obtained through Measure 4.3-7(b) actually will achieve the claimed reduction in emissions. The DEIR therefore lacks legal and evidentiary support for its conclusion that the Project's GHG emissions will be less than significant. The DEIR must be revised to provide enforceable mitigation for the Project's GHG emissions.

(b) The GHG Offset Mitigation Measure Is Impermissibly Deferred Without Adequate Performance Standards.

Grp 21-87

Mitigation Measure 4.3-7(b) impermissibly defers the DEIR's mitigation for the Project's construction-related GHG emissions without sufficient performance standards or assurances of effectiveness. As we explain above, CEQA allows deferral of mitigation measures until after Project approval only when it is "impractical or infeasible" to develop those measures before approval, the agency "commits itself to the mitigation," and the EIR "adopts specific performance standards" and identifies actions that can "feasibly achieve" those standards. CEQA Guidelines § 15126.4(a)(1)(B). These requirements apply to mitigation measures that employ GHG offsets. *See id.* § 15126.4(c)(3). Mitigation for a project's GHG impacts is impermissibly deferred if it relies on development of future management plans without articulating specific,

objective performance standards and providing assurances that the proposed mitigation will be effective. *Golden Door*, 50 Cal.App.5th at 518-525; *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92-95.

The court in *Golden Door* concluded that the GHG offset mitigation measure in that case violated CEQA because it improperly deferred development of the mitigation until after project approval, leaving it for County officials to later determine whether particular offsets met the criteria for the mitigation measure. 50 Cal.App.5th at 518-25. The court found that the mitigation measure lacked adequate performance standards to guide the exercise of the County's discretion in approving these deferred GHG offsets. *Id.* The mitigation measure allowed County officials to determine whether any particular offset program was acceptable based on subjective criteria, including that offsets located geographically closer to the County were not "available" or "financially feasible," and that the offset registry must be "reputable." *Id.* at 520-22.

Here, Measure 4.3-7(b) similarly defers the County's determination as to whether GHG offsets are adequate until after Project approval. DEIR at 4.3-98 to 4.3-99. The measure's "Reporting and Enforcement Standards" require that "[p]rior to issuance of requested grading permits, Rise [Gold] shall submit a report to the County that identifies the quantity of emission reductions required by this mitigation measure, as well as the carbon offsets to be retired to achieve compliance with this measure." *Id.* at 4.3-98. The County will then review the report and determine whether the project's carbon offsets meet the requirements of the mitigation measure. *Id.* at 4.3-98 to 4.3-99. Grading permits may be issued once the County approves the use of the offsets as mitigation. *Id.*

Like the measure invalidated in *Golden Door*, Measure 4.3-7(b) fails to provide specific, objective performance standards to ensure that the GHG offsets will effectively mitigate Project impacts. The measure requires that "[e]ach carbon offset used to reduce GHG emissions shall achieve additional, real, permanent, quantifiable, verifiable, and enforceable reductions." *Id.* at 4.3-97. However, the mitigation measure fails to adequately ensure that these criteria will be met, as discussed above in Section II.C.6(a). Measure 4.3-7(b) provides that the "protocols and methodologies that define the eligibility of carbon offset projects and set forth standards for the estimation, monitoring and verification of GHG reductions" from those offsets "shall . . .[b]e developed by the registries" and must "[a]dhere to the principles set forth in the program manuals of each of the aforementioned registries." *Id.* at 4.3-97. The DEIR thus delegates the task of developing appropriate protocols for the mitigation offsets to the third-party registries. The measure asserts that the registries' protocols require carbon offset projects to achieve additional, real, permanent, quantifiable, verifiable and enforceable reductions. *Id.* at 4.3-98. Again, there is no guarantee that the registry's protocols will achieve these standards.

Grp 21-88

As discussed above in Section II.E.6(a), Measure 4.3-7(b)'s mandate that offset protocols be CARB-approved and compliant with Cal. Code Regs., tit. 17, § 95972 is *not* a sufficient basis

to conclude that the GHG offsets used by the mitigation measure will adequately mitigate Project impacts. The GHG mitigation measure invalidated in *Golden Door* called for the use of CARB-approved offset registries and required offsets to be "consistent" with Health & Safety Code § 38562(d)(2). 50 Cal.App.5th at 518. The court nevertheless found the measure improperly deferred because it relied on "unspecified and undefined offset protocols, occurring in unspecified locations." *Id.* at 520.

The same is true here: Measure 4.3-7(b) does not specify what offset protocols must be used, or where offsets must occur, and requiring CARB approval of offset protocols does not cure this defect. Asserted compliance with regulatory standards is not a sufficient ground to conclude that a project's impacts would be less than significant. *Californians for Alternatives to Toxics v. Dept. of Food & Agriculture* (2005) 136 Cal.App.4th 1, 15-17. And requiring approval from responsible regulatory agencies cannot make up for a lack of performance standards in a deferred mitigation measure. *County of Merced*, 149 Cal.App.4th at 669-70 (mitigation measure for mining project impermissibly deferred despite requiring "concurrence of applicable regulatory agencies").

The DEIR also violates CEQA by failing to demonstrate why it is "impractical or infeasible" to identify the mitigation offset protocols or offsets that will be used prior to Project approval. Measure 4.3-7(b) is also improperly deferred for this reason. *See* CEQA Guidelines § 15126.4(a)(1)(B). Measure 4.3-7(b) must be revised to identify which offset protocols will be used, and where offset projects will be located.

(i) Measure 4.3-7(B) Improperly Allows Offsets Based on "Forecasted" Emissions Reductions.

Grp 21-89

Measure 4.3-7(b) is also inadequate because it allows offsets based on "forecasted" emissions reductions. *See* DEIR at 4.3-97 ("any carbon offset used to reduce the project's GHG emissions shall be a carbon offset that represents the past *or forecasted* reduction or sequestration of one MT of CO2e") (emphasis added). Reliance on "forecasted" reductions that have not yet occurred would allow the adverse impacts of GHG emissions to persist, potentially for many years, before being mitigated. CEQA does not permit an agency to defer implementation of mitigation measures until after significant impacts occur. *King & Gardiner Farms*, 45 Cal.App.5th at 860. Rather, "[o]nce the project reaches the point where activity will have a significant adverse effect on the environment, the mitigation measures must be in place." *POET, LLC v. State Air Resources Bd.* (2013) 218 Cal.App.4th 681, 738.

Measure 4.3-7(b)'s reliance on future "forecasted" reductions to mitigate present GHG emissions fails to address the Project's immediate climate impacts. Delaying implementation of climate mitigation has a real, adverse effect on warming; although CO_2 persists in the atmosphere for centuries, the maximum warming effect of a pulse of CO_2 emissions occurs

within a relatively short time frame. *See* Katharine L. Ricke & Ken Caldeira, Maximum warming occurs about one decade after a carbon dioxide emission, 2014 Environ. Res. Lett. 9 124002, attached as Exhibit L. Accordingly, even if a "forecasted" reduction eventually occurs, the Project's emissions will be in the atmosphere at least until that time, exacerbating climate impacts.[12] Measure 4.3-7(b)'s use of "forecasted" emissions reductions would allow the Project's GHG impacts to occur before they are mitigated, violating CEQA. *King & Gardiner Farms*, 45 Cal.App.5th at 860.

The registries relied on by Measure 4.3-7(b) acknowledge this time lag in emissions reductions. The Program Manual for Climate Action Reserve's "Climate Forward" program states that project emissions may occur well in advance of "forecasted reductions." The manual explains the difference between offsets (which represent emissions reductions verified to have already occurred) and "forecasted mitigation units" (or "FMUs") that might occur in the future. Climate Forward Program Manual, March 2020, attached as Exhibit M, at 6-7. The manual explicitly acknowledges "that there could be a time period, or a temporal disconnect, between the occurrence of the emissions and the occurrence of reduction or sequestration represented by" Climate Forward projects; "[t]hat is, the emission reductions expected to be generated might occur after the actual emissions from the new initiative." *Id.* at 7. Climate Action Reserve thus advises developers to ensure that credits based on "forecasted" emissions will be accepted for CEQA purposes before purchase. *Id.* at 6. The "temporal disconnect" between emissions and reductions is incompatible with CEQA's standards. The DEIR should be revised to remove all references suggesting the Project may rely for mitigation on "forecasted" emissions reductions.

(ii) There Is No Way for the County to Enforce Offsets After Grading Permits Are Issued.

Grp 21-90

Once grading permits for the Project are issued, the County will effectively lose its ability to enforce the DEIR's GHG offset mitigation. If the County later determines that previously retired offset credits no longer meet standards, its only recourse is to "cease permitting activities." DEIR at 4.3-99. Measure 4.3-7(b) provides that "[T]he County may issue a notice of non-consistency and cease permitting activities in the event that the County determines the carbon offsets provided to reduce project GHG emissions are not compliant with the aforementioned standards. In the event of such an occurrence, project permitting activities shall not resume until Rise has demonstrated that the previously provided carbon offsets are compliant

[12] Even if instruments promising forecasted reductions have been secured before Project construction occurs, the "offsets" themselves—i.e., the actual reductions necessary to offset Project emissions—may not occur until well after emissions are generated by the Project.

with the standards herein or have provided substitute carbon offsets achieving the standards of this mitigation measure in the quantity needed to achieve the required emission reduction." *Id.*

However, this provision does nothing to address the scenario in which the County approves the GHG offsets, issues all applicable permits for the Project, and then later discovers that the offset protocol is not being followed. This is especially problematic because Measure 4.3-7(b) allows offsets based on "forecasted" emissions reductions that have not yet occurred at the time the offset is retired and permits are issued. *See* DEIR at 4.3-97. If permits already have been issued, not "resuming" permitting activities is an empty gesture. Like the measure invalidated in *Golden Door*, Measure 4.3-7(b) relies almost entirely on third party registries and project developers over whom the County has no direct enforcement authority. Measure 4.3-7(b) therefore fails to provide enforceable mitigation as required by CEQA. CEQA Guidelines § 15126.4(a)(2).

(c) The EIR Fails to Evaluate the Foreseeable Environmental Impacts of Offset Projects.

Grp 21-91

CEQA requires an EIR to address the potentially significant environmental impacts of proposed mitigation measures. CEQA Guidelines § 15126.4(a)(1)(D). Here, the DEIR fails to consider whether the GHG offsets used as mitigation may cause significant and adverse environmental effects. GHG offset projects may have significant environmental impacts. Just by way of example, the protocols may contemplate construction of organic waste digesters and gas recovery units; changes in forest, wetlands, and rangelands management; construction of carbon capture and storage facilities; installation of landfill gas projects; and construction of new cogeneration facilities. Any one of these activities may have foreseeable direct and indirect environmental impacts. Because the DEIR has identified a set of registries that will generate eligible offset credits (DEIR at 4.3-96), the County cannot claim the environmental impacts of reliance on those registries' offset projects are entirely speculative. The EIR's failure to consider the environmental impacts associated with Measure 4.3-7(b) violates CEQA's standards.

(d) The DEIR Fails to Analyze Additional Feasible On-Site Mitigation for GHG Emissions.

Grp 21-92

The EIR fails to ensure that GHG reductions are achieved from on-site mitigation measures to the maximum extent feasible before offsets are purchased. CEQA provides that "public agencies should not approve projects as proposed if there are . . . feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." Pub. Resources Code § 21002; *see id.*, § 21002.1(b) (agencies must mitigate significant effects of projects they approve "whenever it is feasible to do so"); CEQA Guidelines §15126.4(a)(1) ("An EIR shall describe feasible measures which could minimize significant adverse impacts."). Because of the known problems with enforcement and additionality of offsets, agencies typically strictly limit the use of offsets as part of an overall emissions reduction

program. CARB's 2017 Climate Change Scoping Plan Update cautions that reliance on offset credits is appropriate only where further on-site reductions and direct local investments "are infeasible or not proven to be effective." *See* CARB 2017 Climate Change Scoping Plan Update, attached as Exhibit J, at 102. California's cap and trade program currently allows regulated emitters to use GHG offsets to fulfill no more than four percent of their GHG reduction obligations, and at least half of the offsets used must "provide direct environmental benefits in state." Health & Saf. Code § 38562(c)(2)(E).

Here, by contrast, *100 percent* of the mitigation for the Project's construction-related GHG emissions will rely on offsets, and there is no requirement that those offsets be located in California. *See* DEIR at 4.3-96.[13] The DEIR's excessive reliance on GHG offsets to mitigate all of the Project's construction emissions conflicts with established state policy, which limits offset use. The DEIR fails to adequately consider alternative mitigation measures.

The DEIR includes another mitigation measure for construction-related GHG emissions, Mitigation Measure 4.3-7(a), which calls for electric-powered or non-diesel construction equipment where feasible, carpooling for construction workers, and the use of locally sourced or recycled construction materials. *Id.* at 4.3-95 to 4.3-96. However, these measures lack any specificity or enforceability and the DEIR makes no attempt to quantify that measure's effect on emissions. *Id.* Mitigation Measure 4.3-7(a) calls for construction emissions to be reduced to the DEIR's chosen significance threshold of 1,100 MT CO_2e using GHG offsets, but does not mandate any reduction below that level. *Id.* at 4.3-96.

The DEIR does not explain why it is infeasible to require that all GHG offsets used by the Project be located in California. The DEIR also fails to show that further on-site GHG mitigation measures for construction emissions are infeasible or ineffective. For example, the DEIR does not consider whether more of the existing vegetation on the site could be preserved rather than removed. Nor does it consider whether any of the Project's electricity demand during construction could be met via the use of solar-powered equipment (e.g. portable solar-powered lighting). The DEIR also fails to require vehicle electrification of the mine's truck fleet as well as the trucks that serve the mine. The DEIR must be revised to consider additional feasible on-site measures to reduce the Project's GHG emissions.

F. The DEIR Fails to Adequately Analyze and Mitigate the Project's Impacts on Energy Use.

Grp 21-93

The DEIR's analysis of Project energy use suffers from several flaws. First, the DEIR fails to analyze the Centennial cleanup's energy use, or additional energy consumption by the

[13] As noted above, the DEIR should use a no net increase threshold to determine whether the Project will have significant GHG emissions and should require mitigation for all of the Project's GHG emissions, not just a portion of them.

IMM Project if the Centennial cleanup does not occur. Second, the DEIR's analysis of energy use from Project construction assumes a construction timeline that contradicts the Project description. Finally, the DEIR improperly relies on assumed mitigation measures for energy impacts, failing to acknowledge those measures as mitigation. The DEIR must be revised to address these deficiencies.

1. The DEIR Fails to Analyze the Centennial RAP's Energy Usage.

Grp 21-94

The DEIR must include the Centennial RAP as part of the Project, and must analyze all of the environmental impacts resulting from the RAP, as discussed in Sections I.C, II.D.1 and II.E.1, *supra*. Accordingly, the DEIR must evaluate the Centennial cleanup's energy usage. The Centennial RAP would involve cement mixing, excavation and grading of 36.7 acres of land, and the use of backhoes and other heavy equipment. Exhibit G (MND) at 3-4; Exhibit E (RAP) at 44. The DEIR improperly fails to disclose or analyze the impacts of these RAP activities on energy use. DEIR at 4.3-66 to 4.3-102. The DEIR's omission of these impacts prevents informed analysis and violates CEQA. *See County of Inyo*, 172 Cal.App.3d at 165-66; *Nelson*, 190 Cal.App.4th at 271.

2. The DEIR Fails to Analyze Energy Use that May Result from the IMM Project if the Centennial Cleanup Does *Not* Occur.

Grp 21-95

The DEIR also fails evaluate additional energy use that would result from the Project if the Centennial cleanup does not occur. The DEIR acknowledges that the Centennial Site might never be remediated during the 80-year term of the mine permit, which would require trucking an additional 1.6 million tons of mine waste to offsite locations after the Brunswick Site is full. DEIR at 1-3, 3-32 to 3-33, 3-26. The DEIR must evaluate the energy usage (e.g. fuel consumption) associated with that additional offsite trucking, but fails to do so. Instead, the DEIR simply assumes that the Centennial RAP will be completed and that fill dumping at the Centennial site will occur in the first five years of Project operations. *See id.* at 4.3-50, 4.3-53 to 4.3-54, 4.3-67 to 4.3-68. As discussed in Sections I.B, II.D.2 and II.E.2, *supra*, the DEIR must consider the possibility that the RAP may never occur and analyze the impacts that would result in that scenario. If the Centennial RAP is never completed and no fill is ever placed at the Centennial site, that fill must be trucked offsite for an additional five years, resulting in additional fuel consumption. The DEIR's failure to disclose or analyze this impact deprives the public and decision-makers of essential information in violation of CEQA. *See Banning Ranch*, 2 Cal.5th at 941-42.

3. The DEIR's Analysis of Construction Energy Use Contradicts the Project Description.

Grp 21-96

The DEIR's analysis of energy use from Project construction is unsupported because its assumptions regarding the duration of construction contradict the Project description. The

DEIR's project description states that Project construction would last for 18 months. DEIR at 3-37. By contrast, the DEIR's energy analysis assumes that Project construction would last for only 12 months, and bases its impact evaluation on that assumption. DEIR at 4.3-44 to 4.3-46. The DEIR is therefore internally contradictory. "[S]uch an unexplained discrepancy precludes the existence of substantial evidence" for the EIR's conclusions. *Preserve Wild Santee*, 210 Cal.App.4th at 284. The DEIR asserts that "the construction scenario assessed herein is the worst-case, because if the same construction activities were to be spread over a longer period (i.e., a period in excess of 12 months), the amount of overlap of equipment usage would be reduced." *Id.* at 4.3-44. The DEIR fails to consider whether an 18-month construction period could result in greater total energy use than a 12-month construction period. The DEIR's energy analysis must be revised to assume the same construction duration as the Project description.

4. The DEIR Improperly Relies on Assumed Energy Use Mitigation Measures, Preventing Informed Impact Analysis.

As discussed above, the DEIR lists several "applicant-proposed emissions reduction measures" which it does not classify as mitigation, and simply assumes that those measures would be implemented when conducting impact analysis. DEIR at 4.3-65; *see* Sections II.D.4 and II.E.4, *supra*. The APMs were not identified as Project features in the Project description, and there is no assurance that these measures will be implemented as a part of the Project. *See* Exhibit A (Baseline Report) at 14. These "applicant-proposed" measures are in reality mitigation measures, which the DEIR improperly fails to recognize as such. As explained above, this approach violates CEQA. *Lotus*, 223 Cal.App.4th at 656. A project's significant impacts must be determined first, and then the CEQA document must identify enforceable mitigation and evaluate its effectiveness in addressing project impacts. *Id.* at 656, 658.

Grp 21-97

This error invalidates the DEIR's analysis of energy usage, just as it does for the air quality and GHG analyses. In addition to requiring Tier 4 engines, applicant-proposed measure APM-AQ-1 (Exhaust Emission Controls) requires that "[u]nnecessary construction vehicle idling time shall be minimized" and that "[a]ll off-road equipment shall be maintained in accordance with manufacturer's specifications." DEIR at 4.3-65. APM-AQ-1 thus seeks to reduce the Project's energy consumption as well as its air quality and GHG impacts. *Id.* at 4.3-87 (concluding that APM-AQ-1 would "avoid inefficient energy consumption in several ways"). These measures are vague and unenforceable and cannot be relied upon to demonstrate any reductions in the Project's air quality, GHG, or energy impacts.

Even if APM-AQ-1 were specific and enforceable, it is a de facto mitigation measure. *See* CEQA Guidelines §15370. The DEIR's analysis of the Project's energy usage impermissibly assumes that APM-AQ-1 has been implemented *before* evaluating the significance of impacts or considering mitigation. DEIR at 4.3-65, 4.3-87 to 4.3-88, 4.3-102. The DEIR makes no attempt to calculate what the Project's energy usage would be without APM-AQ-1, and does not

separately quantify the emission reductions that would result from that "applicant proposed" measure. This approach prevents informed analysis of Project impacts, violating CEQA. *Lotus*, 223 Cal.App.4th at 656. The DEIR must be revised to classify the APMs as mitigation measures, and must evaluate their effectiveness in reducing energy usage.

G. The DEIR's Analysis of Project Alternatives Is Inadequate.

Under CEQA, a proper analysis of alternatives is essential to comply with the Act's mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Resources Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-45. As stated in *Laurel Heights I*, "[w]ithout meaningful analysis of alternatives in the DEIR, neither the courts nor the public can fulfill their proper roles in the CEQA process. . . . [Courts will not] countenance a result that would require blind trust by the public, especially in light of CEQA's fundamental goal that the public be fully informed as to the consequences of action by their public officials." 47 Cal.3d at 404.

Grp 21-98

Critically, an EIR must consider a "reasonable range" of alternatives "that will foster informed decision-making and public participation." CEQA Guidelines § 15126.6(a); *Laurel Heights* I, 47 Cal.3d at 404 ("An EIR's discussion of alternatives must contain analysis sufficient to allow informed decision-making."). The discussion of alternatives must focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. CEQA Guidelines § 15126.6(b). The DEIR for the Project fails to heed these basic mandates.

1. The DEIR Fails to Include a Reasonable Range of Alternatives.

As described throughout this letter, the DEIR fails to adequately describe the Project and fails to reveal the severity and extent of numerous environmental impacts. In many instances, the DEIR incorrectly determines that impacts would be less than significant. As we explained, the DEIR incorrectly found the Project's impacts to air quality, GHG emissions, energy, hazards, hazardous materials, hydrology, water quality, noise, and vibration to be less than significant. Had the DEIR conducted a proper impact analysis, it should have recognized that numerous, if not all of these impacts would be significant and unavoidable. In this case, the DEIR would have been obligated to identify and evaluate alternatives to the Project capable of reducing those impacts. CEQA Guidelines § 15126.6 (b). Thus, the DEIR must be recirculated to analyze the Project's full environmental impacts and identify mitigation measures or alternatives that could feasibly avoid or minimize those impacts.

Grp 21-99

Grp 21-100

However, even for those significant impacts that the DEIR does acknowledge, the document's analysis of alternatives is deficient. The DEIR determines that the Project would

result in significant and unavoidable impacts relating to aesthetics, noise, and transportation. DEIR at 6-7, 6-8. Yet, except for the "No Project" alternative, which "would not meet any of the project objectives," none of the examined alternatives would reduce the Project's impacts on aesthetics, noise, and transportation to a less than significant level. *See* DEIR at 6-44. In fact, in certain instances, the Project's alternatives would result in similar or even greater impacts than the proposed Project. *Id.*

While there is no "magic number" for how many alternatives an EIR should examine to present a "reasonable range," at a minimum CEQA requires an agency to examine at least potentially feasible alternatives to try to avoid or substantially lessen significant environmental impacts that are central to a project. *See Watsonville Pilots Assn. v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1089-90 (EIR was deficient for failing to include reduced development alternative that would avoid or substantially lessen the project's primary growth-related significant impacts); *Habitat and Watershed Caretakers v. City of Santa Cruz* (2013) 213 Cal.App.4th 1277, 1285, 1305 (invalidating EIR that failed to discuss any feasible alternative addressing the project's primary water supply impact). Furthermore, with the inherent dangers and environmental harms associated with underground mining activities that will impact the environment for a minimum of 80 years, in close proximity to existing residential and other land uses, the DEIR should evaluate multiple alternatives in order to help inform the decisionmakers and the public of the environmental consequences of this Project.

Other than the "No-Project" alternative, the DEIR identifies only three alternatives: Alternative 2: the Elimination of Centennial Industrial Site and Expansion of Brunswick Fill Pile; Alternative 3: Expansion of Centennial Engineered Fill Pile and Elimination of Brunswick Engineered Fill Pile; and Alternative 4: Reduced Throughput. Again, by the DEIR's own admission, each of these alternatives would result in significant and unavoidable impacts relating to aesthetics, noise, and transportation. DEIR at 6-44.

2. The DEIR Does Not Provide a Meaningful Comparison of the Project and the Alternatives.

Grp 21-101

The Project's objectives are defined so narrowly that they essentially call for the Project itself. An EIR cannot provide a meaningful comparison between a proposed project and various alternatives unless the project's objectives are defined broadly enough to make such options at least potentially possible. *See Kings County Farm Bureau*, 221 Cal.App.3d at 735-37; *City of Santee v. County of San Diego* (1989) 214 Cal.App.3d 1438, 1455. Here, the DEIR calls for the construction of an underground gold mine operation that will produce 1,000 tons per day (365,000 tons per year) of gold mineralization on property that Rise Grass Valley, Inc. owns. DEIR at 3-11. This is tantamount to saying that the objective of the Project is to implement the Project. Narrowing the Project's goals in this way tilts the analysis of alternatives unavoidably—and illegitimately—toward the Project as proposed. Rather than providing the required reasoned,

objective analysis, the DEIR has become "nothing more than [a] post hoc rationalization[]" for a decision already made. *Laurel Heights I*, 47 Cal.3d at 394.

3. All of the Project Alternatives Incorrectly Assume the Remediation of the Centennial Site.

Grp 21-102

All three of the Project alternatives assume the remediation of the Centennial Site. As we explain throughout this letter, DTSC has not yet approved the Centennial Site cleanup, which is currently undergoing a separate CEQA review. Because DTSC might not approve the cleanup, and Rise Gold might not complete it, the DEIR's use of a hypothetical post-remediation baseline in its alternatives analysis is inappropriate. The revised DEIR's alternatives analysis must evaluate the impacts of each alternative assuming the remediation is not completed.

4. The Revised EIR Should Evaluate Alternatives that Avoid the Project's Significant Environmental Impacts and that Would Be Consistent with the County's and the City's General Plans.

Grp 21-103

The revised DEIR must examine feasible Project alternatives that could reduce the Project's significant environmental impacts. CEA explicitly requested that the DEIR analyze alternative locations for the dumping of waste rock and tailings from the mine. The DEIR fails to consider this alternative.

Grp 21-104

Moreover, the DEIR errs because it does not seriously consider an alternative industrial use that would be consistent with the Industrial designation on the Brunswick site and the Industrial /Urban Medium Density designation on the Centennial site.[14] While the DEIR did discuss alternative uses under the No Project alternative (*see* DEIR at pp 6-11 through 6-13), it rejects such an alternative from further consideration claiming that such a use would be more intensive than the proposed Project. *Id.* Yet, the DEIR certainly could have considered a less intensive alternative use than that proposed by the No Project alternative. For example, a mixed use employment center not requiring a use permit would be more in keeping with the aesthetics of this entry point to the City. To the extent the County would argue that it need not consider

[14] The County's General Plan designates the Centennial site as "Industrial" whereas the City of Grass Valley designates the Centennial site as "Urban Medium Density." If approved, the Project would violate the County's General Plan policy calling for its land use designations to be consistent with the City's designations: Nevada County General Plan Land Use Policy 1.8.3: *Within the City/Town spheres of influence, the Nevada County General Plan Land Use Maps will generally reflect the City's/Town's General Plan land use mapping. In some instances, the County may provide for a less intensive land use due to infrastructure capability, environmental constraints or effect on land use and development patterns outside the city's sphere. However, the County's Plan will not preclude implementation of the City's/Town's Plan by providing for a significantly more intensive land use than the City's/Town's Plan.*

alternatives that do not meet the Project's objectives, this argument would have no merit. An EIR cannot provide a meaningful comparison between a proposed project and various alternatives unless the project's objectives are defined broadly enough to make such options at least potentially possible. *Kings County Farm Bureau*, 221 Cal. App. 3d at 735-37; *City of Santee v. County of San Diego* 214 Cal. App. 3d 1438, 1455 (1989). Here, the DEIR states that a gold mine operation must be built as planned by the proposed Project. DEIR at 6-2. This is tantamount to saying that the objective of the Project is to implement the Project. Narrowing the Project's goals in this way tilts the analysis of alternatives unavoidably—and illegitimately—toward the IMM Project as proposed. Rather than providing the required reasoned, objective analysis, the DEIR has become "nothing more than [a] post hoc rationalization[]" for a decision already made. *Laurel Heights I*, 47 Cal. 3d at 394. CEQA forbids the use of this sort of circular logic to justify a project. Accordingly, the revised DEIR must consider a less intensive alternative use alternative, and one that is consistent with the County's and the City's General Plans.

5. The County May Not Approve the Project if a Feasible Alternative Exists that Would Meet the Project's Objectives and Would Diminish Its Significant Environmental Impacts.

Grp 21-105

Under CEQA, an agency may not approve a proposed project if a feasible alternative exists that would meet a project's objectives and would diminish or avoid its significant environmental impacts. Pub. Res. Code § 21002; *Kings County Farm Bureau*, 221 Cal.App.3d at 731; *see also* CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth*, 198 Cal.App.3d at 443-45. An alternative need not meet every Project objective or be the least costly in order to be feasible. *See* CEQA Guidelines § 15126.6(b).

The DEIR readily admits that Alternative 2: Elimination of Centennial Industrial Site and Expansion of Brunswick Fill Pile is the environmentally superior alternative. DEIR at 6-42. It further acknowledges that this alternative would further nearly all of the Project objectives. *Id.* at 6-42, 6-43. Consequently, approval of the Project, or any alternative project with greater impacts than Alternative 2 would violate CEQA.

III. The DEIR Must Be Recirculated.

Grp 21-106

Under California law, this DEIR cannot properly form the basis of a final EIR. CEQA and the CEQA Guidelines describe the circumstances that require recirculation of a draft EIR. Such circumstances include: (1) the addition of significant new information to the EIR after public notice is given of the availability of the DEIR but before certification, or (2) the draft EIR is so "fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." CEQA Guidelines § 15088.5.

Here, both circumstances apply. Decisionmakers and the public cannot possibly assess the Project's impacts, or even its feasibility, through the present DEIR, which is riddled with errors. Among other fundamental deficiencies, the DEIR repeatedly understates the Project's significant environmental impacts and concludes incorrectly that these impacts would be less than significant. It also assumes that unformulated or clearly useless mitigation measures will effectively reduce these impacts. And the DEIR's Project Description is so unstable and uncertain that meaningful review of the Project's environmental impacts is essentially impossible. In order to resolve these issues, the County must prepare a revised EIR that would necessarily include substantial new information.

Conclusion

As set forth above, the DEIR suffers from numerous deficiencies, many of which would independently render it inadequate under CEQA. Taken as a whole, the deficiencies of the DEIR necessitate extensive revision of the document and recirculation for public comment.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Ellison Folk

cc: Ralph Silberstein, Community Environmental Advocates Foundation

Exhibits:

Exhibit A: Baseline Environmental Consulting Report, February 15, 2022.

Exhibit B: Salter Report, March 9, 2022.

Exhibit C: Draft Final Remedial Action Plan for Centennial M-1 Property, January 25, 2021.

Exhibit D:	Email from Dean Wright, Project Manager, DTSC, to Ralph Silberstein, February 4, 2022.
Exhibit E:	Central Valley Regional Water Quality Control Board, Review of Draft Final Remedial Action Plan Centennial M-1 Property, Nevada County, September 24, 2021.
Exhibit F:	Department of Toxic Substances Control, Voluntary Cleanup Agreement for Centennial M-1 Property, September 3, 2019.
Exhibit G:	Initial Study/Mitigated Negative Declaration for Remedial Action Plan for the Centennial M-1 Property, July 23, 2021.
Exhibit: H:	Safeguards for Well Owners and the Idaho-Maryland Mine, CEA Foundation, December 1, 2021.
Exhibit I:	Intergovernmental Panel on Climate Change, Climate Change 2021: The Physical Science Basis, Summary for Policymakers, October 2021.
Exhibit J:	CARB 2017 Climate Change Scoping Plan Update.
Exhibit K:	Comments of Barbara Haya, Ph.D. in Response to Additional Information Regarding Carbon Offset Protocols for Greenhouse Gas Emission Reduction, Sept. 17, 2020.
Exhibit L:	Katharine L. Ricke & Ken Caldeira, *Maximum warming occurs about one decade after a carbon dioxide emission*, 2014 Environ. Res. Lett. 9 124002.
Exhibit M:	Climate Action Reserve, Climate Forward Program Manual, March 2020.

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SHUTE, MIHALY
& WEINBERGER LLP

Exhibit A

BASELINE ENVIRONMENTAL CONSULTING

15 February 2022
22204-00

Laurel L. Impett
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102-4421

Subject: **Review of Idaho-Maryland Mine Project, Draft Environmental Impact Report, SCH# 2020070378**

Dear Ms. Impett:

Grp 21-107

At your request, Baseline Environmental Consulting has reviewed the Hazards and Hazardous Materials, Hydrology and Water Quality, and Air Quality, Greenhouse Gas Emissions and Energy sections (and associated technical studies) of the Draft Environmental Impact Report (DEIR) for the proposed Idaho-Maryland Mine Project dated December 2021 and prepared for the County of Nevada (County). In order to provide a meaningful context for the analyses of the sections listed above, we also reviewed the DEIR Project Description. Following are our comments on the DEIR, organized by topical sections.

DEIR SECTION 4.7 HAZARDS AND HAZARDOUS MATERIALS

Legacy Contamination, Project Segmentation, and CEQA Baseline

Grp 21-108

The types of geological materials/rock historically mined at the site contain heavy metals, and when excavated, the waste rock and mine tailings have been found to contain contaminants that pose a potential risk to people and the environment. The Centennial Industrial Site was historically used by the Idaho-Maryland Mine to deposit mine tailings and waste rock. The DEIR (page 4.7-3) confirms that:

> *Extensive site investigation, overseen by DTSC, has identified mill tailings, waste rock, and affected soil at the site that contain lead, arsenic, mercury and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations. Elevated soil metals concentrations present a potential human health risk resulting from routine, long-term exposures, as well as ecological concerns in terms of impacts to plant and animal species. As a result, under existing conditions, the majority of the Centennial Industrial Site cannot be developed due to unstable soils and/or contamination.*

Per the California Department of Toxic Substances Control (DTSC) EnviroStor database, the Centennial Industrial Site is characterized as follows:

388 17th Street, Suite 230, Oakland, CA 94608 | P: (510) 420-8686 | www.baseline-env.com

> *Based upon information from existing documents, mining waste rock and mine tailings are present throughout much of the property. Results of sampling that has been completed to date indicates that the soil at the site contains lead, arsenic, nickel, and mercury at maximum concentrations of 35,111 milligrams per kilogram (mg/kg), 3010 mg/kg, 2100 mg/kg, and 41 mg/kg, respectively. These concentrations are above background and California hazardous waste levels.*

Based on this DTSC description, the existing waste rock and mine tailings that were generated from historic mining activities contain contaminants at levels exceeding regulatory thresholds, including California hazardous waste thresholds. These existing waste rock and mine tailings at the Centennial Industrial Site have been present (and have represented a persistent environmental hazard) since the former mining operation at the site shut down over 60 years ago (circa 1956). In 2019, the owner of the Centennial Industrial Site entered into a Voluntary Cleanup Agreement with the DTSC to address the hazard associated with the legacy waste rock and mine tailings generated from previous mining operations. It should be noted that cleanup actions were not initiated by the site owner until they were ready to reopen the mine.

The DEIR inappropriately establishes a future baseline condition (that may or may not actually exist in the future) for the DEIR hazards analysis as follows (DEIR page 4.7-1):

> *As discussed in Section 1.3, "Approach To Centennial Industrial Site Baseline," of this EIR, for the purposes of this hazards analysis, the environmental baseline for the Centennial Industrial Site has been adjusted to be consistent with anticipated site conditions at the completion of the separate Centennial Industrial Site Clean-up Project.*

This is clearly not allowed by CEQA. CEQA Guidelines Section 15125 states:

> *An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.*

In addition, the timing of the action related to the proposed cleanup of the legacy contamination (which began in 2019 – over 60 years after the waste was placed at the site) strongly indicates that the cleanup is related to, and part of the proposed mine reopening project (i.e., the site owner would not have entered into a Voluntary Cleanup Agreement unless they were planning to reopen the mine). Development of the Centennial Industrial Site for reopening of the mine is contingent on the completion of cleanup activities. However, the preparers of the DEIR have separated the project that would clean up the existing waste rock

and mine tailings contamination at the Centennial Industrial Site from the proposed new mining project. The DEIR asserts that these are two separate projects.

By separating the two projects (the waste rock cleanup and the proposed new mining activities), the applicant is violating the CEQA Guidelines (Section 15378). The CEQA Guidelines define a project under CEQA as "the whole of the action" that may result either directly or indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. Piecemealing or segmenting means dividing a project into two or more pieces and evaluating each piece in a separate environmental document, rather than evaluating the whole of the project in one environmental document. This is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact.

The DEIR should be revised to address the current baseline condition and segmentation of the environmental review process, which would require the project to include the cleanup of legacy contamination at the Centennial Industrial Site.

Project-related Waste Rock and Mine Tailings

Grp 21-109

Neither the DEIR Project Description nor the Hazards and Hazardous Materials section adequately describes how future waste rock and mine tailings generated by the proposed project would be managed to ensure that they do not pose a health hazard to people or the environment (as the placement of similar waste materials from the same mine did in the past). Since Section 4.7 Hazards and Hazardous Materials of the DEIR contains almost no discussion of the impacts associated with generation and disposal of potentially hazardous mine waste, it should be revised to include a detailed description of waste rock and mine tailings, including all historic analytical data and chemical characterization of the waste, so that the reader can gain a better understanding of the nature of this waste.

The DEIR provides little or no analytical data that demonstrates the chemical quality of the rock proposed to be mined would differ in any way from the rock that was mined historically. In the absence of data to the contrary, it is reasonable to assume that any newly generated waste rock and mine tailings would have similar chemical characteristics as the rock mined in the past. Therefore, the waste rock and mine tailings generated by the proposed project will almost certainly contain metals contaminants that could pose a health risk to people and the environment, and the DEIR includes no detailed plan as to how these contaminated wastes will be managed so that they do not create another environmental hazard. In fact, the DEIR appears to try to "rebrand" the waste rock and mine tailings as "engineered fill", apparently in the hopes that the waste material can be transported off-site for use at various unspecified

construction sites throughout the region as fill material, which would almost certainly result in numerous new contaminated wastes sites that pose a threat to the public and the environment. Unless it can be clearly demonstrated using substantial evidence that the waste rock and mine tailings can be safely used at uncontrolled constructions sites, this waste management option should be eliminated from the proposed project and the DEIR.

The only assurance provided by the DEIR (in section 4.8 Hydrology and Water Quality) that the project would not create another environmental hazard associated with placement of waste rock and mine tailings at the Centennial Industrial Site, which is already contaminated with previous placement of waste rock and mine tailings, is as follows (DEIR page 4.8-50):

> *Rise will be required as part of the project to submit a Report of Waste Discharge and obtain Waste Discharge Requirements from the Regional Water Quality Control Board for construction of the engineered fill areas.*

It is not adequate to state that the project will get permits without providing substantial evidence that the proposed action will not result in environmental impacts, particularly when very similar historic actions have been demonstrated to result in environmental impacts that have persisted for decades.

DEIR SECTION 4.8 HYDROLOGY AND WATER QUALITY

Impacts to Groundwater Resources and Domestic Water Supply Wells

The proposed project would intentionally affect local groundwater resources by dewatering the aquifer in the project vicinity to lower groundwater levels. The dewatered groundwater resources would be converted to surface water that is discharged into existing creek channels and quickly conveyed out of the area.

Grp 21-110

As described on page 3-15 of the DEIR:

> *The Idaho-Maryland Mine would be dewatered using the Brunswick shaft to access the underground workings.*

And page 4.5-55 of the DEIR:

> *As dewatering occurs, the water level within the underground workings would decrease from its current depth of approximately 250 feet bgs down to the maximum depth of the New Brunswick shaft at about 3,460 feet bgs. These depths are equivalent to elevations of approximately 2,500 feet msl and -700 feet msl, respectively. Thus, the water level within the mine workings would eventually decrease as much as 3,200 feet due to the project. As previously discussed, the transmissivity of the fractured bedrock decreases by several orders of magnitude at deeper depths, due to a reduction in the number of*

> *fractures and a decrease in the width of the fracture openings caused by increased lithostatic pressures at depth. As a result, dewatering of deeper tunnels and drifts would have less impact on groundwater levels in the fractured bedrock than would dewatering of shallower mine workings.*

As described in the DEIR, groundwater levels within the mine would be lowered by over 3,000 feet. Under the proposed project, the mine workings would essentially act as an enormous groundwater extraction well that would be pumped continuously for generations (the requested permit term is 80 years – DEIR page 2-3).

The applicant's consultants have prepared a numerical groundwater model to attempt to predict how this proposed long term dewatering effort would affect overlying and surrounding groundwater levels where rural residences and businesses rely solely on private groundwater wells for their water supply. Per the DEIR (page 4.8-55):

> *...based on the variation in the transmissivity and hydraulic conductivity of the fractured bedrock, 99 percent of groundwater inflow would occur within 550 feet of the ground surface, as previously discussed. Based on the fractured bedrock aquifer properties and the maintenance dewatering rates, it is anticipated that the drawdown near the mine area would cause the water levels in several of the wells in the East Bennett area to be affected.*

Based on this groundwater model output, the DEIR concludes that the East Bennett wells area could be affected and that impacts in all other areas would not be significant (DEIR page 4.8-62):

> *Thus, in the perimeter areas and including a safety factor of 100 percent in calculations, the project would not have any significant impact on groundwater supplies.*

In Mitigation Measure 4.8-2(a) (DEIR page 4.8-67) the DEIR acknowledges that more groundwater level data is needed to assess the potential impacts of the project to groundwater levels. The DEIR inappropriately defers the collection of additional data (via a Groundwater Monitoring Plan) to the future.

Mitigation Measure 4.8-2(a)(4) (DEIR page 4.8-67) is internally inconsistent and not implementable as stated. The first part of the measure requires an assessment be conducted "once dewatering of the underground mine workings commences", as stated (DEIR page 4.8-67) [underline emphasis added]:

> *A projected water-level impact assessment for individual domestic wells shall be performed once dewatering of the underground mine workings commences, based on responses of the measured groundwater levels of the project monitoring wells. The*

> *projected groundwater drawdown shall be estimated for each domestic well in the project area. This impact assessment shall be performed by tabulating the variation of the measured water levels from the project monitoring wells over the monitoring period and during the dewatering of the underground mine workings and mining operations.*

The second part of the same mitigation measure refers to determination of "baseline groundwater level", which would be based on the assessment discussed above, "shall be developed prior to the initiation of dewatering of the underground mine workings", per the DEIR (page 4.8-67) [underline emphasis added]:

> *For each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings.*

It would not be possible for pre-dewatering baseline levels to be determined when they would be based on an assessment that would not start until after dewatering begins. Consequently, this Mitigation Measure 4.8-2(a) (DEIR page 4.8-67) would be impossible to implement.

The lack of clarity and implementability of the proposed approach demonstrates that the DEIR does not provide a clear and feasible methodology for protecting groundwater resources and domestic well users. A groundwater management plan that includes information gathering and data collection from a broad network of existing domestic wells (not monitoring wells - refer to additional discussion below under **Proposed Reliance on a Groundwater Monitoring Well Network**) should be implemented prior to preparation the DEIR.

CEQA does not allow the deferment of important studies that would allow full characterization of impacts and deny decision-makers information that would allow them to make well-reasoned decisions regarding the viability of the project. Groundwater monitoring networks should be established and resulting data included in the DEIR.

As described below, the approach that the DEIR takes to assessing and mitigating potential impacts to groundwater levels and existing water supply wells is flawed in numerous ways.

Uncertainty of Groundwater Model Predictions

Grp 21-111

Accurately characterizing the flow patterns and behavior of groundwater using mathematical equations (models) is a challenging endeavor in any geologic environment. The types of hydrogeologic systems that are most readily modeled accurately are uniform (homogeneous), isotropic (consistent structure from place to place) rock and or sediments, like a uniform unfractured sandstone where water flows slowly through pore spaces around the grains of the geologic material.

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Groundwater occurrence and flow within complex fractured bedrock systems, like those that occur at the project site, are exceedingly difficult to model with accuracy or reliability. It is widely known by practitioners in the hydrogeologic community that accurate prediction of groundwater behavior in fractured bedrock using groundwater models, where most of the flow occurs within the unknowable sets of primary and secondary fracture patterns, rarely occurs.

The DEIR bases its entire approach to characterizing and mitigating the impacts to groundwater resources and water levels in existing domestic wells on the results of a numerical model for a complex aquifer system with many intricacies that can never be fully understood. Even the water resources firm hired by the applicant to conduct a peer review of the mathematical model expressed concerns about the reliability of the model results:

From Wes Yost (page 12)

> *A major assumption is that flow contributions from the workings are distributed uniformly across the mining areas after correcting for depth. However, the subsurface distribution and orientation of bedrock fractures is not uniform and is subject to uncertainty. Discussion of this uncertainty and the overall uncertainty of the model predictions with respect to groundwater level impacts on individual wells should be provided.*

The DEIR does not explicitly acknowledge the concern related to the "subsurface distribution and orientation of bedrock fractures is not uniform and is subject to uncertainty" raised by Wes Yost.

Grp 21-112

Additional uncertainties in the groundwater model are evident based on review of the groundwater model report included in Appendix K.3 of the DEIR. The groundwater model was calibrated based on pumping rates from the historical Idaho-Brunswick Mine and one water level measurement collected from the flooded (i.e., inactive) Union Hill shaft in 1956. Using only one water level measurement to calibrate a complex bedrock aquifer system over a large region introduces a significant amount of uncertainty to the model. In addition, page 6 of Appendix K.3 states "...there is a poor hydraulic connection between these two mines", which suggests the water level measurement collected from the Union Hill Shaft is not ideal for calibrating the groundwater model.

Grp 21-113

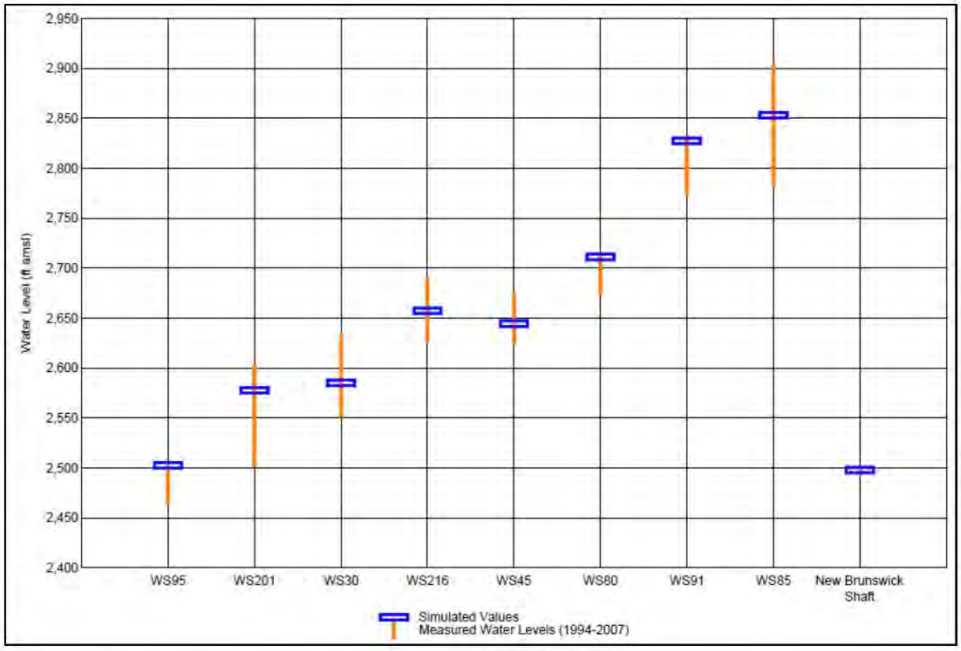
According to groundwater model report in Appendix K.3, the model was further calibrated or verified by terminating the pumps in the historical Idaho-Brunswick Mine (represented in the model by drainage nodes in the mine workings) and allowing the groundwater levels to recover from 1957 to 2019. The simulated groundwater levels at the end of the recovery period (2019) were then compared to water levels measured in eight domestic wells in the project vicinity from 1994 to 2007. As shown in Figure 4-8 from the groundwater model report (see below), the

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simulated water levels recovered within the range of measured water levels in the select domestic wells; however, the variation in measured water levels for each domestic well ranges from about 40 feet (well WS95) to 120 feet (well WS85). Demonstrating that the simulated groundwater levels can recover within a 40- to 120-foot range of measured water levels does not provide much assurance regarding the accuracy and reliability of the groundwater model. This is particularly true when the model is being used to predict that the project will have a maximum groundwater level drawdown of 10 feet in the project vicinity.

Figure 4-8 of Appendix K.3: Simulated Water Levels Compared to Select Domestic Wells



As summarized on page 4.8-19 of the DEIR, groundwater currently appears to be seeping into the existing mine shafts and then discharging to several drains located along Wolf Creek. As stated on page 4.8-19 of the DEIR:

Grp 21-114

> *The elevation of the water in the New Brunswick shaft averages 2,497 feet msl. This elevation is about 25 feet to 265 feet below the static water level in the domestic supply wells in the East Bennett area. Thus, the underground workings connected to the New Brunswick shaft must have a connection to a point that allows the workings to be*

drained, resulting in a lower water level in the shaft than in the wells in the surrounding bedrock.

Page 4.8-19 of the DEIR also states the following:

Because the water level in the shafts appears to be consistently below the static groundwater levels in the wells in the East Bennett area, groundwater will continually seep into the shafts. As a result, the shafts act as "wells" that constantly draw groundwater from the surrounding shallow bedrock (i.e., above a depth of 500 feet, where the transmissivity is highest).

As a result, there is currently a groundwater depression created by constant drainage from the existing mine workings. This groundwater movement is generalized in Figure 4.8-7 of the DEIR shown below. The groundwater model report in Appendix K.3 of the DEIR also simulated this existing groundwater depression. However, the groundwater model report provides no discussion of how this condition was simulated. Since the static water level in the mine workings remains at about 2,497 feet msl, the model should apply boundary conditions (e.g., drainage nodes or pumping wells) along the mine workings located above 2,497 feet msl to create the specified head of the current water level in the mine workings. There is no discussion of such a boundary condition being applied to the groundwater model to simulate the current drainage of the mine workings. Calibrating the groundwater model without incorporating the proper mechanisms to simulate the drainage of groundwater from existing mine workings could introduce substantial error to the overall modeling results.

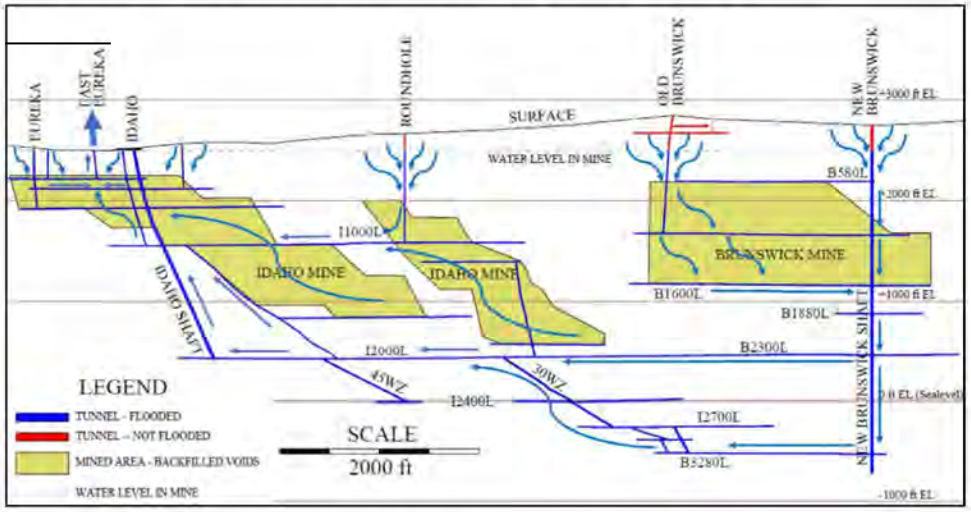
Grp 21-115

In summary, there is a high level of uncertainty associated with the groundwater model that was used in the DEIR as justification to identify a very small subset of the domestic wells in the East Bennett area that are likely to be adversely affected by the project, and to characterize impacts to a vast number of other domestic wells in the project vicinity as less than significant. This is a flawed approach and provides no assurance that residences and businesses that rely on groundwater wells in the region will have a reliable water supply if the project were to be approved.

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Figure 4.8-7 of DEIR: Groundwater Movement in Mine Workings (Existing Condition)



Arbitrary Impact Criteria of 10% Drawdown

Grp 21-116

DEIR Mitigation Measure 4.8-2(b) states that:

> *If, based on the GMP, it is determined that mining operations are resulting in a significant impact to any well(s) (i.e., a 10 percent or greater reduction of the water column of any well), pursuant to Nevada County General Plan Policy 17.12, the project applicant shall be responsible for providing a comparable supply of water to such homes or businesses whose wells are significantly impacted…*

Grp 21-117

This mitigation measure attempts to establish this "10 percent or greater reduction of the water column of any well" as a criterion of significance which would trigger a significant impact requiring mitigation. Nowhere is the arbitrary groundwater level of 10 percent reduction justified in the DEIR. It is certainly possible that of the hundreds of supply wells in the region, that some of them are just barely satisfying the well owners needs under existing conditions, and that a water level reduction of 10 percent could lead to water levels dropping below the well pump intake, adversely impacting the quantity of water available from the well with the existing pumping system. The DEIR presents no details related to the characteristics and function of the existing domestic wells that the project may affect and allow for the development of a fact-based criterion of significance. The DEIR needs to disclose this fact and gather the data needed to make such a determination, then discuss and mitigate the impacts.

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The mitigation measure also does not describe how drawdown would be determined relative to baseline conditions. As stated on page 7 of Appendix K.3, private domestic wells in the project vicinity have seasonal fluctuations that may vary from 10 to 50 feet between wet and dry seasons. It is not clear how these seasonal water fluctuations would be distinguished from project-related drawdown.

Also, it should be noted that the General Plan policy referred to (Policy 17.12) says nothing about a 10 percent reduction criterion. Verbatim, this General Plan policy states:

> *In approving mining projects which according to expert opinion may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses, the County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water.*
>
> *Where water quantity and quality problems occur, an immediate water supply shall be provided by the operator until the source of the problem is determined. The burden of proof shall be on the operator to show that the mining operation did not create the water problem. If it is determined that the operator is at fault, impacted owners shall be compensated by the operator.*

Grp 21-118

According to the General Plan policy, the correct criterion for mitigating potential impacts to water resources from mining projects is based on expert opinion and not an unsubstantiated 10 percent reduction criterion. For the reasons stated within this letter, it is Baseline's expert opinion that the project may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses in a much wider area than is indicated in the DEIR. The DEIR criterion of impact should be revised to be consistent with General Plan policy 17.12 and Mitigation Measure 4.8-2(c) should be revised to include all wells that may be affected instead of only the 30 wells in the East Bennett area.

Proposed Reliance on a Groundwater Monitoring Well Network

The DEIR and associated Groundwater Monitoring Plan (GMP) (Itasca, Feb. 2021) does not propose to monitor water levels in the actual water supply wells at overlying and nearby residences and businesses that may be affected by the project, but proposes to install monitoring wells to (GMP page 1):

Grp 21-119

> *...provide data for assessing groundwater conditions during dewatering of mine workings and mining operation at the Project. The GMP includes the installation of monitoring wells across the Project site at 15 different locations.*

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It is not explained in the DEIR or GMP how 15 monitoring wells in complex fractured bedrock spread out over thousands of acres could possibly be relied upon to provide data to ensure that groundwater level impacts to the hundreds of existing water supply wells in the project vicinity are immediately identified and mitigated. For example, a monitoring well could be placed in proximity to an existing supply well and respond very differently to changing water levels in the mine during dewatering if a water-bearing bedrock fracture intersects one of the wells, but not the other. To comply with the requirements of General Plan Policy 17.12, the applicant should, at minimum, do the following:

- Complete a detailed water supply well inventory for all wells within the Mineral Rights Boundary (plus a substantial buffer zone);
- Investigate all available details about each well such as the construction design (i.e., depth, diameter, screened interval); type and use of the well (e.g., domestic, irrigation, industrial, etc.); water demand (installing totalizer meters if necessary to determine water use); and recharge rates (installing pressure transducers if necessary to monitor drawdown and recharge); and seasonal variations in water levels.
- Develop a plan for each well to ensure that an immediate alternate water supply can and will be provided should an impact to that well occur. This plan should include provisions to ensure alternate water supplies will be provided throughout the 80-year life of the project and beyond. For example, if the project causes a domestic well to go dry, and the well collapses or partially collapses (which older wells often do when they go dry), the applicant should be required to replace the well at no cost to the owner.

We understand that this well identification and mitigation planning will be a substantial effort and need to be funded by the applicant, but the consequences of not committing to full compliance with General Plan Policy 2.17 are dire for local property owners who rely on groundwater.

Grp 21-120

It should be noted that the County has already required a similar program for a previous mining project. Please refer to the Conditional Use Permit (File Number: U94-017) for the Extension of Time for Emperor Gold (U.S.) Corporation dated March 28, 2001 (Attachment A), in which the County required: 1) a monitoring program to establish baseline data on local wells and the collection of at least 12 months of baseline data from these wells. The proposed project should be required to at least implement as rigorous of a well protection program for the proposed project as was previously required in the use permit of a previous mining project. DEIR Mitigation Measure 4.8-2 should be revised to more fully address potential impacts to water supply wells and meet or exceed the requirements previously required by the County.

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Impacts to Groundwater Dependent Biological Resources Not Adequately Characterized and Mitigated

For similar reasons as described above for potential impacts to water supply wells, proposed mine dewatering activities could, and likely will, have a significant impact on groundwater dependent biological resources by drying up springs and reducing or eliminating groundwater discharges to certain creek segments. This is not addressed at all in section 4.8 of the DEIR. The applicant's own consultant identifies this problem (West Yost, page 18):

> *Baseflow in the South Fork of Wolf Creek and Wolf Creek is from bedrock fractures. The reported hydrogeologic conceptual model for groundwater flow acknowledges this, but the numerical model necessarily assumes a relatively uniform distribution of hydraulic properties in the subsurface. The subsurface distribution and orientation of bedrock fractures is not uniform and is subject to uncertainty. Discussion of this uncertainty and its impact on the model's predicted impacts of mine dewatering on stream flow should be provided.*
>
> *Based on the data and analysis presented in the Itasca Report and EMKO Report, it is possible that mining activities, including blasting, backfilling with CPB, and sealing of drains or areas of the underground workings, could activate leaching and groundwater flow in new subsurface areas, potentially resulting in impacts to neighboring wells, and discharges to surface water of groundwater with water quality exceeding applicable standards. These impacts could potentially occur during the mining or post-mining periods. Because of the uncertainty inherent in the bedrock fracture flow system, monitoring will be needed, as mining activities progress, to assess potential impacts, design appropriate solutions and attain necessary permits to mitigate these potential impacts. These efforts should be addressed in the monitoring and mitigation requirements for the mining and post-mining phases of the Proposed Project.*

Grp 21-121

This potential impact needs to be fully addressed and mitigated.

DEIR SECTION 4.3 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

Underestimated Emissions of Criteria Air Pollutants and GHGs from Haul Trucks Transporting Engineered Fill

Grp 21-122

The air quality analysis for the DEIR assumed that waste rock and mine tailings would be used as engineered fill at the following locations over time:

- Years 2022–2026: Fill placement at the Centennial Industrial Site;
- Years 2027–2032: Fill placement at the Brunswick Industrial Site; and
- Years 2033–2102: Fill placement at off-site locations.

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The DEIR estimated the annual average emissions of criteria air pollutants and greenhouse gases (GHGs) for the haul trucks that would transport engineered fill from the Brunswick Industrial Site to the Centennial Industrial Site (1.8 miles per trip) from 2022 to 2026 and then to off-site locations (60 miles per trip) starting in 2033. The DEIR analysis assumed that remediation of the Centennial Industrial Site would be completed and approved by the DTSC prior to the opening year. However, since remediation of the Centennial Industrial Site is not included as part of the CEQA analysis for the project, there is no assurance that remediation of the site will be completed prior to the opening year of the project or within the lifetime of the project. As a result, it's speculative to assume that the Centennial Industrial Site will be available for fill placement.

A more reasonable analysis is to assume the Centennial Industrial Site is not available for fill placement and the haul trucks will need to travel to the more distant off-site locations for an additional five years starting as early as the opening year. Since the fleetwide air pollutant emissions from haul trucks are expected to improve over time as older equipment is replaced with newer technology (e.g., cleaner engines), estimating haul truck emissions to off-site locations in the opening year also provides the most conservative analysis. To illustrate the severity of impacts that could result under this assumption, Baseline prepared an updated analysis of the project's daily nitrogen oxide (NOx) emissions in the opening year related to haul trucks transporting engineered fill to the off-site locations.

As shown in **Table 1**, the project's daily NOx emissions for haul trucks transporting engineered fill to off-site locations (89.6 pounds per day [lbs/day]) would be substantially higher than the results of the DEIR analysis of haul trucks transporting engineered fill to the nearby Centennial Industrial Site (4.0 pounds per day [lbs/day]). The updated analysis would result in the project's total NOx emissions (193.1 lbs/day) exceeding the Northern Sierra Air Quality Management District's (NSAQMD's) Level C threshold of significance (136 lbs/day) in the opening year, which would result in a significant and unavoidable impact if emissions are not mitigated below the NSAQMD's Level C threshold.

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Table 1: Comparison of NOx Emissions for Haul Truck Transporting Engineered Fill to the Centennial Industrial Site and Off-Site Locations in the Opening Year (2022)

Haul Truck Destination in Opening Year (2022)	Haul Truck Annual VMT	NOx Emissions (lbs/day)		
		Haul Truck Emissions[1]	Total Project Emissions[2]	NSAQMD Threshold Level
Existing Analysis for Centennial Industrial Site	65,700	4.0	107.5	Level B (24-136 lb/day)
Updated Analysis for Off-Site Locations	2,190,000	89.6	193.1	Level C (>136 lb/day)

Notes: VMT = vehicle miles traveled; NSAQMD = Northern Sierra Air Quality Management District
[1] Haul truck emissions were estimated based on the annual VMT, trips, idling, and emissions factors reported for Haul Trucks in Appendix E.1 of the DEIR.
[2] Total project emissions were estimated based on the unmitigated NOx emissions from other project sources summarized in Table 4.3-17 of the DEIR.

Emissions of other criteria air pollutants and GHGs would also similarly increase if the Centennial Site is not available for fill placement. The project analysis for criteria air pollutants and GHGs should be updated to assume that remediation of the Centennial Industrial Site may not be completed within the lifetime of the project and, therefore, off-site locations may be needed for fill placement for an additional five years starting as early as the opening year. As demonstrated in Baseline's updated analysis of daily NOx emissions, this is expected to result in more severe air quality and GHG impacts than disclosed in the DEIR.

Failure to Evaluate the Effectiveness of Applicant Proposed Measures to Reduce Air Quality, GHG, and Energy Impacts

Grp 21-123

As described on page 4.3-65 of the DEIR, the following three applicant proposed measures (APMs) will be implemented during construction, operation, and reclamation of the project:

- APM-AQ-1: Exhaust Emission Controls
- APM-AQ-2: Surface Fugitive Dust Controls
- APM-AQ-3: ASUR Plan

Similar to mitigation measures, these APMs are intended to reduce the project's air quality, GHG, and energy impacts. The DEIR included the APMs in the project's unmitigated analysis of air quality, GHG, and energy impacts. It appears that the preparers of the DEIR intended to incorporate the APMs into the project design; however, the APMs were not identified as features in the project description. Therefore, there is no assurance that these APMs will be implemented as a part of the project.

Based on the *Lotus v. Department of Transportation* (223 Cal. App.4th 645) decision, the DEIR should first evaluate if the project's air quality, GHG, and energy impacts would exceed the

thresholds of significance without implementation of the APMs, and then evaluate how the APMs would reduce the impacts to or maintain them at a less-than-significant level. Furthermore, the APMs need to be analyzed for their effectiveness in reducing the impact and a mitigation monitoring or reporting plan needs to be adopted to ensure these measures are implemented.

The DEIR should be updated to properly incorporate of APMs into the project design or convert the APMs into CEQA mitigation measures and include them in the Mitigation Monitoring and Reporting Program. More importantly, the DEIR analysis of unmitigated air quality, GHG, and energy impacts should be updated to evaluate the effectiveness of the APMs in reducing impacts to a less-than-significant level.

Inadequate Mitigation of Criteria Air Pollutant Emissions

Grp 21-124

According to Table 4.3-17 in the DEIR, the project's unmitigated emissions of NOx would exceed the NSAQMD's Level B threshold during the 1-year period of construction and over the entire 80-year period of the mining permit, while unmitigated emissions of reactive organic gases (ROG) and respirable particulate matter (PM10) would exceed NSAQMD's Level A threshold during that period. Therefore, the project would have a potentially significant air quality impact that should be mitigated to reduce emissions from both short-term and long-term sources. The DEIR analysis has incorporated the minimum mitigation measures recommended by the NSAQMD; however, these mitigation measures only reduce project emissions during the 1-year period of construction. The mitigation measures do not address any of the long-term NOx, ROG, and PM10 emissions over the 80-year permit of the project. As result, there is no evidence that the project's long-term NOx, ROG, and PM10 emissions have been mitigated to a less-than-significant level. The DEIR analysis should be updated to identify and evaluate feasible mitigation measures that would reduce long-term criteria air pollutant emissions from project operations, not just construction.

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Health Risk Assessment Fails to Provide Essential Information and Lacks Substantial Evidence to Support Conclusions

The DEIR prepared a health risk assessment (HRA) for nearby sensitive receptors exposed to concentrations of toxic air contaminants (TACs) generated by the project. TACs of concern include diesel particulate matter (DPM), asbestos, silica, and trace heavy metals, as described on page 4.3-79 of the DEIR:

> *Project construction, operations, and reclamation activities would produce DPM emissions (with PM10 exhaust modeled as surrogate) due to off-road equipment and haul truck trips, and other TAC emissions from mining and soil movement. The TAC emissions associated with blasting and crushing, ore processing, and earthwork and material handling would include asbestos, silica, and trace heavy metal TACs including arsenic, beryllium, cadmium, copper, lead, manganese, mercury, nickel, selenium, and vanadium. In addition, for purposes of the HRA, diesel emergency generators were assumed to operate for up to 100 hours per year in accordance with CARB's ATCM for Stationary Compression Ignition Engines.*

Grp 21-125

The methodology and input parameters used for the HRA are documented in the *Health Risk Assessment for The Idaho-Maryland Mine Project* included in Appendix E.1 of the DEIR. The HRA included air dispersion modeling of 25 unique sources of TAC emissions during construction and operation of the project, such as ore processing exhaust fans, diesel generators, diesel storage tanks, and fugitive dust from off-road equipment. Based on the air dispersion model results, the HRA estimated the health risks for a sensitive receptor exposed to 33 different TACs of concern, such as DPM, asbestos, and silica. Consistent with guidance from the Office of Environmental Health Hazard Assessment (OEHHA), the sensitive receptor exposure was assumed to begin in the 3rd trimester of pregnancy for a duration of 30 years.

The estimated unmitigated cancer risk at the maximally exposed individual resident was reported to be 10.4 in a million, which is above the threshold of significance (10.0 in a million). With implementation of higher-tier engines during construction, as required by Mitigation Measure 4.3-1(b), the DEIR estimated that the project would result in an incremental cancer risk of 7.6 in one million. This 27 percent reduction in cancer risk is surprising, because Mitigation Measure 4.3-1(b) only reduces emissions during 1 year of construction and does not reduce any of the emission sources over the 80 years of operation. However, there is no way to review the validity of the HRA results and effectiveness of Mitigation Measure 4.3-1(b) because the results of the HRA analysis are poorly documented and non-existent in most cases.

Grp 21-126

For the HRA results, the DEIR only presents the total cancer risk, chronic health risk, and acute health risk for a sensitive receptor exposed to 33 different TACs from 25 different sources at different times over a 30-year period. The individual health-risk contributions from each

emission source, TAC, and year of exposure are not documented or summarized anywhere in the DEIR. In addition, no graphics are provided to show the location of the modeled emission sources, sensitive receptors, and results of the air dispersion modeling. As a result, there is no reasonable method for the public or decision makers to review the validity of the HRA findings and evaluate the effectiveness of proposed Mitigation Measure 4.3-1(b). According to *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal. 4th 412, 442, the data in an EIR must be presented in a manner to adequately inform the public and decision makers. Here, the DEIR air quality analysis lacks substantial evidence to support its conclusions and should be revised to properly document and summarize the findings of the HRA.

Unsubstantiated GHG Threshold of Significance

Neither the NSAQMD nor the County has adopted numerical thresholds of significance for GHG emissions that would apply to the project. Therefore, the DEIR uses a bright-line GHG threshold of 10,000 metric tons of carbon dioxide equivalents (MT CO2e) per year for operations based on the following justification described on page 4.3-43 of the DEIR:

Grp 21-127

> *For operations, because the project is an industrial project that includes stationary sources (i.e., diesel generators used for emergency power), the project's GHG emissions were compared to the 10,000 MT CO2e per year quantitative threshold, which, as described above, is used by SMAQMD, PCAPCD, BAAQMD, and SCAQMD for industrial and/or stationary source emissions of GHGs. The substantial evidence for this GHG emissions threshold is based on the expert opinion of various California air districts, which have applied the 10,000 MT CO2e per year threshold in numerous CEQA documents where those air districts are the lead agency.*

The justifications for adopting this threshold are unique to each air district. These air districts have prepared detailed GHG inventories to identify and evaluate strategies for achieving the statewide GHG reduction goals within their air district. While these air districts have adopted the same bright-line threshold of 10,000 MT CO2e per year for stationary sources, the justification for adopting this threshold is not the same for each air district. Furthermore, these air districts originally adopted the stationary GHG threshold to achieve the 2020 statewide GHG goal under California Assembly Bill 32, which was to reduce GHG emissions to 1990 levels by the year 2020. In September 2016, Senate Bill 32 established the State target to reduce GHG emissions 40 percent below 1990 levels by 2030. The Bay Area Air Quality Management District (BAAQMD), which is referenced above, is in the process of updating their GHG thresholds to address California's long-term GHG goals for 2030 and beyond, and is proposing a new stationary source threshold of 2,000 MT CO2e per year or compliance with Cap-and-Trade.[1]

[1] Bay Area Air Quality Management District (BAAQMD), Air District Update to CEQA Thresholds of Significance for Greenhouse Gases; Public Workshop. December 9, 2021.

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The DEIR does not discuss the justification provided by each air district for adopting the 10,000 MT CO2e per year threshold, nor does it provide substantial evidence for applying this threshold to the project to demonstrate how it will achieve a fair share of the statewide GHG reductions goals for 2030 and beyond. The DEIR should be updated to identify and provide justification for a GHG threshold of significance that will achieve the statewide GHG reductions goals for 2030 and beyond over the proposed 80-year lifetime of the mining permit.

CONCLUSIONS

Grp 21-128 Based on our review of the DEIR and supporting appendices for the proposed project, Baseline recommends that the County revise and recirculate the environmental analysis to address the environmental concerns related to the issues described above.

Sincerely,

Patrick Sutton, PE
Senior Environmental Engineer

Bruce Abelli-Amen, PG, CHg
Principal

PS:BAA:km

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ATTACHMENT A

Conditional Use Permit (File Number: U94-017)
for the Extension of Time for Emperor Gold (U.S.) Corporation

COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
950 MAIDU AVENUE NEVADA CITY, CA 95959-8617
(530) 265-1222 FAX (530) 265-1272 www.co.nevada.ca.us/cda

PLANNING DEPARTMENT	ENVIRONMENTAL HEALTH	BUILDING DEPARTMENT	CODE COMPLIANCE
PHONE (530) 265-1440	PHONE (530) 265-1452	PHONE (530) 265-1444	PHONE (530) 265-1362
FAX (530) 265-1798	FAX (530) 265-7056	FAX (530) 265-1272	FAX (530) 265-1625

March 28, 2001

Scott A. Galati
Grattan & Galati
801 "K" Street, Penthouse Suite
Sacramento, CA 95814

RE: Extension of Time for Emperor Gold (U.S.) Corporation – Conditional Use Permit File Number: U94-017

Dear Mr. Galati:

At their regular meeting of March 22, 2001, the Nevada County Planning Commission considered your extension request dated December 13, 2000, for an extension of time for the Conditional Use Permit application of Emperor Gold, File Number U94-017.

The Commission, by a 5-0 vote, granted the extension of time for two (2) years. The dewatering activities for the Conditional Use Permit on this project must be commenced no later than January 25, 2003 .

If you have any questions, please contact the project planner, Tod Herman, Associate Planner, at (530) 265-1257.

Very truly yours,

NEVADA COUNTY PLANNING COMMISSION
Mark Tomich, Ex-Officio Secretary

By: Jean Jacobs
JEAN JACOBS
Clerk to the Planning Commission

MT:jj

COUNTY OF NEVADA

PLANNING DEPARTMENT

Eric Rood Adm. Bldg.
950 Maidu Avenue
Nevada City, CA 95959-8617
(916) 265-1440
Fax (916) 265-1798

January 26, 1996

NOTICE OF CONDITIONAL APPROVAL
USE PERMIT APPLICATION

Emperor Gold (U.S.) Corporation
P. O. Box 1836
Grass Valley, CA 95945

U94-017; EIR94-003
AP#: 06-441-03, -04, -05, & -29;
09-630-24, -27, -30 & -31

ENVIRONMENTAL ACTION: Certified EIR

You are hereby notified that the Nevada County Planning Commission, at a regular meeting held on January 25, 1996, after public hearing, did duly consider your application for the dewatering of the existing underground workings of the Idaho Maryland Gold Mine, and the subsequent underground exploration and sampling of those workings, on property located on 117 acres of contiguous property located southwest of the intersection of Brunswick Road and E. Bennett Road, including the Bohemia Mill site. A legal description of the property is on file in the Planning Department, 950 Maidu Avenue, Nevada City, California.

The Planning Commission hereby notifies you that your application for a use permit was granted, on a 4-0 vote, subject to the following mitigation measures and conditions:

The agency references are: Planning Department (PD), Department of Transportation (DOT), Environmental Health (EH), Building Department (BD), and the Northern Sierra Air Quality Management District (NSAQ).

I. GENERAL CONDITIONS

PD 1 All operations shall be conducted in accordance with the project description in Section 3.0 (Draft EIR), and as amended in the EIR Errata (Section 3.0 of the Final EIR). All other conditions required by this permit shall be considered as modifications to the project description. All mitigation measures attached to this project shall also be considered as conditions of this permit.

PD 2 Under applicable law, this use permit will "run with the land" and the entitlements and obligations will be fully assumed by any subsequent owner of the property covered by this use permit. Any party or entity acquiring the property and electing to continue with the use of the property as authorized by this use permit will be required to fully comply with all of the conditions and obligations created by the use permit, including, but not limited to, being required to post and maintain adequate security as required under MM 4.3.6 of this permit.

PD 3 Once the dewatering portion of the Exploration Phase has commenced, the operator shall have four and a half years to complete the Exploration Phase and an additional six months to complete the site clean up activities outlined in the Post Project phase (Section VIII) of this use permit. All mine dewatering shall cease at the end of the Exploration Phase (Section VII).

PD 4 Every two years, beginning from the commencement of the Site Preparation Phase, this Use Permit shall be reviewed before the Nevada County Planning Commission. The purpose of the review will be to evaluate the success of the established performance standards and of the operator in complying with these Conditions of Approval. Additionally, the review will monitor the status of the project and any deviations from the anticipated impacts described in the Final EIR. Adjustments to the monitoring program may be made in order to accommodate any such deviations.

PD 5 If the review hearings in Condition PD 4 above reveal serious violations and/or unexpected significant environmental or public health impacts that either have not or cannot be corrected, the Planning Commission shall recommend that the Board of Supervisors hold a hearing to consider revocation of the Use Permit.

NOTE: Notwithstanding any other provision, use permit revocation hearing(s) may be held any time by the Board of Supervisors pursuant to Section L-II 31.6 of the Land Use and Development Code whenever non-compliance on the part of the operator is demonstrated such that the established conditions of approval are not being followed.

PD 6 These conditions may not be changed without amending this permit except that minor adjustments to the project and conditions may be made if approved by the Planning Department staff, and if such changes do not result in a major departure from the approval either individually or cumulatively as defined in Section L-II 3.49 of the Land Use and Development Code. Staff will report all such adjustments to the Planning Commission and Community Liaison when applicable.

PD 7 The operator shall fund the County's monitoring and inspection for this project. All such fees shall be based on an at-cost basis pursuant to Section K.1 of the latest fee schedule adopted by the Board of Supervisors.

PD 8 The following is the definition of the Community Liaison with whom the Mine Operator shall be required to coordinate:

a. At their election, and on an "as available" basis, the Bohemia Area Residents Committee (BARC) will provide the operation with the name, address, and phone number of a person designated as the "Community Liaison." This volunteer will serve both the community near the mine and the operator as the main line of communication between the two. For example, the liaison may:

   i. Pass on BARC or community member's concerns in an orderly fashion.
   ii. Stay informed about the project and notify BARC or community members of the current stage of the project including, as examples, temporary noisy events or the status of the monitoring results.



iii. Review monitoring data on file at the County as necessary.
iv. Serve on the Review Team for various contracts administered by or requiring review by the County.

b. The liaison will be notified concurrently with the County of any changes to the operation requiring County approval.

c. The operator shall allow the Community Liaison (when accompanied by County staff) to review on-site monitoring procedures and related activities. These on-site visits however, will be subject to conditions of the operator's liability or product loss insurance carriers and the necessary safety training of the liaison.

d. Periodic "Review Team" meetings with the County, the Community Liaison, and the operator shall be held to discuss the project's status. These meetings shall occur at a minimum on a quarterly basis, but may also be held on a more-frequent "as-needed basis." If deemed desirable by the "Review Team," the County will provide notice (at the operator's expense) to area residents of project events, status, etc. which may be of interest to such persons.

II. SUBSEQUENT PERMIT ACQUISITION

EH 1 Valid Hazardous Waste Permits are required prior to remedial action or hazardous waste operations. If necessary, obtain a Hazardous Waste Permit from the Nevada County Department of Environmental Health prior to the start of operations.

EH 2 A Hazardous Material Storage Permit is required prior to installing any hazardous material on site which equals or exceeds 55 gallons, 500 pounds, or 200 cubic feet of compressed gas. Obtain a valid permit(s) from the Nevada County Department of Environmental Health prior to the start of operations.

EH 3 Bulk storage of hazardous materials, hazardous substances, hazardous wastes and/or fuels require the submittal of a Hazardous Materials Release Response Plan and Inventory (HMRRP&I) pursuant to California Health and Safety Code Chapter 6.95. Operator shall submit a HMRRP&I to the Nevada County Department of Environmental Health 30 days prior to the start of operations at this site.

NSAQ 1 Obtain an Authority to Construct and Permit to Operate from the Northern Sierra Air Quality Management District prior to constructing anything that requires such a permit.

MM 4.4.2 The water quality and quantity parameters associated with surface discharge resulting from the proposed project shall conform to Order No. 94-005 (for quality) and any other waste discharge requirements and standards as set forth by the California Regional Water Quality Control Board, Central Valley Region. The operator shall submit any required background documentation to CRWQCB to obtain these permits, and these permits shall be in place before dewatering commences. The operator shall also submit to the Nevada Irrigation District any discharge plans or proposals which may affect NID facilities. NID shall be treated as an affected or reviewing agency.

MM 4.4.5 As supporting documentation to assess receiving water quality, the operator shall conduct additional upstream and downstream testing within the South Fork channel, as required by the CRWQCB.

MM 4.4.6 The operator shall conduct a discharge Monitoring and Reporting Program during dewatering, as set forth by the CRWQCB. Such monitoring will include testing for metals as well as pH levels.

III. ON-SITE PREPARATION

PD 9 During the On-Site Preparation Phase, the operator may conduct the following site preparation activities:

a. Do the necessary geotechnical work for the dewatering pond.

b. Installation of the on-site power lines.

c. Develop the internal road system.

d. Begin preliminary site clearing and development of the on-site buildings and structures.

Prior to the establishment of any of these activities, the operator shall demonstrate by documentation that all appropriate mitigation monitoring has been performed. All such activities must comply with the other applicable requirements of this permit and those of the other permit issuing agencies.

PD 10 The activities in Condition PD 9 above shall be conducted in the following manner:

a. All surface activities (PD 9 above) shall comply with those noise standards established in Policy 9.1 of the Noise Chapter of the Nevada County General Plan and shall be conducted in accordance with Mitigation Measures 4.9.2, and 4.9.3.

b. All required permits from the CRWQCB, or waivers therefrom, shall be obtained prior to the dewatering.

PD 11 Site plan standards shall be as follows:

a. Administration Office Parking: A minimum of 12 parking stalls (including Disabled parking) shall be provided in accordance with Article 28 of the Land Use and Development Code. Parking area shall be paved to control fugitive dust.

b. Shop Area Parking: A minimum of 30 parking stalls shall be provided in accordance with Article 28 of the LUDC. Parking area shall be paved to control fugitive dust.

c. Buildings: All permanent building shall be colored to blend with their respective background settings.

d. Lighting: All exterior lighting shall be shielded and directed down to prevent direct off-site light spill. Permanent exterior lighting shall be limited to the Administration Office Area, Shop Area, Watchman's Quarters, and those areas reasonably necessary to provide safety measures during nighttime operations. Within an hour after the evening's activities, all unnecessary exterior lighting shall be turned off.

e. Site Plan: After buildings are permanently located, a revised site plan shall be submitted to the Planning Department and kept on file.

f. Watchman's Quarters: A watchman's quarters shall be permitted for the purposes of mine security.

BD 1 Obtain the proper permits from the Building Inspection Department for all building construction and grading activities. Such permits shall meet the minimum requirements of the Uniform Building Code and Chapter XV of the Nevada County Land Use and Development Code (Grading Ordinance).

DOT 1 Provide proof of access rights to Brunswick Road through the S.P.I. property. (Note that the "Concept Plan" as submitted with the rezoning application, Z93-004, depicts a redesigned interior road system for the S.P.I. property.)

DOT 2 The Road Improvement Fee in accordance with Nevada County Ordinance No. 1829 creating and establishing the authority for imposing and charging a road improvement fee within the unincorporated territory of Nevada County, will be levied for this development and will be based on the latest fee schedule adopted by the Board of Supervisors. (Note: Class of Use = 5; Zone = 5)

EH 4 Sewage disposal from any facility on the project site shall be in compliance with Nevada County Land Use and Development Code, Chapter X, and any subsequent revisions or amendments pertaining to the disposal of sewage in Nevada County.

MM 4.2.1 Prior to the construction of water treatment improvements to the treatment pond, the operator shall conduct a geotechnical evaluation of the pond and earthen dam structure. This evaluation should include (but not be limited to) the following:

Testing using the hollow stem-auger drilling method to bore test holes through the containment dam and into underlying materials.

A slope stability study of the containment structure based upon an evaluation of the drilled soil samples, their condition, and encountered ground water conditions within the earthen structure;

A determination of the dam's existing factor of safety under normal conditions and during a seismic event.

Recommendations for remedial measures, if necessary, to ensure the stability and integrity of the structure for the life of the project. Such measures, if found to be necessary, may include re-compaction, stabilization with additional engineered material, or excavation and caulking of the existing structure. Necessary remedial measures shall be completed concurrent with construction of treatment facilities.



MM 4.2.2 Commensurate with site grading and improvement activities, the following measures shall be taken to help prevent the loss of soil within the construction area around the shaft:

Regular spraying of water on exposed soils during the dry season from a hose or water truck to prevent the generation of dust.

Construct a brow ditch above (up-gradient) from the construction area to divert the overland flow of rainfall around construction activities.

Place straw bails below the construction site (down-gradient) to help prevent discharge of muddy runoff.

MM 4.5.1 Prior to approval of a building permit for on-site improvements, the operator shall obtain from NID any necessary permits, approvals, will-serve letters, or agreements required for the extension of treated water to areas of the site not currently served.

MM 4.5.2 Prior to the issuance of building permits for on-site structures, the operator shall submit detailed wastewater treatment plans to the County of Nevada Department of Environmental Health for review and approval. Prior to finalizing plans, operator shall work with the Department to determine site-specific soil/percolation conditions and optimum facility locations. All wastewater disposal permitting will be conducted through the Department of Environmental Health.

MM 4.5.3 The operator shall coordinate with PG&E staff to assess the technical requirements for utilizing existing primary lines. This process, although at the operator's discretion, should begin immediately considering that all electrical equipment must be in place prior to dewatering. Operator will incur the costs of connections and other equipment, such as on-site transformers.

MM 4.5.5 Concurrent with site preparation activities, all access and service roads shall be made available for use by all emergency response units, including fire suppression, medical aid, and law enforcement.

MM 4.5.6 Concurrent with site preparation activities, the operator shall provide signage that will make all project entries and on-site buildings easily identifiable by emergency service providers.

MM 4.5.9 Prior to approval of grading permits for site improvements, the operator shall designate an area of the project site to be used as a helispot (for use in medical emergencies only) for County review and approval. This area shall be cleared and void of all vegetation and loose gravel materials.

MM 4.6.1 Concurrent with final site plans for the project, the underground powder magazine shall be located in accordance with the American Table of Distance for Storage of Explosives. All use and transport of explosives will conform to applicable federal, State and local regulations, requirements, and specifications.

MM 4.6.2 Concurrent with project operations, all activities relative to site preparation, dewatering, shaft rehabilitation and mineral exploration shall be conducted in conformance with MSHA and CALOSHA regulations.



MM 4.6.4 Prior to commencement of dewatering, the operator shall establish a bond for the removal and disposal of the precipitate sludge.

NOTE: At the completion of the dewatering and exploration phase, the operator shall contract for this task if necessary. The material (if determined to be hazardous via MM 4.6.5) shall be removed and transported by a certified hazardous materials hauler and disposed of in a pre-approved facility licensed by the State.

MM 4.8.1 During site construction, the operator shall utilize the following dust control measures:

Water sprays to control dust during demolition, loading and unloading activities;

Suspend dust-producing activities during periods of high winds when dust control measures are unable to avoid visible dust plumes;

During the dry season (May-October) provide equipment and staffing for watering of unpaved haul roads, areas being graded and equipment/vehicle parking areas at least twice daily;

Daily removal of mud and dirt carried out from the site to adjacent paved roads;

Limit the speed of equipment and vehicles to 15 miles per hour while traveling on unpaved surfaces on the site; and

Earthen or other materials which may become entrained in ambient air will be sprayed or tarped as necessary to prevent fugitive emissions while in transport to or from the site.

MM 4.8.2 Concurrent with site construction operations, parking areas and access roads on-site shall be paved, graveled or treated with a dust palliative to control fugitive dust.

✓**MM 4.9.1** Unless weather conditions (which may result in an impact upon the public health or safety) require early morning or late night construction activities, the operator shall limit site surface construction activities to daytime hours, Monday through Friday (7 a.m. to 6 p.m.).

✓**MM 4.9.2** During initial site construction (and throughout the life of the project), the operator shall ensure that all equipment utilizing internal combustion engines shall be properly maintained and fitted with mufflers in accordance with the manufacturers recommendations.

MM 4.10.1 Prior to the construction of any outfall facilities within the stream banks of South Fork Wolf Creek, the operator shall obtain an Army Corps permit under Section 404 of the Clean Water Act as required. The operator will be required to submit all information required for such a permit, and shall be subject to all mitigation requirements set forth by the Corps.

MM 4.10.2 Prior to the construction of any outfall facilities within the stream banks of South Fork Wolf Creek, the operator shall obtain a Streambed Alteration Agreement under Sections 1600-1603 of the California Fish a and Game Code. The operator will be required to submit all information needed for such a permit, and shall be subject to all conditions (if any) set forth by the Department of Fish and Game (DFG).

MM 4.11.1 Concurrent with final site planning and site improvement activities, disturbance to the Union Hill Mine, prospects landscape area and narrow gauge railroad bed shall be avoided by design and left intact. If, by change in design or plan, it is determined that the project will affect one or more of these sites, a qualified historical archaeologist shall be required to reevaluate the sites(s), determine the effect(s), and suggest appropriate measures to mitigate the impacts identified.

MM 4.11.2 Should cultural or historic resources be uncovered in the course of grading operations, all work in the immediate vicinity of the uncovered material shall be halted until a qualified archaeologist can evaluate the finds and propose suitable recommendations for further action.

MM 4.11.3 Should human remains be discovered, work must stop immediately and the county coroner must be contacted, as required by State law. If the remains are Native American, then the coroner will notify the Native American Heritage Commission.

MM 4.11.4 Should historic mining artifacts be encountered and recovered concurrent with dewatering and exploration activities, such artifacts will undergo an evaluation to determine the material's significance. Such an evaluation will be conducted by a qualified archaeologist.

MM 4.12.1 Concurrent with project implementation, the operator will use the minimum number of light sources and minimum wattage necessary to provide a safe working environment and security at the site. All building permits shall note the locations of the exterior light sources.

MM 4.12.2 Concurrent with project implementation, the operator shall ensure that light sources will be mounted at the lowest feasible height in order to minimize the line of sight from surrounding properties.

MM 4.12.3 Concurrent with project implementation, the operator shall locate and shield light sources so as to minimize the spill of light into unwanted areas. The operator shall utilize cut-off lenses, baffles or other methods to control the focus of the light sources, specifically protecting the adjacent residential areas.

IV. OFF-SITE PREPARATION

MM 4.4.1 Prior to dewatering, the operator shall conduct an engineering study to quantify the ultimate volume capacities of downstream public and private drainage facilities. Once facility capacities are known and quantified, the operator shall:

Reduce or cease outflow into South Fork Wolf Creek during storm events to the point where the combined natural flow and discharge flow do not exceed 75% capacity of downstream drainage facilities (75% of capacity allows for a storm buffer, so that the creekshed can "bleed", or drain after discharge is throttled back). This option will require accurate monitoring of downstream volumes in order to make appropriate outflow adjustments. Monitoring of storm events will require measuring precipitation with a rain gauge to determine the amount of precipitation entering the drainage basin, monitoring water volume at several downstream locations, and visually monitoring for stream bank erosion along the length of the South Fork below the project site. Monitoring of volume will occur hourly once facility capacities reach 50%. The operator shall be responsible for parcel-specific erosion damage, if such damage is shown by the third-party consultant that mine discharge was responsible.

DOT 3 A copy of the comprehensive hydrological analysis (required in MM 4.4.1 above) shall be submitted to the Nevada County Department of Transportation upon completion of the study. A fee based on the latest adopted hourly rate will be charged for the actual time spent reviewing the analysis.

V. PRE-DEWATERING WATER SUPPLY

Monitoring Program, and Property Notices

MM 4.3.1 As mitigation for the potential well impacts, the project will require a monitoring program to establish baseline data on local wells. As the first step in this process, the operator (or consultant acceptable to the County) shall locate and collect survey data for any remaining wells within the identified study area which have not yet been logged and assigned a risk category. To identify such wells and their owners, the operator shall send a notification letter/questionnaire to the owner of each parcel within the study area to ensure 100% coverage. This notification letter/questionnaire will serve to accomplish the following:

a) To identify any new or previously unknown wells within the study area;

b) To inform property owners (with and without wells) as to the purpose of the data collection, and that the data may later be used to determine if a well is impacted;

c) To provide an informational update to well owners currently participating in the operator-sponsored well monitoring program;

d) To request permission from un-categorized well owners to allow the operator or County-approved professional to collect specific well data needed to determine the well's risk group;

e) To solicit well owner participation in the 12-month baseline monitoring program;

f) To inform well owners that specific well characteristics and monitoring data is very helpful for early identification of impacts .

MM 4.3.2 Based upon the authorizations received and additional well data collected, any new data shall be applied to the County's model of risk assessment and a risk category determined for that well. Once a risk category is determined and monitoring is allowed by a well owner, that well will be considered "in the monitoring program".

MM 4.3.3 At least 12 months prior to the commencement of dewatering, the operator shall be responsible for establishing and implementing a ground water monitoring program which shall be approved by the County targeted for all wells within the study area. This 12 month period will establish baseline well data for the four seasons of the year. The monitoring effort shall be conducted by a qualified professional acceptable to the County, and will consist of the following:

a) Baseline monitoring of all identified wells will occur monthly, and will consist of measuring the static water level of each well. The 12 month monitoring time line will begin only after the notification letter/questionnaire has been sent and personal contact with the owners of all the high and moderate risk wells has been made or attempted by the operator, as described below. After or during this initial contact with well owners, an initial monitoring date and regular monitoring schedule will be established. This first monitoring date will establish the beginning of the 12 month time line for baseline data collection. Well data previously collected by the operator may be considered for inclusion into the baseline data.

b) Prior to the first monitoring date described above, the operator shall conduct follow-up contact efforts, either in person or by telephone, to each well owner to further ensure that each owner has been given ample opportunity to participate in the monitoring program. Property owners shall be provided the results of all monitoring in a timely fashion with direction to review the results to insure that they coincide with the property owner's experience. In the event of any disagreement, the operator shall be required to retest the well.

c) In order assess the rate of owner participation, the operator shall report back to the County prior to this first monitoring date, to evaluate the effectiveness of the letter/questionnaire and follow-up contact efforts. A qualified professional acceptable to the County shall be consulted (if necessary) to determine that the rate of well owner participation is sufficient to establish baseline data.

d) A second follow-up contact effort shall be conducted for the remaining wells within the Western Study Group. This follow-up effort is intended to maximize participation in the monitoring program. Any new participants from the Western Study Group resulting from this follow-up effort shall be identified and shall begin participating in the program by the second monthly monitoring date. The rate of well owner participation will also be reported to a qualified professional acceptable to the County to determine that the rate of owner participation within the Western Study Group is sufficient for establishing baseline data.

e) A third follow-up contact effort shall be conducted for the remaining wells within the entire Study Area. This follow-up effort is intended to maximize total participation in the monitoring program. Any new participants within the Study Area resulting from this follow-up shall be identified and shall be included in the program by the third monthly monitoring date. The rate of well owner participation will also be reported to a qualified professional acceptable to the County to determine that the rate of participation within the remaining areas is sufficient for establishing baseline data.

Third Party Consultant

MM 4.3.8 Prior to the commencement of the dewatering process, a qualified third party consultant selected mutually by the County, the Community Liaison, and the operator, shall be retained (at operator's expense) to interpret the ground water monitoring results on behalf of all parties. If the three parties cannot agree on the selection of the third party consultant, the County, at its sole discretion, shall select the third party consultant. In any event, the operator shall fund a qualified third party consultant for the life of the project.

The duties of the third-party consultant are to independently interpret data, to conduct well impact analysis, to review the baseline stream conditions developed in the hydrological study required by MM 4.4.1 and DOT 3, to determine when an adverse impact has occurred, to determine size and locations of temporary systems, and to determine the difference between NID and electricity costs, as outlined in subsequent measures. Other related duties may be added as conditions and issues arise over the live of the project.

Design, Engineering, Annexation, and Contract

MM 4.3.4 Prior to the commencement of mine dewatering, the operator shall prepare complete engineering and design plans, as well as an installation schedule, all of which shall be submitted to and accepted by Nevada Irrigation District (NID) for water main trunk line infrastructure (including individual laterals for all High and Moderate risk wells) to all properties within the Study Area, with a permanent water source to be supplied through NID facilities. Such plans will be provided for all parcels.

PD 12 Prior to the commencement of mine dewatering, the operator shall conduct a "windshield" survey of all parcels within the Study Area to determine potential locations for temporary water storage tanks. For all parcels with High and Moderate risk wells and those parcels identified during this survey to pose siting difficulties, plans for the location and size of temporary water systems shall be completed and submitted to the County. Upon submittal, the third party consultant shall review those plans with those parcel owners to ensure the determined locations are agreeable. Any disagreement shall be settled by the third party consultant.



MM 4.3.5 Prior to commencement of dewatering, the operator shall complete the following:

a) Successfully annex any parcel within the Study Area with a well to NID which is currently outside of NID's district boundaries; or enter into a private water supply agreement with the owner of such a parcel until annexation is complete. The operator shall be responsible for any and all costs associated with NID annexation.

b) Enter into a conveyance agreement with NID to allow for infrastructure construction;

c) Enter into an agreement with an engineering company, acceptable to NID, to supervise and direct a contractor to install the water trunk lines and individual residence connections. The County shall be notified of the contractor selected; and

d) Confirm water capacity of NID systems and water availability per NID requirements as a component of any conveyance agreement.

e) Obtain and document all necessary permits and approvals, and identify all right-of-way, variances, easements, and agreements necessary to guarantee installation and delivery of water service from NID to any and all residences in the study area.

MM 4.3.6 Prior to dewatering, the operator shall post financial assurances in a form acceptable to and to be approved of by the Nevada County Counsel and consisting of either a performance and security bond, a letter of credit, cash, certificate of deposit with a recognized financial institution, or a combination thereof, in an amount that will cover 100% of the costs, as determined by a registered civil engineer and as accepted by the County, of providing for permanent water sources to all of the properties within the study area defined in the Final EIR. At least $100,000 of this amount shall be available for immediate use of the County to address emergency water supply needs should the operator not respond to such problems within the 24 hour period designated in MM 4.3.9. The financial security shall contain a provision (to be approved by County Counsel) that creates, in addition to the rights of the County, an independent right of action against the security deposit or bond in favor of any of the owners of the private property whose water supply may be deemed to be adversely impacted by the dewatering of the mine and obligates the operator, the surety/bonding company, or party or financial institution holding the cash deposit to honor any demand by such impacted private property owner, only in the event of non-action by the County for a period of 45 days in response to any such demand for County action by a private property owner. Non-action by the County as used herein is defined as: 1) The County failing to provide written notice to the operator demanding provision of a permanent water source to any affected property when required by conditions of approval; or 2) The County failing to continue for a successive period of 45 days to direct the operator to remedy the situation or to take initiate any claim against the financial assurances when no continuing progress is being made toward provision of a permanent water source until it is provided. The County shall maintain a log of all such contacts from which the 45 successive day period would run. Any independent right exercised hereunder would be in lieu of, rather than in addition to, any right of the County to make a claim against the financial assurance for the affected property concerned.

The amount of the financial security shall include all of the following:

a) Installation of all necessary infrastructure and any necessary improvement to the existing system water supply system, based upon the accepted final design plans (MM 4.3.4).

b) Estimated costs for the installation of the individual laterals to each residence within the study area.

c) Construction costs for the moderate to high risk groups (based upon prevailing wage rates) to perform all the work associated with a) and b) above. All other risk groups shall use construction costs at a non-prevailing wage rate.

d) Costs of providing individual meters to each residence within the study area.

e) NID system capacity charges for each residence.

f) Contingency for administrative costs.

Any lapse or failure to provide or maintain the security deposit or bonds shall result in the immediate suspension of the right to continue any of the use of the property as authorized under the use permit but shall not invalidate the operator's, security's or depository institution's obligation under the security provisions as required under this Mitigation Measure.

In the event that the operator is required to provide a permanent water supply to any of the private property owners under the terms of this use permit, in lieu of providing a permanent water supply the operator may, and subject to the separate and independent concurrence of the private property owner whose well or ground water is deemed adversely affected, purchase any of the affected private properties at a fair market value. Nothing in this permit shall de deemed to require the private property owners to sell their property.

PD 13 In the event the operator is required to provide a permanent water supply to any property or area pursuant to the conditions of this permit, and in the event the operator has successfully and satisfactorily provided the water source, the costs associated with that task may be subtracted from the total financial assurance amount required by MM 4.3.6 above.

Within 24 months, but not less than 6 months from completely dewatering the workings (below the 3,280 foot level), the financial assurance amount may be reviewed by the County (through a public hearing) for the purposes of reconsidering the required amount. If evidence can be provided supporting the fact that the risks have either been reduced or no longer exist, the percentage amount required by MM4.3.6 may be altered. The intent of this provision is to provide an opportunity to reconsider the necessary financial assurance amount. It may be possible to reduce the required amount at this hearing if it is demonstrated that the risks no longer warrant 100% of the total costs required by MM 4.3.6 above. In no case however, will the County consider releasing the entire requirement for the financial assurance.



PD 14 Prior to the commencement of the dewatering, this Use Permit shall be reviewed by the Nevada County Planning Department staff and the results of the review shall be reported to the Planning Commission and the Community Liaison. The purpose of this review will be to evaluate the operator's compliance with the permit conditions of approval and the success of the established performance standards.

VI. ON-GOING WATER SUPPLY

Monitoring Program

MM 4.3.7 Throughout the dewatering process, the operator shall continue the ground water monitoring program, and reports shall be provided to the County as follows:

Weekly intervals for wells within the high and moderate risk groups;

Twice-monthly intervals for wells in the low risk group; and

Monthly intervals for wells in the very low risk group.

Twelve months following the dewatering to the 3,280 level, monitoring will be required at quarterly intervals for the life of the project and until the mine refills (to the pre-project level) with water.

PD 15 Should an impact occur to any residence, the monitoring sequence for the adjacent homes (from the impacted well) shall increase to a weekly interval.

Third Party Consultant

MM 4.3.12 All well owners within the study area will be notified by the third-party consultant if other wells in the study area are showing an impact or change in yield. This condition will allow another chance for non-participating well owners to join the monitoring program, and will generally serve to inform the owner of the surrounding conditions of nearby properties.

MM 4.3.16 All parcels within the study area that are not yet developed shall be connected to the permanent water system at the operator's expense if the well owner can establish to the third party consultant and the County that mine dewatering has adversely affected the property's ability to support a well. The operator shall make notice to properties currently without wells that the burden remains with the well owner to determine the source of impact to any future well.

Temporary Water Source and Compensation

EH 5 In the event that any parcel within the study areas is adversely affected by the mine dewatering, potable water service shall be provided to the properties in accordance with MM 4.3.9 and MM 4.3.9A below. All water provided (on a temporary or permanent basis) for service to habitable structures shall be potable and from an approved source, in compliance with Nevada County Land Use and Development Code, Chapter VI.

MM 4.3.9 Should any well be impacted a temporary water source shall be immediately provided to the affected well owner prior to the installation of a permanent water source. The temporary water source shall be in place within and operational 24 hours after telephonic notification to the third party consultant. The operator shall be required to provide a phone number to all property owners were such notification can be accepted at all times.

Where feasible and subject to the permission of any affected property owners, any temporary water source may include the installation of a water tank on or near the affected property. In some instances, a single tank may serve more than one affected property

Any temporary water supply needed as a result of mine dewatering will be of sufficient capacity and pressure so that the daily lifestyles and average water usage of individual families will not be affected.

Any temporary water supply needed as a result of mine dewatering will be in place only as long as necessary to hook up the residence to the permanent water source.

Temporary water systems will be located, configured and sized by the third-party consultant with the concurrence of the property owner (identified within MM 4.3.8). Property owners must be immediately informed of the identified impact, and permission must be received prior to temporary system installation.

PD 16 In the event the temporary system cannot be installed within 24 hours (as outlined in the first paragraph of MM 4.3.9), a fine in the amount of $500.00 per day (paid weekly) shall be paid to the County starting 24 hours after telephonic notification up until such time that the temporary water system is installed and operating. The County shall deposit the fine(s) into a trust account and will have the choice of utilizing the fines for either permit monitoring costs or property owner(s) compensation.

MM 4.3.9A Should an impact occur in the form of an unexpected and sudden failure of a well, the affected resident shall be provided an immediate source of water supply for the period of time prior to temporary system installation (maximum 24 hours). This immediate supply may include water delivered by truck, bottled water, alternative lodgings (or cash equivalent), at the property owner's discretion, until the temporary supply is established. The costs of all immediate and temporary water supplies and storage facilities will remain the burden of the operator. Furthermore, all water carriers contracted by the operator shall be properly insured and licensed, and certified to carry and deliver potable water as required by law.

MM 4.3.9B Upon removal of the temporary system or installation of the permanent system, the operator shall either restore the property to its original state, including the repair of any damage or scarring caused by tank installation (and/or hook-up) or water truck delivery, or, the property owner will be financially compensated, at the property owner's discretion, for such damages. If financially compensated, a mutual agreement must be reached regarding the existing condition of the property prior to tank installation.

MM 4.3.13 Any well owner impacted by the project who requires NID service will be compensated by the project applicant for any additional costs for monthly water service. The operator shall compensate for the difference between current monthly rates (as determined by the third party consultant), and NID rates. This compensation shall continue for as long as the owner's well is impacted by the project.

MM 4.3.14 In cases where an affected property currently utilizes NID service and well water, the operator shall compensate for the cost of additional NID water usage caused by the unavailability of supplemental well water. Water usage will be determined by the third-party consultant based upon historic water usage patterns.

Permanent Water Source

MM 4.3.10 Installation of a permanent water source shall be initiated immediately after the well(s) have displayed a significant impact (partial or complete dewatering). Such a response will be determined as significant on a case by case basis by the third party consultant identified in MM 4.3.8. Temporary water systems shall be removed once permanent service is in place and operational. The costs associated with engineering and installing the permanent system will be the responsibility of the operator.

On the first day of impact identification to an individual residence, the operator shall coordinate with NID to finalize the service agreement application and pay the necessary hook-up fees for the affected residence. The process and payments will be completed in the quickest manner afforded by NID staff. The contractor hired to make the final connection shall be available, at the operator's expense, immediately upon NID's meter installation.

PD 17 In the event the operator becomes responsible for providing a permanent water source to any residence (as outlined in the above mitigation measure, MM 4.3.10), the operator shall be held to an acceptable time frame for completing the project. Said time frame will be mutually agreed upon by the County, the operator, the third party consultant, and the community liaison. Should the operator fail to complete the project within this time frame, a penalty ($1,000 per week) will be paid to the County up until such time as NID water service is hooked up and operational to all applicable residences. This payment is a penalty only and is not payment in lieu of a permanent water system or supply. The County shall deposit the fine(s) into a trust account and will have the choice of utilizing the fines for either permit monitoring costs or property owner(s) compensation.

VII. EXPLORATION PHASE

Miscellaneous Operations

EH 6 All waste generated shall be classified by Waste Determination Methods pursuant to the California Health and Safety Code, Chapter 6.5 and the California Code of Regulations, Title 22, Sections 66261.2, 66261.3, 66261.20, and all other applicable regulations.

PD 18 The hours of operation for the miscellaneous surface activities associated with this phase of the project shall be limited to 8:00 a.m. to 5:00 p.m., Monday through Friday. This does not apply to the following activities as long as such activities do not result in a violation of any existing County Standards, including but not restricted to, noise impacts:

a. activities associated with dewatering;
b. activities associated with water treatment;
c. indoor equipment maintenance (where the entire activities are enclosed);
d. activities associated with project management;
e. activities associated with the logging of rock core samples;
f. response to life- or property-threatening emergencies; and
g. underground activities.

However. it is recognized that the operator shall attempt to minimize incidental noise impacts during all operations.

MM 4.4.3 In the event that discharge quantities exceed those proposed within the Project Description (6 cfs), the operator shall notify the Regional Board, NCDEH, NID, and the Planning Department immediately to implement a remedial action program or other requirements as set forth by the Board.

MM 4.4.4 In the event that the quality of discharged water exceeds effluent limitations as set forth by Order 94-005 or the individual order for this project, the operator shall take action including but not limited to temporary cessation, reduction, or treatment of the discharge to acceptable levels. The operator shall also immediately notify the Regional Board, NCDEH, NID, and the Planning Department and develop/submit a remedial action program for Regional Board approval and implementation.

MM 4.5.4 Concurrent with project operation, the operator will adopt and adhere to the relevant fire prevention and hazardous material response methods as defined in the County's Fire Protection Ordinance, County Hazardous Material Ordinance and other established regulations regarding emergency response.

MM 4.6.3 Prior to any on-site disposal of timber wastes, the operator must demonstrate, through analytical testing of the timbers, that the wood is untreated and safe. This analysis (waste determination and classification) will be demonstrated to the satisfaction of the County of Nevada Department of Environmental Health. The operator shall be responsible for the hauling and disposal of the material at an appropriate disposal facility, if necessary, once a waste determination is made.

MM 4.7.1 For the duration of the project, haulage vehicles moving equipment and/or materials to and from the site will be restricted to Brunswick Road and that section of East Bennett Road between Brunswick and Millsite Road (E. Bennett entrance). The operator shall post signage on site exit points alerting drivers to designated haul routes.



MM 4.9.2 Throughout the life of the project, the operator shall ensure that all equipment utilizing internal combustion engines shall be properly maintained and fitted with mufflers in accordance with the manufacturers recommendations.

MM 4.11.2 Should cultural or historic resources be uncovered in the course of grading operations, all work in the immediate vicinity of the uncovered material shall be halted until a qualified archaeologist can evaluate the finds and propose suitable recommendations for further action.

MM 4.11.3 Should human remains be discovered, work must stop immediately and the county coroner must be contacted, as required by State law. If the remains are Native American, then the coroner will notify the Native American Heritage Commission.

MM 4.11.4 Should historic mining artifacts be encountered and recovered concurrent with dewatering and exploration activities, such artifacts will undergo an evaluation to determine the material's significance. Such an evaluation will be conducted by a qualified archaeologist.

MM 4.12.1 Concurrent with project implementation, the operator will use the minimum number of light sources and minimum wattage necessary to provide a safe working environment and security at the site.

Underground Operations

MM 4.3.7 Throughout the dewatering process, the operator shall continue the ground water monitoring program, and reports shall be provided to the County as follows:

Weekly intervals for wells within the high and moderate risk groups;

Twice-monthly intervals for wells in the low risk group; and

Monthly intervals for wells in the very low risk group.

Twelve months following the dewatering to the 3,280 level, monitoring will be required at quarterly intervals for the life of the project and until the mine refills with water.

MM 4.3.15 Should water be encountered within any core drill hole during the exploration process, that drill hole shall be immediately sealed or plugged upon removal of the core material to prevent the continued flow of water. The operator shall then notify the County and the Community Liaison of said encounter.

MM 4.4.7 During implementation of the shaft rehabilitation, timbers pressure-treated with substances which may leach toxins into future mine water shall not be used. The project applicant shall indicate the type and amount of replacement timber to the County prior to its use.

MM 4.5.7 Prior to the commencement of project activities which require the work of personnel below ground, the project applicant shall coordinate with other local mining operations and local fire protection districts to establish and maintain a cooperative mine rescue station, per the requirements of Title 8, Article 30 of the California Code of Regulations.

MM 4.5.8 Prior to the commencement project activities which require the work of personnel below ground, the operator shall contact the Mining and Tunneling Unit of the Division of Occupational Safety and Health or other certified entity to schedule and receive specialized safety and rescue training pursuant to the provisions of Title 8. The operator shall include and invite appropriate OHFPD and NCCFPD personnel in any scheduled training sessions. The Districts and the operator shall decide cooperatively upon the appropriate fire protection district personnel to be trained.

MM 4.6.1 Concurrent with final site plans for the project, the underground powder magazine shall be located in accordance with the American Table of Distance for Storage of Explosives. All use and transport of explosives will conform to applicable federal, State and local regulations, requirements, and specifications.

MM 4.6.2 Concurrent with project operations, all activities relative to site preparation, dewatering, shaft rehabilitation and mineral exploration shall be conducted in conformance with MSHA and CALOSHA regulations.

MM 4.9.3 Concurrent with dewatering operations, the operator shall retain a consultant acceptable to the County to conduct a noise level measurement survey with the project in normal operation to ensure compliance with Nevada County noise standards. If it is determined that project noise emissions are excessive, noise control devices shall be incorporated into the project design to reduce noise impacts to a less-than-significant level.

VIII. POST PROJECT

MM 4.6.5 At the completion of dewatering and exploration, the removal of waste sludge will be accomplished under proper permitting through the Department of Toxic Substances Control (DTSC), the Nevada County Department of Environmental Health (NCDEH) or other responsible agency. Prior to removal, the material will be analyzed (to the satisfaction of the RWQCB and NCDEH) to determine if it exhibits characteristics of hazardous waste. Based upon the analytical results and prior to off-site removal, the operator will explore the possibility of on-site (stope) disposal.

MM 4.6.6 Prior to pond sediment removal, the operator shall apply for and appropriate any necessary hazardous material, hazardous waste, or other permits or plans as required through the authority of the NCDEH.

PD 19 Upon completion of the project, the New Brunswick Shaft shall be safely secured to prevent further mine entry. If prior to project completion, a new application is sought to reopen the mine, this condition may be sustained until a determination is made on that application.



The applicant/operator is also responsible for compliance with applicable State Laws and County Ordinances including Article 32 of the Land Use and Development Code. In order to maintain a valid permit, Article 32 requires that you commence your project no later than January 25, 1998, and complete the dewatering and exploration and all post project activities (Section VIII of this Permit) no later than January 25, 2000. If you will not have commenced on-site construction activities (Section III of this Permit) prior to that starting date, you may apply for an extension of time **prior** to January 25, 1998. If you do not commence your project pursuant to Section L-II 32.1.A of the Nevada County Land Use Code by the above-referenced dates or do not request in writing an extension of time for those dates, the permit shall become null and void.

Pursuant to the requirements of the Land Use and Development Code, you are hereby notified that this permit is not valid until the expiration of ten (10) days from the date of the Planning Commission action. If the granting of the permit is appealed or submitted to the Board of Supervisors for final action, the effective date is stayed until final action by said Board. Any appeal must be submitted on the proper form which is available from the Clerk to the Board of Supervisors, Eric Rood Administrative Center, Nevada City, California 95959 (Deadline for appeal: February 5, 1996, at 5:00 p.m.).

You are advised not to commence any work on this permit until the ten-day period expires and to check with the Planning Department to determine if any appeal has been submitted.

Should you have any questions, please contact the project planner, Tod Herman, at (916) 265-1257.

NEVADA COUNTY PLANNING COMMISSION
Thomas Miller, Acting Ex-Officio Secretary

By: Deborah A. Keyser
DEBORAH A. KEYSER
Clerk to the Planning Commission

TM:dk

cc: Building Department
Department of Transportation
Environmental Health Department
Northern Sierra Air Quality Management District
Regional Water Quality Control Board (Central Valley)
Scott Galati, Esq.
BARC

NEVADA COUNTY PLANNING COMMISSION
STAFF REPORT

APPLICANT: Emperor Gold (U.S.) Corporation
SUPERVISORIAL DISTRICT: III
HEARING DATE: January 25, 1996
FILE #: U94-017

PROJECT: **U94-017.** Use permit application of ***Emperor Gold (U.S.) Corporation*** for the dewatering of the existing underground workings of the Idaho Maryland Gold Mine, and the subsequent underground exploration and sampling of those workings. Specifically, the dewatering activities will necessitate the clearing of the entire underground mine workings to a depth 3,280 feet below the shaft collar. Approximately 6 cfs (12 acre-feet/day) of water will be pumped into the existing 40 acre-foot pond on site. The estimated volume of water within the workings is 2,500 acre-feet, which will take approximately 7 months to dewater. Once the mine is dewatered, the pumping will be maintained (at an estimated average of 1.1 cfs to 2.7 cfs) in order to allow the exploration activities to continue. The retention pond water will be aerated to allow excess iron, manganese, and arsenic to precipitate. From that point, the water will either be discharged in the South Fork of Wolf Creek, or a portion may be diverted for domestic uses. The exploration activities will be conducted within the existing underground workings (the sampling will occur off-site). Diamond drilling and blasting will be conducted at or below 2,000 feet beneath the surface, and channel samples will be collected from selected areas. Bulk samples of gold-quartz mineralized rock will be shipped off-site in containers for further testing. Bulk sample size could range from 0.25 to 10 tons, with the maximum estimated tonnage of bulk samples at 70 tons. All waste rock from the exploration activities will be stored underground in the abandoned stopes. Most of the on-site exploration activities will be completed over a 20 month period. However, the New Brunswick shaft could be kept open for up to 5 years in order to continue economic evaluation. If the exploration and sampling results are encouraging to the operator, an additional permit may be sought to formally re-open the mine for production. No mining is proposed with this application.

LOCATION: The Idaho Maryland Mine project location is described in two formats: 1) where the surface activities (office, underground mine access, and the dewatering process) will be located; and 2) the extent of the underground mineral rights. Emperor Gold controls the surface rights to 117 acres of contiguous property located southwest of the intersection of Brunswick Road and East Bennett Road. This includes the 80 acre Bohemia Mill site. The Idaho Maryland subsurface mineral rights includes 2,750 contiguous acres which irregularly extends into portions of Sections 23, 24, 25, 26, and 36 of Township 16 North, Range 8 East, and Sections 19, 29, 30, and 31 of Township 16 North, Range 9 East.

Emperor Gold (U.S.) Corporation

FACTUAL DATA:

General Plan:	Industrial
Zoning:	"M1"
ZDM:	#53
Lot Size:	117 ac.
APN:	06-441-03, -04, -05, -29; 09-630-24, -27, -30, -31
Sup. Dist.:	III

SERVICES:

Water:	N.I.D.
Sewage:	Septic
Fire:	Ophir Hill Fire District
Schools:	Grass Valley/NUHS
Recreation:	Grass Valley

Prev. File #: SP77-20; MSP86-16; MSP87-5; Z93-04, EIS93-042, MI91-016; MSP90-02

RECOMMENDED ACTIONS:

Use Permit: Approve subject to staff's recommended Mitigation Measures and Conditions of Approval.

ATTACHMENTS:

1. Project Findings of Fact
2. Use Permit Mitigation Measures and Conditions of Approval
3. Mitigation Monitoring Program

BACKGROUND

The last association the Planning Commission had with this project was the certification of the Final EIR in October. That action was appealed to the Board of Supervisors who considered the appeal last December. After the close of the public hearing, the Board determined the Final EIR was adequate - with the addition of a proposed Water Supply Plan the applicant has prepared - and upheld your Commission's determination.

Outside of the public hearing process, there have been a number of meetings involving Planning Department staff, County Counsel, members of the Bohemia Area Residents Committee (BARC), and the applicant. The purpose of these meetings has been to negotiate the conditions of approval (and the mitigation measures) through agreement with various parties. In a few cases our recommendation does not represent a consensus since there wasn't agreement on some issues. Staff will highlight those in our presentation.

PROJECT PROPOSAL

The Planning Commission will be familiar with the proposed project through its review of the specific project description section within the environmental impact report (Section 2.0 of the Draft EIR, and as revised in Section 5 - 2.0 of the Final EIR).

Essentially, the project will remove the water from the underground workings of the Idaho Maryland Mine. During this process of dewatering, the main shaft (New Brunswick Shaft) will be rehabilitated as necessary. The applicants propose to perform some exploration drilling and sampling to determine the extent of the resources. The sampling activities will occur off site at some other location. When the mine is empty, the condition of the workings will also be evaluated. The results of these activities will determine whether it will be feasible to reopen the mine at some future date, under a new use permit.

STAFF COMMENT / USE PERMIT

The last step in this process is to consider the use permit for the project. Throughout the various hearings on the EIR, a few issues have been deferred to this point. Also, ingrained within the use permit is the Remedial Water Supply Plan, something identified in the EIR as critical to an approval of this project. This is the program for insuring that no home will be left without water as a result of this project. And, coupled with the water supply plan is the need for a financial assurance to guarantee the plan will be carried out if ever needed. Last, but not least, the permit process also involves the adoption of a Mitigation Monitoring Program. Each of these items will be discussed below.

The Planning Commission should take note that the conditions of approval for this use permit are divided into eight separate categories - each representing an identifiable step in the project. These categories (or steps) are as follows: General (applicable throughout the project), Subsequent Permit(s) Acquisition, On-Site Preparation, Off-Site Preparation, Pre-Dewatering Water Supply, On-Going Water Supply, Exploration Phase (on-going project), and Post Project. To make the conditions fit neatly into these categories, the numbering format has been modified somewhat. This will make clear which conditions (and mitigation measures) are applicable to each step in the project.

Pre-project Infrastructure

Much of the focus on this project has been aimed at the potential impacts associated with the dewatering. That "potential" has resulted in a series of debates as to whether the risk warrants the installation of some of the infrastructure before the dewatering activities begin. On one side of the debate, having the main infrastructure in place (only for the high and moderate risk wells) before the dewatering would reduce the overall time to bring permanent water to those impacted residences. On the other side, everyone will be covered by the financial assurance (adequate to cover all the costs to hook homes up to permanent water) anyway and if the impact never occurs, the money spent on the infrastructure would be unnecessarily spent.

This critical debate has not yet been decided by the County, although it has been raised many times throughout the EIR process (including the appeal). The County's position has been that this will be an issue for the use permit to decide. In anticipation of this opportunity, staff has attempted to negotiate a resolution to this issue.

The applicant had shown a willingness to consider the partial installation of the infrastructure (defined as the main trunk line down E. Bennett Road serving those parcels in the high and



moderate risk groups) on the condition that a substantial "portion" of the financial assurance be released after the risk has been "substantially diminished" (defined as approximately six to twelve months after the entire workings have been dewatered). Although there are merits to this argument, staff has chosen to err on the conservative side and - at this time - recommend not to relinquish the financial assurances based, solely on the theory that all of the impacts will be known soon after the mine working have been emptied.

Because of this conservative approach, staff also cannot support the requirement for the pre-dewatering infrastructure installation. Staff believes that having an appropriate financial assurance in place (covering those costs associated with the entire study area infrastructure installation) will ensure that if any problems do occur, a solution will be available. Granted, it may not be as quick - but it would happen. This also avoids having to second-guess the definition of the terms such like "portion" and "substantially diminished."

Remedial Water Supply Plan

Assuming the use permit is approved as recommended, the Remedial Water Supply Plan will be as follows:

Prior to the commencement of mine dewatering, the complete design of the water system infrastructure, easements, and individual hook-ups needed for all homes within the established study area will be completed by the operator. Those plans will then be checked and accepted by the County and NID. Additionally, the operator will secure a list of contractors who will be ready and able to carry out the installation project.

A complete monitoring program will [again] be established [or added to]. All parcels within the study area will be notified of the approved project and given additional opportunities to sign up for the program.

The County will hire a qualified independent Consultant to review/coordinate the monitoring program and evaluate the results of the monitoring. Additionally, a variety of other assignments related to water issues will be assigned to this person.

The community will establish a contact person (or liaison) who will serve both the surrounding community and the mine operator. This liaison will help to transfer information between the operation and the community.

A financial assurance will be provided to the County to cover those cost associated with the installation of the permanent water system.

The operator will secure temporary systems and keep them on site and available for an instant response to any ground water loss. Additionally, the particulars associated with the location of these systems will be established.



All of these items will be in place before any dewatering begins. When the dewatering begins, the ground water monitoring will be closely watched by the County's consultant. Then, should a well ever become impacted, the temporary system(s) can be installed and the plans for bringing in permanent water will be in place ready to give to a construction company. Additional incentives (read: fines) have also been incorporated into the recommended conditions to ensure that the operator quickly responds.

Limits to the Plan

In addition to how this Plan works, a question has been raised as to who is actually covered by this Plan. The question has come from a few people who live beyond the defined study area. In response to this question, staff's interpretation of General Plan Policy 17.12 is that the Remedial Water Supply Plan should cover only those who in the "expert's opinion" may be impacted. In this case, the County has hired a qualified consultant (Willdan/PMC and Sierra Pacific Groundwater Consultants) to evaluate the ground water issue.

The first step of the EIR's ground water study actually addresses this question by defining the study area. The area was defined (in Section 4.3) using both the surface and subsurface features. These include the boundaries of the local drainage basin (surface features) and the location of those fault structures containing dense, impermeable barriers (subsurface features). Using that study, the County can make a qualified decision based on factual evidence. Your Commission may recall that within this study area, all the known wells (101) were placed into one of four risk groups ranging from High to Very Low. And even though "Very Low" has been determined to be highly unlikely to be impacted, those wells are still covered under this proposal. Staff would not recommend going beyond those established boundaries at this time.

Financial Guarantee of Permanent Water Supply

As stated above, staff is recommending that a financial assurance be in place to cover 100% of the costs for providing permanent water to all parcels within the study area. Mitigation Measure 4.3.6 has been modified from the version in the Final EIR to provide the structure for this financial assurance.

Staff has, however, recommended (through Condition PD 13) two opportunities for this financial assurance to be reduced. The first would be if the operator ever has to provide permanent water to any area, and only after the water has been provided, those costs associated with that water project may be returned to the operator from the original financial assurance amount. Obviously, the theory being that if the area now has water, there is no longer a need for the County to hold those costs. The second opportunity is not an absolute either. Staff is recommending reevaluation of the financial assurance amount 24 months after the entire workings have been dewatered. Going back to the EIR's ground water hydrology study, the impacts (if any) should (in theory) be realized sometime after the workings have been dewatered below the fractured rock zone (approximately 330 feet). Again, as a safety measure, two years is being recommended as a conservative time to allow for those impacts to occur. If at that time those



impacts have not yet been realized, then it may be a safe bet to assume the impacts might not ever occur. Assuming that can later be proved, staff is recommending a public hearing be held in order to discuss a partial release of the financial assurance.

Mitigation Monitoring Program

Associated with the use permit is the Mitigation Monitoring Program, established through the EIR. The purpose of this monitoring program is to identify the timing and responsibility of each mitigation measure. Attachment #2 is a draft Mitigation Monitoring Program prepared by Willdan Associates/PMC. You will note that the measures listed in the monitoring program resemble those found in the Final EIR. The many cases, the text of the mitigation measures have been clarified - resulting in changes to the wording from those found in the Final EIR. But, in those cases, the measures remain consistent with the purpose of the original mitigation, and with who and when will be responsible for the measure. Thus, the basic program still works and can be used as a matrix for the purposes of the monitoring program.

Other Issues

There is general agreement on the mitigation needed to deal with issues other than water, including light and noise. Again, staff will highlight those in our presentation.

ACTIONS FOR CONSIDERATION

Staff recommends the Planning Commission take the following actions:

I. Prior to taking action on the project, review and consider the previously certified Final EIR and determine that the project is consistent with the project description.

II. Pursuant to Section 15092 of the CEQA Guidelines, review and consider making the **Environmental Findings** for this project found in Attachment #1 of this staff report.

III. Approve the Use Permit (U94-017) subject to the Mitigation Measures and Conditions of Approval found in Attachment #2 of this staff report.

IV. Also based upon the certification of the Final EIR, and the approval of the Use Permit, adopt the Mitigation Monitoring Program found in Attachment #3 for this project complete with any changes to the Mitigation Measures resulting from the public hearing.

V. Pursuant to Section L-II 31.5 of the Land Use and Development Code, upon approval of U94-017, make the **Use Permit Findings** found in Attachment #1 of this staff report.

Bruce Abelli-Amen, PG, CHg

BASELINE ENVIRONMENTAL CONSULTING

Principal, Certified Hydrogeologist



Areas of Expertise

Project management, CEQA, hydrology and water quality, geology, hazardous materials management

Education

M.S., Environmental Systems, Applied Geology, Humboldt State University, 1988

B.A., Geological Sciences, University of California, Santa Barbara

Registrations/Certifications

Certified Hydrogeologist No. 96, 1995

Professional Geologist No. 5593, 1993

Years of Experience

31 Years

Bruce Abelli-Amen, owner and Principal of Baseline, is a Certified Hydrogeologist, Professional Geologist, and a CEQA project manager. He also manages hazardous materials investigations. He has experience in all phases of CEQA and NEPA projects, including a wide range of project types from small focused projects to managing large multi-disciplinary teams of specialists in the preparation of Expanded Initial Studies, Mitigated Negative Declarations, and Environmental Impact Reports and Statements. He has managed CEQA projects for landfill decommissioning, new wastewater treatment plants, mining projects, resource management plans, mixed-use developments, and major water and sewer conveyance infrastructure projects (including tunnels and pipelines).

Bruce has managed numerous on-call environmental services contracts for municipal agencies, including SF Public Works, SF Public Utilities Commission (SFPUC), Port of Oakland, Port of SF, Yolo County, City of Milpitas, Town of Windsor, and others.

He also has experience with construction management, mitigation monitoring, and permitting, which provides useful insights into the development of feasible and practical bid specifications and mitigation measures for identified significant CEQA impacts.

He has extensive experience managing hazardous materials investigations and has designed and implemented groundwater aquifer tests and remediation systems for the cleanup of contaminated shallow groundwater aquifers. He has managed numerous underground storage tank (UST) investigations and is familiar with local, state, and federal regulatory requirements for such investigations. He has supervised soil excavation, large scale bioremediation projects, and backfill operations.

Project Experience

Various On-Call Environmental Consulting Contracts, Contract and Project Manager for on-call contracts with City of Berkeley, San Francisco Public utilities Commission, SF Public Works, City of Milpitas and Sonoma County Water Agency.

SFPUC Channel Tunnel EIR, Project Manager for preparation of comprehensive CEQA documents (detailed initial Study and focused EIR).

KC BBQ Meat Smoker Emission Evaluation, Project Manager in assisting City of Berkeley Attorney's Office in evaluation of air quality impacts associated with wood smoke emissions.

Foster City Levee Improvement Project EIR, Technical Project Manager for preparation of EIR. Prepared and/or provided review for technical sections including hydrology, geology, hazardous materials, noise, air quality, GHG, and alternatives.

City Place EIR, Santa Clara, Project Manager for Geology, Groundwater Hydrology and Water Quality, and Hazardous Materials sections.

Apple Campus EIR, Cupertino, Project Manager for Geology, Hazards, and Hydrology EIR sections.

Patrick Sutton, P.E.

BASELINE ENVIRONMENTAL CONSULTING

Senior Environmental Engineer



Areas of Expertise

Air Quality, GHGs, Hazardous Materials, Geology, and Hydrology

Education

M.S., Civil and Environmental Engineering, University of California – Davis

B.S., Environmental Science, Dickinson College

Registration

Professional Engineer No. 13609 (RI)

Years of Experience

17 Years

Patrick Sutton is an environmental engineer who specializes in the assessment of hazardous materials released into the environment. Mr. Sutton prepares technical reports in support of environmental review, such as Phase I/II Environmental Site Investigations, Air Quality Reports, Greenhouse Gas (GHG) Reduction Plans, and Health Risk Assessments. He has prepared numerous CEQA/NEPA evaluations for air quality, GHGs, geology, hazardous materials, and water quality related to residential, commercial, and industrial projects, as well as large infrastructure developments. His proficiency in a wide range of modeling software (AERMOD, CalEEMod, RCEM, CT-EMFAC) as well as relational databases, GIS, and graphics design allows him to thoroughly and efficiently assess and mitigate environmental concerns.

For mixed-use development projects, Mr. Sutton has prepared health risk assessments for sensitive receptors exposed to toxic air contaminants based on air dispersion modeling. He has also prepared GHG Reduction Plans to demonstrate how projects can comply with State and/or local GHG reduction goals. For large highway infrastructure improvement projects, Mr. Sutton has prepared air quality and hazardous materials technical reports in accordance with Caltrans requirements. Air quality assessments include the evaluation of criteria air pollutants, mobile source air toxics, and GHG emissions to support environmental review of the project under CEQA/NEPA and to determine conformity with the State Implementation Plan. Hazardous materials investigations include sampling and statistically analysis of aerially-deposited lead adjacent to highway corridors.

Project Experience

Oakland Downtown Specific Plan EIR. Prepared a program- and project-level Air Quality and GHG Emissions analysis. Developed a mitigation measure with performance standards to ensure GHG emissions from future projects comply with the Citywide 2030 GHG reduction target.

I-680 Express Lanes from SR 84 to Alcosta Boulevard Project. Prepared Initial Site Assessment and Preliminary Site Investigation to evaluate contaminants of potential concern in soil and groundwater. Prepared Air Quality Report to determine the project's conformity to federal air quality regulations and to support environmental review of the project under CEQA and NEPA.

Altamont Corridor Expressway (ACE/Forward) Project EIR/EIS. Prepared a program- and project-level Hazardous Materials analysis for over 120 miles of railroad corridor from San Jose to Merced. Hazardous materials concerns, such as release sites, petroleum pipelines, agricultural pesticides, and nearby school sites were evaluated in GIS.

Stonegate Residential Subdivision EIR. Prepared a project-level Hydrology and Water Quality analysis for a residential development located within the 100-year floodplain. The proposed project included modifications to existing levees and flood channels.

BART Silicon Valley Extension Project. Prepared Initial Site Assessment and Hazardous Materials EIS/EIR section for extending 6 miles of proposed BART service through the Cities of San Jose and Santa Clara.

Exhibit B

9 March 2022

Laurel Impett
Shute, Mihaly & Weinberger LLP
396 Hayes Street
San Francisco, CA 94102
impett@smwlaw.com

Subject: **Idaho-Maryland Mine Project, Nevada County, CA**
Acoustical Comments on Draft Environmental Impact Report
Salter Project 22-0039

Dear Laurel:

As requested, we reviewed Chapter 4.10 Noise and Vibration of the Draft Environmental Impact Report (DEIR) for the proposed mine project in Nevada County, CA. We also reviewed information in Appendices L (Noise and Vibration Study) and M (Blasting Report). This letter summarizes our review and comments.

EXECUTIVE SUMMARY

In our opinion, the DEIR does not sufficiently assess or mitigate potential noise impacts and, therefore, fails to protect the community from excessive noise. Our comments focus on the following issues:

Grp 21-129

1. In general, nighttime noise is not adequately addressed in the DEIR. It outright dismisses the potential for noise impacts due to sleep disturbance and inappropriately excludes this consideration from the analysis. The combination of nighttime industrial activities amongst a community that currently enjoys low ambient noise levels represents a significant risk for project noise to impact the community, annoy residents, and cause sleep disturbance. Additional details of likely impacts are outlined below.
2. Engineered fill operational noise is underestimated in Impact 4.10-2. This 5 to 6-year long activity could generate noise levels at least 10 to 18 dB higher than predicted in the DEIR. This is a significant deficiency in the impact analysis. As such, the project's noise levels could be 20 to 35 dB louder than current median/background ambient noise levels, causing a severe impact. In several cases, the DEIR analysis fails to address sensitive receptors located farther away from existing roadways that currently have a lower background noise.

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3. The DEIR fails to adequately analyze the project's impact from mineral processing operations because assumptions are made regarding conditions or constructions that would constitute notable "upgrades" to standard measures. However, these upgrades are not disclosed as being required to meet the County standards and reduce noise to a less than significant level. Without these upgraded measures, mineral processing noise could exceed the County noise standards. As currently written, the DEIR appears to "promise" an insignificant noise impact, but fails to include the controls, assurances, and appropriate mitigation to ensure this claim is actually achieved.
4. Blasting vibration impact is not adequately analyzed (see Impact 4.10-4). In our opinion, potentially subjecting residents to "strongly perceptible" and borderline "unpleasant" vibration on a regular basis for the rest of their lives should be considered a significant impact. In particular, the DEIR fails to include crucial guidance from the U.S. OSMRE Blasting Guidance Manual restricting blasting vibration during evening and nighttime hours. If blasting must be allowed at these sensitive times, the DEIR must also incorporate adequate mitigation with a notably stricter limit at all sensitive receptors.
5. The DEIR includes a claim anticipating a 20 dB reduction of blasting noise at the portal compared to the reference Sutter Gold mine project. However, this 20 dB claim is unsubstantiated. If this claim is in error, the community could be subject to excessive noise levels, up to 75 dBA, during blasting. This would be concerning during daytime hours, but a particularly egregious condition at night.

COMMENTS

#1 – Nighttime Noise Impact is Not Adequately Addressed

Grp 21-130

The DEIR states that "an evaluation of sleep disturbance is not warranted for this project." (DEIR, page 4.10-23, paragraph 2) However, the conditions of this project and the community certainly warrant a detailed analysis of nighttime noise and the potential for sleep disturbance. This project includes many operations that will occur at nighttime hours, including dewatering, indoor facility construction, truck loading/unloading and off-site hauling (from 6 to 7 am), mineralization processing above ground, and water treatment (DEIR, page 3-37). In addition, many of the nearby sensitive receptors are located away from notable sources of ambient noise, and thereby currently enjoy very low nighttime background noise levels between 30 dBA and 45 dBA (DEIR, Appendix L, Appendix B-1 within). The combination of nighttime industrial activities and low background/ambient noise levels represents a potentially significant risk and an undisclosed impact to the community, as it could annoy residents and cause sleep disturbance. A revised EIR should identify appropriate mitigation, including limitations on nighttime noise.

#2 – Engineered Fill Operation Noise is Underestimated (Impact 4.10-2)

Grp 21-131

Placement and compaction of engineered fill operations are expected to occur for at least 5 to 6 years at the two industrial sites. The DEIR assesses noise from bulldozer, grader, excavator, front-end loader, and compactor use. It assumed that noise from such activities would generate levels up to 85 dBA at a

distance of 50 feet from each source. It assumed this level for both average (Leq)[1] and maximum (Lmax)[7] levels. The analysis was performed using a SoundPlan computer noise model to estimate sound propagation away from the sites.

2A – The Brunswick Site

The DEIR lists predicted noise levels around the Brunswick Site in DEIR Table 4.10-14, compares the results to proposed daytime noise criteria and concludes that operational noise from engineered fill operations in this area would be less than significant. However, Salter performed basic calculations of one 85 dBA noise source (equal to the DEIR assumption that a machine would generate 85 dBA at a distance of 50 feet). We determined that the DEIR has significantly underestimated noise levels at the nearest receptors. We provide this comparison in Table 1 below.

Table 1. Comparison of DEIR predicted noise levels to noise levels from one construction noise source.

Receptor	Receptor Distance	DEIR Predicted Noise Levels (L_{eq} & L_{max}, Table 4.10-14)	Calculated Noise Level (dBA) from one 85 dBA source at the Receptor Distance	Delta (dB)
26	300	51	69	+18
24	350	50	68	+17
23	400	55	67	+11
22	500	52	65	+12
28	500	47	65	+17
27	600	46	63	+16
25	650	50	63	+11
21	700	47	62	+13
20	1000	46	59	+10
29	1200	40	57	+14
19	1300	40	57	+13

Comparing the levels listed above, it appears that the DEIR predictions are substantially underestimating the level of engineered fill operational noise that the surrounding community is expected to experience. Based on our review of the DEIR methodology, analysis descriptions, and commentary, we find no apparent reason for the discrepancy. For example, we would not expect noise to be further reduced at these nearest receptors from "shielding" by the terrain as they are located on the surrounding hillsides which overlook the Brunswick industrial area. In addition, noise levels could be even higher since multiple

1 L_{eq} – The equivalent steady state A-weighted sound level that, in a stated period of time, would contain the same acoustic energy as the time-varying sound level during the same period.

7 L_{max} (Maximum Sound Level) – The maximum sound level for a specified measurement period of time as defined in ASTM E1686.

machines and activities are expected to operate simultaneously at the site. In our professional opinion, the DEIR analysis needs to be revised.

Grp 21-132

By underestimating the noise levels at sensitive receptors, the DEIR fails to identify and mitigate a significant noise impact. We compared the calculated noise levels from a single 85 dBA noise source to the DEIR criteria. Per Table 1 above, noise from a single 85 dBA source is expected to be between 57 dBA and 69 dBA at the 11 nearest receptors to the Brunswick Site (i.e., nearest the engineered fill area). The Daytime Noise Criteria for these receptors are between 53 dBA and 65 dBA (per DEIR Table 4.10-14). Many of the calculated noise levels from a single 85 dBA source exceed these criteria, by up to 14 dB. This is a significant increase over the criteria established in the DEIR. Therefore, we expect that an updated analysis would identify a significant impact and therefore require mitigation of the engineering fill operations that are expected to last for many years.

Grp 21-133

Furthermore, we compared the calculated noise levels from a single 85 dBA noise source to the ambient noise levels in the surrounding areas, particularly areas with lower background noise levels. The DEIR fails to pay special attention to these sensitive receptors. Away from the major roadway, ambient noise levels were measured to be approximately as follows (see DEIR Appendix L – Appendix B-6 for Monitoring Sites 1 through 4):

- L_{eq}: 60 dBA to 65 dBA (the hourly average noise level, includes intermittent noise)
- L_{50}: 40 dBA to 50 dBA (the median noise level; 50% of the hour noise is below this level)
- L_{90}: 35 dBA to 45 dBA (the "background" noise level)

The L_{eq} metric is the hourly average noise levels and includes the effect of intermittent noise, which appears to be the cause for the higher L_{eq} levels. However, the median and "background" ambient noise levels indicate that much of the time people experience notably lower noise levels (e.g., between those intermittent events). The median/L_{50} noise levels indicate that people in the area enjoy quieter noise levels below 40 dBA to 50 dBA 50% of the time (specifically, 50% of each hour). Therefore, it is appropriate to review expected engineered fill operational noise levels in light of these lower ambient noise levels that people actually experience.

As stated above, noise from a single 85 dBA source is expected to be between 57 dBA and 69 dBA. Therefore, engineered fill operational noise could be approximately 20 to 30 dB louder than the median ambient noise levels of 40 to 50 dBA. Project noise could be up to 25 to 35 dB above "background" (L_{90}) ambient noise levels of 35 to 45 dBA. Based on our experience with community noise and commonly used thresholds of significance (e.g., a 5 dB increase), 20 to 35 dB increases in noise would be a severe noise impact. These levels would be perceived as more than 4 times as loud as the median ambient noise levels and would be expected to result in an aggressive community response and complaints. This should be taken into consideration in the DEIR analysis and further mitigation applied to reduce the expected noise impact on the nearby community from engineered fill operations.

2B – The Centennial Site

Our review of the DEIR's analysis of engineered fill operations at the Centennial Site is similar to our findings for the Brunswick Site, see a summary in Table 2 below. Again, the DEIR appears to underestimate noise from these operations at the nearest sensitive receivers. In our opinion, the DEIR analysis is inadequate and needs to be revised.

Table 2. Comparison of DEIR predicted noise levels to noise levels from one construction noise source.

Grp 21-134

Receptor	Receptor Distance	DEIR Predicted Noise Levels (L_{eq} / L_{max}, Table 4.10-12)	Calculated Noise Level (dBA) from one 85 dBA source at the Receptor Distance	Delta over DEIR L_{eq} (dB)
1	500	54 / 61	64	+10
2	600	50 / 60	62	+12

In addition, it is worthy to note that the area with the greatest planned quantity of fill and elevation change at the Centennial Site is nearest these sensitive receptors (#1 and #2) to the north. We would expect there to be many times where activity, and noise, is focused in the northern portion of the site, close to sensitive receptors.

#3 – The DEIR Underestimates the Project's Potential Noise Impact from Mining Operations (Impact 4.10-3)

Grp 21-135

In the analysis of several mining operational components, the DEIR assumes the implementation of several notable "upgrades" to standard measures. The DEIR concludes that mining operational noise would be below County standards and the project's impact would be less than significant. The DEIR provides no evidence that these upgrades will be implemented in the design and construction of the mining facility. If the facility were to be constructed without these measures, the project's noise would be higher than the DEIR discloses, and the project's impacts could be significant. The DEIR should be revised to analyze the project's noise impacts with and without these "upgrades." It is also important to note that if this analysis were not to occur until after the project is approved and if noise was found to exceed the criteria, it would be challenging, time consuming, and possibly infeasible to add these measures after the fact. Meanwhile, the community would be impacted by excessive noise.

Examples of such assumed upgrades are listed below:

- The metal building enclosing noise generating activities, such as mineral processing, is quoted in the DEIR as having sound transmission loss ratings ranging from "31 dB at 125 Hz to 75 dB at 4,000 Hz. In addition, the metal building would have double doors (i.e., airlock) to prevent sound escaping when one set of exterior doors are open" (DEIR, page 4.10-38, paragraph 4). In the Noise and Vibration Study (DEIR, Appendix L), information on proposed metal building construction is provided (DEIR, Appendix L, Appendix page D-3 within). The construction options include systems with STC ratings between STC 21 and STC 54. The sound ratings quoted in the DEIR indicate that the analysis assumes

that the STC 54 construction will be used. This is the highest rating achievable by the example metal building system. The DEIR must disclose whether this highly sound isolating construction is needed to reduce noise from mineral processing to meet the County's noise standards.

- The ventilation fan(s) required for the mine will be very large industrial units. The DEIR assumes "the effects of a silencer providing comparable sound attenuation as the other industrial buildings proposed at the site" (DEIR, page 4.10-41, paragraph 1). The DEIR analysis implies that this silencer will provide more than 40 decibels of fan noise reduction. This would require the selection of a high-performance industrial fan silencer. The DEIR must disclose whether this high-performance silencer is needed to reduce ventilation fan noise to meet the County's noise standards.

Grp 21-136

- The project's water treatment noise attenuation assumptions are vague and unsubstantiated.
  - The primary noise source associated with the water treatment plant would be the pumps and the turbine aerator (DEIR, page 4.10-42). The DEIR quotes the Auburn California Wastewater Treatment Plant noise level of 50 dBA at a distance of 500 feet as the basis for its analysis (DEIR, page 4.10-43, paragraph 1). To generate 50 dBA at 500 feet, a single source of noise would also be generating a noise level of 90 dBA at a distance of 5 feet. However, the DEIR analysis of water treatment equipment noise is based on a noise level of 75 dBA inside the treatment plant (DEIR Appendix L, page 55, paragraph 5). It seems that either the assumed noise level of 75 dBA inside the plant is an error or the analysis is based on additional attenuating measures that are not disclosed in the DEIR. Therefore, either the DIER analysis should be revised to account for accurate noise levels or The DEIR must disclose whether attenuation of pumps and turbine aerators is needed to reduce the noise to meet the County's noise standards.

Grp 21-137

  - The DEIR also states that the water treatment equipment "will be located inside a building providing a high degree of sound reduction" (DEIR Appendix L, page 55, paragraph 5). The DEIR must disclose whether this high-performance building enclosure is needed to reduce water treatment equipment noise to meet the County's noise standards.

- The DEIR appears to rely on specific assumptions regarding backup generators, including engine exhaust mufflers, sound isolating building construction, and radiator fan silencers, but the document does not identify the specific nature of this equipment. Nor does it identify the expected noise attenuation of each piece of equipment.

Grp 21-138

- The DEIR does not provide the required information about the noise reducing enclosure for the mine compressor.

Grp 21-139

- The DEIR does not provide the required information about acoustical performance of the sound-isolating headframe building construction (to reduce "shaft skipping" noise).

Grp 21-140

As currently written, the DEIR appears to "promise" a less-than-significant noise impact, but omits the controls, assurances, and appropriate mitigation to ensure this claim is actually achieved. Without requiring the aforementioned noise reducing measures, or assumed "upgrades," the DEIR fails to adequately protect the community from the potential for excessive noise.

Grp 21-141

#4 – Blasting Vibration Impact is Not Adequately Addressed (Impact 4.10-4)

The DEIR and associated Blasting Report (DEIR, Appendix M) include lengthy discussions and analyses regarding blasting vibration purporting to show that vibration would be barely perceptible, as summarized below:

Grp 21-142

> "Regular drift round blasting would be undetectable below 900 feet depth or distance, and would be barely perceivable at 500 feet depth. The largest longhole blasts, occurring once every three to four days on average, would be undetectable below 1,400 feet depth or distance from a receiver. The maximum ground vibration that the mine would produce to nearby receptors is 0.23 in/s PPV, which considers a rare scenario where a longhole blast occurs directly underneath a receptor at 500 feet depth. The maximum ground vibration of 0.23 in/s PPV is comparable to the vibration level from running a garbage disposal in a house..." (DEIR, page 4.10-58, paragraph 3)

In response, the DEIR incorporates a blasting vibration limit of 0.4 in/sec PPV with no restrictions regarding time of day. In our opinion, the DEIR does not adequately address blasting vibration and understates the project's potential vibration impact for reasons provided below.

4A – Comments on the Blasting Vibration Limit

Grp 21-143

The 0.4 in/sec PPV vibration limit from the DEIR appears to be based primarily on a vibration study performed following an underground nuclear blast in Mississippi in 1964. The first concern is that human responses to this one blast may not be equal to the community response to ongoing perceptible and potentially unpleasant vibration over the 80-year lifespan of this project. Nevertheless, the DEIR references this study as it is described in Bulletin 656 titled "Blasting Vibrations and Their Effects on Structures" published by the U.S. Bureau of Mines (USBM) in 1971. The claim extracted from the USBM document is that "less than 8% of people would complain about blasting activities if the peak particle velocity (PPV) was below 0.4 in/sec." (DIER, Appendix M, page 7, paragraph 3). However, the original chart this is drawn from provides additional context. Figure 3.10 from Bulletin 656 is provided below with dashed lines highlighting the DEIR proposed limit:

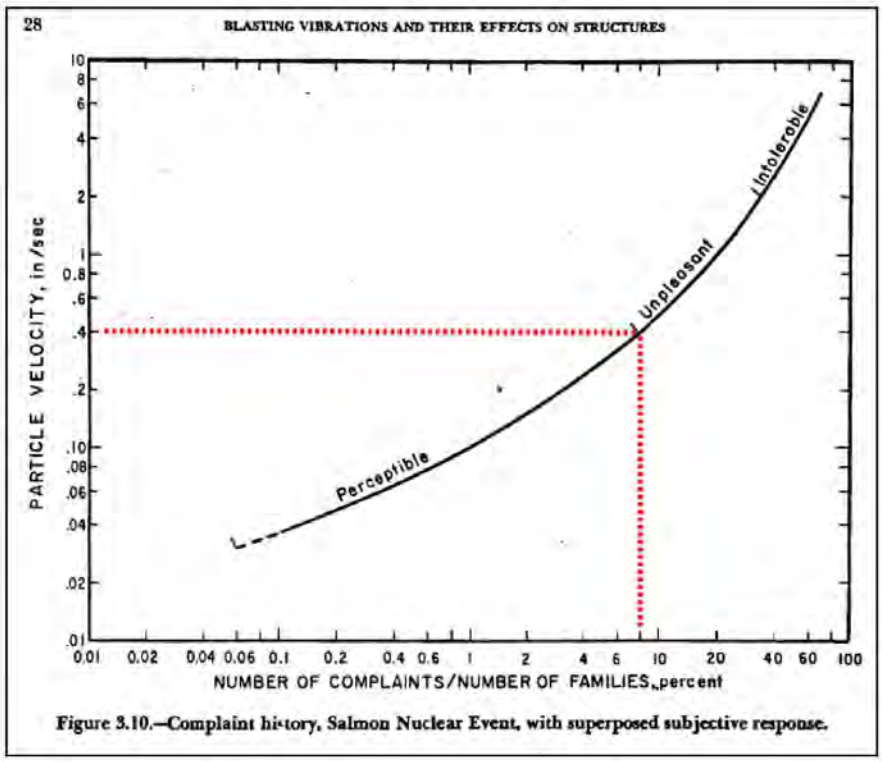


Figure 3.10.—Complaint history, Salmon Nuclear Event, with superposed subjective response.

The proposed limit of 0.4 in/sec. PPV is characterized as clearly perceptible and borderline unpleasant. This description is supported by the Caltrans Transportation and Construction Vibration Guidance Manual (April 2020). Table 21 below, an excerpt from the Caltrans Manual, indicates that blasting vibration of 0.4 in/sec. would be considered "strongly perceptible."

Table 21. Human Response to Blasting Ground Vibration

Average Human Response	PPV (in/sec)
Barely to distinctly perceptible	0.02–0.10
Distinctly to strongly perceptible	0.10–0.50
Strongly perceptible to mildly unpleasant	0.50–1.00
Mildly to distinctly unpleasant	1.00–2.00
Distinctly unpleasant to intolerable	2.00–10.00

The 0.4 in/sec. vibration limit might be appropriate in certain scenarios, such as a short-term event. However, this project involves ongoing mining operations for 80 years. In our opinion, potentially subjecting residents to "strongly perceptible" and borderline "unpleasant" vibration on a regular basis for the rest of their lives should be considered a significant impact. This is particularly true for evening and nighttime operations, which is the subject of our next comment.

4B – Comments on Nighttime Blasting Vibration

The DEIR suggests that the predicted "ground vibration of 0.23 in/s PPV is comparable to the vibration level from running a garbage disposal in a house..." (DEIR, page 4.10-58, paragraph 3). However, the DEIR would currently allow the project to conduct blasting and generate that vibration, equivalent to a garbage disposal, in the bedrooms of residents at night while they are trying to sleep. Despite the project's on-going operations, the DEIR fails to require any restrictions on evening and nighttime blasting vibration operations. This is a serious deficiency of the DEIR.

Grp 21-144

The DEIR and the Blasting Study reference the U.S. Office of Surface Mining and Reclamation and Enforcement (OSMRE) standards to support their analysis. However, the DEIR fails to include crucial guidance from the OSMRE Blasting Guidance Manual (dated March 1987). In the "Citizen Interests" chapter of the OSMRE Manual the following notes on blasting times and schedules is provided:

> "All blasting must take place during daylight hours unless more restrictive times are specified. If night-time blasting is approved by the regulatory authority, it must be based on evidence from the operator that the public will be protected from adverse noise and other impacts." (OSMRE Blasting Guidance Manual, page 114, paragraphs 4 and 5)

The DEIR provides no evidence that the public will be protected from adverse effects from the project's blasting operations. It provides no special consideration and therefore no additional restrictions on blasting vibration during evening and nighttime hours. In our opinion, potentially subjecting residents to "strongly perceptible" and borderline "unpleasant" vibration during evening and nighttime hours would be a significant impact on the community.

#5 – Claim Regarding 20 dB Reduction of Blasting Noise at Portal is Unsubstantiated

Grp 21-145

To evaluate potential noise impacts from blasting noise, the DEIR evaluates noise measurements conducted by Bollard Acoustical Consultants at the Sutter Gold underground mine in Amador County. Those measurements found blasting noise to be 75 dBA, on average, at a distance of 200 feet from the mine portal (DEIR, page 4.10-44, paragraph 5). However, to translate those findings to the Brunswick site of the project, the author assumes that noise at the project site would be reduced by 20 dB compared to the Sutter Gold mine (DEIR, page 4.10-44, paragraph 6). Other than mentioning the difference in orientation and size of the portal, this claim of 20 dB noise reduction is unsubstantiated. Twenty decibels of noise reduction is a substantial change in noise emission. Without further data or evidence to back up this 20 dB claim, the DEIR cannot simply assume these lower noise levels. The DEIR Noise Study states the following:

> "If the 75 dBA L_{max} level collected at Sutter Gold is conservatively reduced by 20 dB to assess blasting noise impacts at the Brunswick site, worst-case maximum noise levels at the nearest receptors would range from 52 to 57 dBA L_{max} on average." (DEIR, Appendix L, page 58, paragraph 4)

However, without the unsubstantiated 20 dB of reduction, blasting noise at the nearest sensitive receptors would be between 72 and 77 dBA. As stated above and in the DEIR, ambient median and "background" noise levels at many sensitive receptors is between 35 dBA and 50 dBA. Thus, the blasting noise could be substantially above the ambient noise levels, by approximately 25 to 40 dB. We would expect such an event to be considered a disturbance, likely resulting in complaints, particularly at night when sleep disturbance would be expected.

The DEIR noise study should be revised to provide evidence for the substantial claim that blasting noise levels at the Brunswick site would be 20 dB quieter than the referenced Sutter Gold mine project. Such a claim must be explained for the public to review and have confidence in the findings of the DEIR. If the claim cannot be substantiated, the potential blasting noise must be adequately mitigated to avoid community disturbance from the excessive noise.

* * *

Should you have any questions, please call.

Best,

SALTER

Jeremy L. Decker, PE
Vice President

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RESUME



Jeremy Decker, PE
Vice President

Mr. Decker has been an acoustical consultant with Salter since 2005. His areas of expertise include environmental noise studies, municipal master planning and noise control policies, architectural noise control, room acoustics, mechanical system noise and vibration reduction, and vibration analyses. He has consulting experience in the development and peer review of environmental noise impact analyses for public, industrial, and other commercial projects.

Project Experience

- Cottonwood Sand & Gravel Mine DEIR Peer Review, San Diego County, CA
- Decker Island Mine, Solano County, CA
- Kern County Oil & Gas DEIR/FEIR/SEIR Peer Review, Kern County, CA
- Southern California International Gateway FEIR Peer Review, Long Beach, CA
- Bay Delta Conservation Plan/California WaterFix FEIR Peer Review, CA
- Redondo Beach Power Plant Noise Impact Peer Review, Redondo Beach, CA
- Caldecott Tunnel 4th Bore Noise Impact Study, East Bay Area, CA
- Kaneohe/Kailua Sewer Tunnel Construction Noise Study, Kailua, HI
- Warner Ranch DEIR Peer Review, San Diego County, CA
- Gateway Valley Construction Noise Impact Study, Orinda, CA
- San Francisco Fire Dept. Water Supply Facility, San Francisco, CA
- FedEx Distribution Center Noise Impact Studies, Various Cities, CA, AZ, TN
- NRG Cogeneration Facility Noise Impact Study, San Francisco, CA
- Fivepoint Amphitheater Noise Impact Study, Irvine, CA
- Kaiser Permanente Construction Noise Study, Oakland, CA
- Saltworks Site EIR, Redwood City, CA
- Egbert Data Center EIR, San Francisco, CA
- Saranap Village EIR, Walnut Creek, CA
- Fresno General Plan Update and EIR, Fresno, CA
- Daly City General Plan Update and EIR, Daly City, CA

Education

California Polytechnic State University, San Luis Obispo, BS Mechanical Engineering

Professional Registration

California: M.E. No. 34231

Professional Affiliation

Allied Member of AIA San Francisco

Acoustical Society of America

Institute of Noise Control Engineering

Salter

San Francisco | Mill Valley | Los Angeles | Honolulu | Seattle
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GROUP LETTER 21: ELLISON FOLK, SHUTE MIHALY LAW FIRM/COMMUNITY ENVIRONMENTAL ADVOCATES FOUNDATION

Response to Comment Grp 21-1

This comment is introductory. The commenter generally states that the DEIR is deficient but does not identify any specific deficiencies. Responses to commenter's specific comments are provided below. Comment noted.

Response to Comment Grp 21-2

The commenter states that the DEIR does not accurately describe the project because it does not accurately describe the cleanup of the Centennial Site and uses post-cleanup conditions as a baseline. The commenter is referred to Master Response 4 – Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 21-3

This comment alleges that the DEIR does not properly analyze or mitigate significant environmental impacts, including the design details of engineered fill and geochemistry of waste rock and tailings. Please see Master Response 8 – Mine Waste Characterization. In addition, regarding the commenter's footnote 1, the term "engineered fill" is defined by the DEIR as min[ing] waste, stating that it will be used to create elevated pad areas at the Centennial and Brunswick Industrial Sites. (DEIR p. 4.8-29.)

The comment also refers to a report submitted by David M. Chambers. Please see responses to Group Letter 9.

Response to Comment Grp 21-4

A full analysis of hydrology and potential impacts in the project vicinity begins with the Project Description, including a disclosure of potential impacts during dewatering and treatment (DEIR p. 3-15) and operational dewatering (DEIR p. 3-18); and is followed in detail by Chapter 4.8 Hydrology and Water Quality. (DEIR p. 4.8-1) Careful consideration was given to regional groundwater occurrence in the immediate area, including review of driller logs, seasonal fluctuations in groundwater levels, and recharge each year. Of particular concern to the County and Project Applicant was the potential effect on private domestic wells in the Project Area (DEIR p. 4.8-8.) The private domestic wells that occur in the Wolf Creek and South Fork

Wolf Creek watersheds are primarily located in four distinct areas, as shown on DEIR Figure 4.8-4. In addition to the four main areas, additional areas or isolated wells are located inside or close to the boundaries of the mineral rights where groundwater supply wells are present, as shown on Figure 4.8-4 (See also DEIR pp. 4.8-10 through -12.) Thresholds of significance can be found in the same chapter on page 4.8-36. The analysis indicates that reductions in the water column of 20 percent to 40 percent could cause the production rate of wells to become unstable by incrementally decreasing the water column much more than would occur under existing conditions. The DEIR uses a 100 percent factor of safety as applied to the potential reduction resulting in unstable conditions, such that a criterion of 10 percent of the water column is used to define wells that might be substantially affected by dewatering of the underground mine workings. For thresholds of significance, discussion and mitigation specific to groundwater supplies, recharge, specific wells in the vicinity and groundwater management, please see Mitigation Measure 4.8-2. (DEIR p. 4.8-54 – 4.8-66.)

Please also see Response to Comment Grp 21-110, Master Response 14 – Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells. As noted in Master Response 15, the applicant has now provided a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Please also see EMKO Environmental, Inc. *Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project*. March 2020. (DEIR Appendix K.2); Itasca Denver, Inc. *Predictions of Groundwater Inflows to the Underground Mine Workings at the Idaho-Maryland Mine*. November 2020 (DEIR Appendix K.3); West Yost. *Peer Review of Groundwater Hydrology and Water Quality Analysis and Groundwater Model Reports for the Idaho-Maryland Mine Project, Nevada County, California*. August 27, 2020 (DEIR Appendix K.7); Itasca Denver, Inc. *Groundwater Monitoring Plan, Idaho-Maryland Mine Project*. February 2021 (Appendix K.8); and Rise Grass Valley Inc. *Well Mitigation Plan*. February 2, 2021 (DEIR Appendix K.9).

Response to Comment Grp 21-5

The commenter provides general concerns regarding the DEIR's noise and vibration analysis, ostensibly based on the Salter comment letter, included as Exhibit B to Group Letter 21. For example, with regard to hours of blasting, please see Responses to Comments Grp 21-143 and Grp 21-144. With regard to sleep disturbance analysis, please see Response to Comment Grp 21-130.

County noise standards are not the only standard of significance used for the noise analysis, as the DEIR also considered a substantial increase in ambient noise levels to be a significant increase, even if the noise does not exceed the County noise standard. Please see Response to Comment Grp 12-28.

Regarding the geographic extent of potential noise and vibration impacts, please see Master Response 7 - Location of Future Mining Areas. As noted in Master Response 7, to address public concerns regarding the scope of future mining within the mineral rights area, the applicant has agreed to an enforceable condition of approval that will limit the area of permitted underground mining to a smaller area within the mineral rights area (shown on maps A101, A201 and A202, included as Appendix A to the Final EIR), and will also prohibit blasting closer than 500 feet below ground surface except for construction of the service shaft.

Regarding the Centennial Industrial Site, please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 21-6

Regarding clean-up of the Centennial Industrial Site, please see Master Response 4 – Clean-Up Project is a Separate Project Under CEQA. Regarding the concerns about waste rock and mine tailings, please see Master Response 8 – Mine Waste Characterization. Regarding the concern related to a plume cloud, please see Response to Comment Grp 7-95.

Response to Comment Grp 21-7

Regarding the commenter's concerns about the air quality, GHG, and energy effects of the Centennial Site cleanup, please see Master Response 4 – Clean-Up Project is a Separate Project

Under CEQA. Regarding the concern about the construction timeline, please see Master Response 24 – Project Construction Schedule. Regarding project design, CEQA Guidelines sections 15070(b)(1) and 15126.4(a)(1)(A) specifically permit the incorporation of project design features into a project. These project design features are specifically listed in the Project Description and will become conditions of approval of the project's conditional use permit. For example, the applicant's Asbestos, Serpentinite, and Ultramafic Rock Management (ASUR) Plan is described on page 3-20 of Chapter 3, Project Description, of the DEIR. The ASUR is identified as an applicant proposed measure (APM) in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR (see pg. 4.3-65). Chapter 4.3 identifies two more APMs that are hereby incorporated into Chapter 3 of the DEIR for clarification purposes, under the "Aboveground Facilities Construction and Operations" header (pg. 3-20), as follows:

> APM-AQ-1: Exhaust Emission Controls
>
> The following measures, required as project conditions of approval, shall be implemented during construction, operation, and reclamation to reduce exhaust emissions:
>
> - All off-road diesel-fueled equipment and emergency generators owned by Rise Grass Valley Inc. shall be equipped with Tier 4 Final engines.
> - Unnecessary construction vehicle idling time shall be minimized. The ability to limit construction vehicle idling time is dependent on the sequence of activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following start-up that limit their availability for immediate use. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project shall apply a "common sense" approach to vehicle use such that idling is reduced as much as possible below the maximum of 5 consecutive minutes required by regulation (13 CCR 2449 and 2485). If a vehicle is not required for use immediately or continuously for activities or for other safety-related reasons, its engine shall be shut off.
> - All off-road equipment shall be maintained in accordance with manufacturer's specifications. All equipment shall be checked by a qualified mechanic, and equipment shall be confirmed that it is in proper condition prior to operation.
>
> APM-AQ-2: Surface Fugitive Dust Controls
>
> The following measures, required as project conditions of approval, shall be implemented to reduce surface fugitive dust emissions:
>
> - During construction, operation, and reclamation, all exposed soil surfaces (e.g., unpaved disturbed areas, unpaved parking areas, and unpaved staging areas, and soil piles) shall be adequately wetted to ensure that no visible dust crosses the property boundary, except when rains are occurring. As an alternative to watering, inactive soil piles shall be covered to minimize wind erosion.
> - During construction, all on-site roadways shall be paved as soon as possible after grading and any unpaved gravel roads shall be treated with chemical stabilizers in order to control fugitive dust.

The above three APMs are included in the project design and project air quality assessment, required as project conditions of approval, and included in Chapter 4 of the FEIR, Mitigation Monitoring and Reporting Program. Therefore, including a description of all three APMs in the

project description chapter of the EIR is for clarification purposes and does not alter the conclusions of the DEIR.

The commenter also provides other general concerns regarding the DEIR's air quality analysis, health risk assessment and GHG emissions significance threshold, but provides no evidence as to why these analyses are inadequate. Please see Master Response 18 – Air Quality Thresholds; Master Response 19 – NSAQMD Criteria Pollutant Thresholds during Operations; and Master Response 27 – Greenhouse Gas Thresholds.

Response to Comment Grp 21-8

The commenter asserts that the DEIR did not consider a reasonable range of alternatives. Section 6 of the DEIR considers project alternatives. As summarized in DEIR section 6.2, and provided in CEQA Guidelines section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. (See CEQA Guidelines, Section 15126.6(a).) The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis given that they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the public and decisionmakers. The commenter does not suggest any specific alternative. Comment noted.

Response to Comment Grp 21-9

The commenter asserts that the DEIR does not fully and accurately inform decisionmakers and the public of the environmental consequences of the project, and requests recirculation of the DEIR. However, the comment does not provide any specific example of an issue with the DEIR requiring recirculation. The County has determined that recirculation of the DEIR is not required as the factors set forth under CEQA Guidelines 15088.5 for recirculation are not met. Please see the Introduction chapter of this Final EIR for a more detailed discussion of recirculation criteria, pursuant to CEQA Guidelines 15088.5.

Response to Comment Grp 21-10

The commenter refers to technical comments attached to its comment letter. For responses to the Baseline Environmental Consulting comments, please refer to Responses to Comments Grp 21-107 to Grp 21-128; for responses to the Salter comments, please refer to Responses to Comments Grp 21-129 to Grp 21-145; and for responses to CEA comments, please see Responses to Group Letters 7 and 8. Please also see the following responses to the commenter's specific comments.

Response to Comment Grp 21-11

The commenter asserts that the DEIR's project description is flawed because it does not include the Centennial cleanup project. Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA. The commenter also asserts that the project description is flawed because it improperly uses an adjusted baseline representing post-cleanup conditions on the Centennial Site as the baseline rather than existing conditions. As discussed in Section 1.3 of the DEIR, the baseline for the Centennial Site was adjusted because the proposed project could not possibly impact that site unless and until the DTSC cleanup project has already been completed. As such,

presenting the project's impacts to the Centennial Site based on the pre-DTSC Project conditions would be misleading to the public and decision-makers and would not represent the actual project impacts. This adjusted baseline is appropriate under CEQA Guidelines Section 15125(a)(1) and is supported by substantial evidence in the record. The commenter also asserts that the DEIR's project description is flawed because it does not adequately describe the duration of the required permits or the duration of construction and phasing of mining and exploration activities over the entire permit period. However, the commenter does not provide any specifics on what information is not provided. The DEIR's project description details all required permits, explains that the term of the project would be for 80 years, and provides sufficient detail on construction and other project activities. Also see Master Response 24 - Project Construction Schedule.

Response to Comment Grp 21-12

The commenter summarizes details regarding the DTSC Cleanup Project and the Idaho-Maryland Mine Project and does not address the adequacy of the DEIR. Comment noted.

Response to Comment Grp 21-13

The commenter asserts that the DEIR does not include a proper description of the environmental setting because it uses an adjusted baseline for the Centennial Site. Please see Master Response 4 – Clean-Up Project is a Separate Project Under CEQA.

Regarding the possibility that the Centennial Site will not be cleaned up and therefore not be available for placement of engineered fill, the commenter further asserts that the DEIR "ignores this uncertainty, simply assuming the future cleanup will occur." However, the DEIR explicitly addresses this situation and states "[i]f the separate DTSC cleanup project is not approved by DTSC and completed within the term of the Idaho-Maryland Mine Project use permit, engineered fill would be placed on the Brunswick site, but not the Centennial site, and the remainder would be hauled to local and regional markets." (DEIR, p. 1-3.) Accordingly, the DEIR did not ignore the possibility of not placing material on the Centennial Site, but specifically addressed and analyzed impacts under that possible scenario.

The commenter further argues that the DEIR cannot use the adjusted baseline as the "sole" baseline because there is a possibility the cleanup may not occur, and requests analysis based on an existing conditions baseline. The commenter mistakenly references CEQA Guidelines Section 15125(a)(2), for "future conditions" baselines, but the DEIR relied on CEQA Guidelines Section 15125(a)(1), which allows use of a baseline consisting of "conditions expected when the project becomes operational." In this case, it is reasonably expected that the DTSC cleanup project will be complete when the project becomes operational.

Response to Comment Grp 21-14

The commenter asserts that the DEIR is flawed because it did not analyze the impacts of transporting 1.6 million tons of mine waste from the project site. However, the commenter mischaracterizes the circumstances that would occur if the Centennial Site were not available for fill placement. The material that would have been placed on the Centennial Site was already analyzed by the DEIR as being transported from the Brunswick Site to the Centennial Site. Thus, the DEIR already analyzed impacts from the transport of that material. However, if the Centennial Site were not available for placement of fill material when the project commences, that material would be transported to local construction aggregate consumers rather than the Centennial Site. The commenter asserts that the air quality, GHG emissions, energy use, and noise impacts of

transporting the fill material to regional construction were not addressed in the situation where the Centennial Site is not available for placement of fill material. However, the impacts of transporting material to the regional construction market was already addressed in the DEIR.

The DEIR analyzed the impacts of off-site hauling of rock material to the construction aggregate market, starting in 2033; however, it was assumed in the DEIR that prior to 2033, rock material would be placed on the Brunswick engineered fill pile and Centennial Site engineered fill pile. Based on public comments regarding the air quality and GHG impacts associated with hauling of rock material to construction aggregate purchasers earlier than anticipated, the applicant has agreed to a condition of approval that would require the applicant to use electric trucks for any offsite sale or transport of waste rock or sand tailings from the Brunswick site (other than to the Centennial Site) if such transport occurs prior to 2033. Hauling of material to offsite locations for use as construction aggregate starting in 2033 was already assumed in the DEIR's analysis; thus, the emissions impacts associated with this activity are already included in the DEIR, regardless of whether the Centennial Site is available for placement of fill material. The below condition would ensure that the project would not have greater air quality and GHG emissions impacts or energy use impacts than analyzed under the DEIR even if the Centennial Site is not available for placement of engineered fill. The text of the condition of approval is provided below:

> COA 4: In the event that sand tailings or waste rock material is transported from the Brunswick Site prior to 2033 to locations other than the Centennial Site, all transport of such material shall be accomplished using electric vehicles.

Further, noise impacts from transport of material to regional construction aggregate markets were already addressed in the DEIR's noise analysis. The commenter does not explain how the unavailability of the Centennial Site for fill placement could result in greater noise impacts than were already analyzed by the DEIR. Regarding wasteful energy, the commenter does not explain how transport of aggregate that would be used in construction projects would cause wasteful use of energy or fuel. Notably, the new condition of approval above requiring use of electric vehicles for any sand tailings and waste rock transported from the mine prior to 2033 would provide an environmental benefit in terms of air quality and energy use, as the vehicles would be electric rather than powered by diesel.

Response to Comment Grp 21-15

The commenter asserts that the Centennial Site DTSC Cleanup Project should be analyzed in the DEIR. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-16

The commenter asserts that the Centennial Site DTSC Cleanup Project should be analyzed in the DEIR. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-17

The commenter asserts that the Centennial Site DTSC Cleanup Project should be analyzed in the DEIR. Please see Master Response 4 -Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-18

The commenter asserts that the Project Description is not stable and therefore the DEIR is inadequate because the County Conditional Use Permit (CUP) would last for 80 years but other agency permits such as National Pollutant Discharge Elimination System (NPDES) permits

typically have shorter terms and need to be renewed at regular intervals. The commenter asserts that lack of correlation between the CUP term and the term of other permits, along with the DEIR's failure to discuss this discrepancy is a deficiency that makes the project description inadequate. However, the commenter does not explain how the difference in permit terms would cause a new significant environmental impact or would lead to more severe environmental impacts. Rather, the DEIR discloses that other state and federal agencies have authority over ancillary permits required for the project, and requires that the applicant obtain those permits as necessary for project operations. Those agencies' continuing oversight of the project, including the need to renew such permits at various intervals, adds an additional layer of protection guaranteeing project compliance with applicable laws and regulations. The commenter does not offer any statutory, regulatory or case law authority for its argument that the permit terms should be identical, as there is no such requirement. Rather, counties routinely issue use permits, and other approvals (such as building permits) that require continuing oversight of other agencies and the need to renew ancillary permits during the life of that use permit or structure. Discussion of the various permits terms is not required by CEQA, and does not directly relate to the existence or severity of an environmental impact. Moreover, while the DEIR provides a thorough analysis and disclosure of the project and its related impacts, including every detail requested by the commenter, where those details are not necessary for public disclosure or analysis of impacts, would create an unreasonably lengthy EIR, and is not required by CEQA. As stated by California Courts: "The need for thorough discussion and analysis is not to be construed unreasonably… to serve as an easy way of defeating projects. Absolute perfection is not required." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d at p. 406.)

Response to Comment Grp 21-19

The commenter asserts that the Project Description is "shifting" and inadequate because the groundwater model relied on a 25-year hydrogeologic model to assess groundwater impacts from project implementation, while the project CUP term is proposed as 80 years. The 25-year model is based on known locations of mineralized gold ore and represents the underground location of where mining would occur during the first 25 years of mine operation. For subsequent years of mine operation, the precise location of mining would be determined by further geologic exploration that would be conducted during mine development and cannot be known until additional mining and exploration is completed. However, Sensitivity Scenario 6 used in the groundwater model considered the significant expansion of mining in areas with potential for mineralization, as shown in Figure 5.10 of Appendix K.3 of the DEIR for an additional 40 years of mining. This groundwater model scenario represents the reasonably foreseeable location of where future mining would likely take place after the initial 25-year period. As shown in Figure 5-12, and discussed on page 29 of the report, the 5-ft drawdown contour extent of Scenario 6 at the end of potential additional mining (to Year 65) relative to the 2019 water level expands less than 500 ft from that of the Base-Case Scenario. The drawdown contour of the Base-Case Scenario is at the end of the original planned future mining (Year 25) relative to the 2019 water level. The comparison of drawdown contours between Scenario 6 and the Base-Case Scenario suggests that the added potential mining (beyond the 65 years modeled) will not lead to large incremental drawdowns as the mining progresses because the mining activities occur in deep, low-K rocks.

As stated in Response to Comment Grp 7-82, the groundwater flow model would be updated periodically after dewatering commences and additional groundwater level data is collected to evaluate dewatering impacts. New groundwater level data and updated modeling would

incorporate changes to the long-term mining plan, data from monitoring wells, and measured pumping rates.

The commenter asserts that the DEIR does not disclose that mining may progress beyond the area analyzed for the initial 25 years; however, the DEIR Project Description states explicitly that "[t]he project would also involve underground mining within an approximately 2,585-acre mineral rights boundary owned by the applicant," which discloses that underground mining could occur within this 2,585-acre area, not just the smaller area analyzed for the initial 25-year groundwater model analysis. (DEIR, p. 3-1.)

Importantly, based on public comments regarding the geographic scope of underground mining, the applicant will be subject to a condition of approval that will reduce the area in which it is allowed to conduct underground mining during the term of the 80-year permit to a smaller subset of the 2,585-acre mineral rights boundary, as discussed in Master Response 7 - Location of Future Mining.

While the commenter asserts that the DEIR does not disclose where future mining would occur, the DEIR does in fact disclose that underground mining may occur within the 2,585-acre mineral rights boundary below a depth of 500 feet, subject to the further limitation discussed in Master Response 7 - Location of Future Mining Areas. As stated on page 1-2 of the DEIR, one of the listed project components is "Underground mining at a depth of 500 feet or more in areas underlying the mineral rights properties." The groundwater model's analysis of the first 25-years of mining and its impact on groundwater impacts, along with analysis of an additional 65-years of potential future mining locations, does not make the project description unclear or unstable, as the DEIR is explicit that underground mining could occur within the mineral rights area.

Response to Comment Grp 21-20

The commenter asserts that the DEIR's project description is inconsistent because it states that construction would take 18 months, while the air quality analysis assumes that construction would occur over a 12-month period. As discussed in Master Response 24 - Project Construction Schedule, the air quality analysis assumed a 12-month construction period that overlapped some construction activities that may be done sequentially, in order to assess the most conservative air emissions impacts scenario. The Project Description is explicit in its disclosure that project construction activities would likely take place over 18 months; however, the air quality analysis takes a more conservative approach in order to ensure that air quality emissions from construction are not underestimated due to the assumption that activities will be staggered rather than overlapping. The analytical approach used for the air quality analysis used to provide a conservative impact analysis does not in any way make the Project Description inconsistent or unstable. Please see Master Response 24 - Project Construction Schedule.

Response to Comment Grp 21-21

The commenter asserts generally that the DEIR is insufficient and fails to provide accurate information about project impacts or appropriate alternatives and mitigation measures. The comment provides no specific information on its general statements. The commenter's specific comments are addressed below in subsequent responses to comments.

Response to Comment Grp 21-22

The commenter asserts generally that the DEIR does not adequately evaluate the impact of dewatering on residences and businesses in the project vicinity. Contrary to the commenter's assertion, the DEIR provides extensive analysis of groundwater, water quality and hydrology impacts in Chapter 4.8 of the DEIR and appendices K.1 through K.9, including analysis of impacts to nearby groundwater wells. Please see Master Response 14 - Adequacy of Groundwater Model and Response to Comment Grp 21-110.

Response to Comment Grp 21-23

The commenter asserts that the DEIR is inadequate because baseline groundwater levels have not been established. However, the DEIR includes a detailed groundwater model that included decades of groundwater level measurements to establish the regional groundwater level baseline and to calculate groundwater impacts due to dewatering based on those levels and the expected project dewatering activities. In addition, to mitigate dewatering impacts, the DEIR requires a groundwater well monitoring plan that includes placement of a network of groundwater monitoring wells to collect additional data over a 12-month period before dewatering of the mine commences. Further, the applicant has agreed to an additional condition of approval requiring the applicant to offer individual groundwater well monitoring for all owners of wells within the expected 1-foot drawdown area as predicted by the groundwater model. For those well owners that agree to allow individual monitoring of their wells, this additional data will be used to ensure that any individual well impacts are mitigated. The groundwater baseline data, groundwater model, impact conclusions and proposed mitigation measures have been independently reviewed by the County's independent experts, who provided input on the model and the mitigation, finding that that the analysis and mitigation is sufficient after incorporation of their independent expert input. Please also see Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 21-24

The commenter asserts that the DEIR provides no evidence that the hydrologic analysis covers the full geographic scope of the project and the geographic scope of the expected drawdown impacts, when concluding that the drawdowns will be generally within the mineral rights boundary. However, the groundwater model included analysis of an area much larger than merely the mineral rights boundary or the mine itself. As stated on page x of Appendix K.3 of the DEIR "Using the hydrogeologic conceptual model and the available data, Itasca developed a 3-D finite element numerical groundwater flow model of the Mine and the surrounding area." Contrary to the commenter's assertion, the groundwater model's conclusion that groundwater impacts would be limited to areas generally within the mineral rights boundary is based on expert analysis and use of an industry-standard groundwater model, not upon a mere assumption that impacts would be limited to a certain geographic area. The groundwater baseline data, groundwater model, impact conclusions and proposed mitigation measures have been independently reviewed by the County's independent experts, who provided input on the model and the mitigation, finding that that the analysis and mitigation is sufficient after incorporation of their independent expert input. Please also see Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 21-25

The commenter asserts that the groundwater model and proposed monitoring well network does not account for potential impacts at individual domestic wells and summarizes the related

comment from Baseline (Comment Grp 21-119). Please see Response to Comment Grp 21-119. Note that the applicant has also agreed to an additional condition of approval requiring the applicant to offer individual groundwater well monitoring for all owners of wells within the expected 1-foot drawdown area as predicted by the groundwater model. For those well owners that agree to allow individual monitoring of their wells, this additional data will be used to ensure that any individual well impacts are mitigated. Please also see Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 21-26

The commenter asserts that no impact threshold has been set for groundwater drawdown impacts, and then inconsistently argues that the threshold used by the DEIR in Mitigation Measure 4.8-2(b) (10 percent or greater reduction of the water column of any well), is arbitrary and is not based on substantial evidence. This comment mirrors Comment Grp 21-117 provided by Baseline. Please see Response to Comment Grp 21-117 for a full explanation of this threshold. The selection of the 10% reduction as a threshold of significance is discussed in Section 3.2.1, page 80, of Appendix K.2 of the DEIR, and this threshold was deemed appropriate by groundwater experts, including the County's independent experts. As discussed in CEQA Guidelines Section 15064(b)(2), CEQA lead agencies have discretion to establish appropriate impact thresholds based on substantial evidence. As discussed in Response to Comment Grp 21-117, this threshold was established based on substantial evidence and reviewed by the County's independent experts. Note that the applicant has also agreed to an additional condition of approval requiring the applicant to offer individual groundwater well monitoring for all owners of wells within the expected 1-foot drawdown area as predicted by the groundwater model. For those well owners who agree to allow individual monitoring of their wells, this additional data will be used to ensure that any individual well impacts are mitigated. To the commenter's assertion that some individual wells may barely be functional, such that a drawdown of less than 10 percent of the existing well water column would result in impacts due to poor well function, the additional condition of approval agreed to by the applicant will provide additional data on individual wells that are barely operational, that would trigger the applicant's obligation to mitigate said well impacts under Mitigation Measure 4.8-2(b) and under General Plan Policy 17.12, if said wells experienced a significant impact due to dewatering.

Response to Comment Grp 21-27

The commenter asserts that the DEIR's analysis is inadequate because it relies on a flawed groundwater model. In making its arguments, the commenter relies on arguments from the Baseline comments Grp 21-111 and Grp 21-112. Please see Responses to Comments Grp 21-111 and Grp 21-112, and Master Response 14 - Adequacy of Groundwater Model. As discussed in the referenced responses to comments and Master Response, the groundwater model relies on industry standard software modelling, and uses conservative assumptions to model groundwater conditions and project impacts. The model analysis was peer-reviewed by the County's independent expert who provided input on the model, analysis, and mitigation measures. Thus, the information provided in the DEIR on groundwater impacts constitutes substantial evidence.

Response to Comment Grp 21-28

The commenter asserts that the DEIR does not provide explanation on how drawdown impacts would be determined in connection with seasonal fluctuations in groundwater wells. This comment mirrors the Baseline comment Grp 21-117. Please see Response to Comment Grp 21-117.

Further, the additional condition of approval agreed to by the applicant to offer individual monitoring of groundwater wells within the expected 1-foot drawdown area will provide additional data on individual wells, as data is collected (including data on seasonal fluctuations) over a 12-month period prior to initiation of dewatering activities. Please see Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 21-29

The commenter asserts that the groundwater model used in the DEIR does not account for the groundwater depression that will be created by constant drainage from the existing mine workings, and further does not account for existing drainage from existing mine workings. This comment is a summary of points argued in Baseline's comments Grp 21-113 and 21-114. Please see Responses to Comments Grp 21-113 and Grp 21-114, and Master Response 14 - Adequacy of Groundwater Model.

Response to Comment Grp 21-30

The commenter asserts that the Groundwater Monitoring Plan required by Mitigation Measure 4.8-2(a) is flawed because it does not include monitoring of individual groundwater wells, and rather relies on a network of groundwater monitoring wells. This comment summarizes the comments made in Baseline's comment Grp 21-119. Please see Response to Comment Grp 21-119. Further, the additional condition of approval agreed to by the applicant to offer individual monitoring of groundwater wells within the expected 1-foot drawdown area will provide additional data on individual wells, as data is collected (including data on seasonal fluctuations) over a 12-month period prior to initiation of dewatering activities. Please see Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 21-31

The commenter summarizes its previous comments and generally asserts that the DEIR's conclusion on the extent of dewatering impacts is incorrect because the groundwater model is flawed and that the mitigation is inadequate. Please see Responses to Comments Grp 21-21 through Grp 21-30 above, and also see Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 21-32

The commenter asserts generally that the mitigation measures provided to mitigate the project's impacts to groundwater supply are deficient. This comment does not identify any specific deficiencies in the mitigation measures. The commenter's specific assertions are addressed in the responses below. Comment noted.

Response to Comment Grp 21-33

The commenter asserts that the DEIR's groundwater supply mitigation measures are improperly deferred because under the groundwater monitoring plan, additional data will be collected prior to dewatering and then during dewatering to anticipate any unexpected impact to groundwater wells. Specifically, the commenter alleges that the mitigation is inadequate because the DEIR fails to include performance criteria for the mitigation measures, does not include factual support for its 10 percent impact threshold, and does not accurately describe existing conditions. With regard to the commenter's assertion that no evidence exists to support the 10 percent threshold, please see Response to Comment Grp 21-26. With regard to the commenter's assertion that the mitigation measures are improperly deferred, in the case *Center for Biological Diversity v.*

California Department of Conservation, etc. (2019), the court explains that "[g]enerally, it is improper to defer the formulation of mitigation measures…However, an exception to this general rule applies when the agency has committed itself to specific performance criteria for evaluating the efficacy of the measures to be implemented in the future, and the future mitigation measures are formulated and operational before the project activity that they regulate begins." (36 Cal.App.5th 210, 239.) The court determined both conditions were met in that case and upheld the deferred mitigation measures. Similarly, the mitigation measures presented in the DEIR for mitigation of groundwater supply impacts require compliance with specific performance standards and also require implementation prior to dewatering activities. Specifically, Mitigation Measure 4.8-2(a) requires establishment of a Groundwater Monitoring Plan that will collect data for a 12-month period prior to dewatering; Mitigation Measure 4.8-2(b) requires immediate replacement of water supply for any water well that is impacted by the project; and Mitigation Measure 4.8-3(c) requires that the Project Applicant connect 30 properties to Nevada Irrigation District potable water supply prior to dewatering activity, even though only 7 wells are expected to be impacted, based on quantitative groundwater modeling. These mitigation measures include specific performance standards that ensure any impacts will be adequately mitigated. Moreover, the commenter ignores the fact that the DEIR's conservative analysis anticipates that only 7 wells will be impacted, provides replacement water prior to dewatering to those 7 wells and 23 other properties that are not anticipated to be impacted, and further, that the Groundwater Monitoring Plan and replacement requirement in Mitigation Measures 4.8-2(a) and 4.8-2(b) are provided as an extra layer of security for unanticipated impacts to wells that were shown by the groundwater model not to experience significant impacts. As such, the mitigation for impacts anticipated by the DEIR has already been fully formulated and is not deferred, due to the requirement that water connections be provided to the 7 wells expected to have impacts (and 23 additional properties) prior to dewatering. The additional Groundwater Monitoring Plan and water replacement mitigation is provided to ensure mitigation of unanticipated impacts that are beyond the impacts actually predicted by the DEIR, and detailed performance standards are provided in Mitigation Measures 4.8-2(a) and 4.8-2(b) and in Appendices K.8 (Groundwater Monitoring Plan) and K.9 (Well Mitigation Plan). Please see Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Further, the additional condition of approval agreed to by the applicant to offer individual monitoring of groundwater wells within the expected 1-foot drawdown area will provide additional data on individual wells, as data is collected over a 12-month period prior to initiation of dewatering activities.

Response to Comment Grp 21-34

The commenter asserts that Mitigation Measure 4.8-2(c) is inadequate in providing water supply to 30 properties because the commenter asserts that the DEIR has no evidence that the dewatering impact will be limited to 30 properties. However, the DEIR actually concludes that dewatering will only significantly impact 7 wells, and the requirement to connect 30 properties goes beyond what is required to mitigate the project's impact. (See DEIR Impact 4.8-2.) The commenter cites *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 866, for the proposition that courts will not defer to agency conclusions about effectiveness of mitigation where there is no evidence in the record showing that it will be effective. However, the DEIR contains voluminous evidence documenting the DEIR's conclusion that only 7 groundwater wells will be significantly impacted (see DEIR Chapter 4.8, and Appendices K.2, K.3, K.7, K.8, K.8 and K.9), includes a comprehensive Groundwater Monitoring Plan to monitor groundwater levels in the case that unanticipated significant impacts occur to wells other than the 7 wells, and

includes a strict requirement that water supply be provided in case unanticipated significant impacts occur to other wells beyond the 30 for which replacement water supply is already provided. The commenter summarizes comments from Baseline comment Grp 21-119 in describing the actions that Baseline believes are necessary to analyze and mitigate groundwater impacts. Please see Response to Comment Grp 21-119.

Response to Comment Grp 21-35

The commenter asserts that Mitigation Measure 4.8-2 must be revised to include the mitigation elements proposed for the 1996 Emperor Gold project, and references Exhibit H to its comment letter. Please see Master Response 13 - Historic Hydrogeologic Assessments.

Response to Comment Grp 21-36

The commenter asserts that the project is inconsistent with General Plan Policy 17.12 because it will threaten water supplies in the project area. However, the DEIR specifically addresses General Plan Policy 17.12 (see DEIR p. 4.8-66) and concludes that the project is consistent with the General Plan Policy's requirement to replace any water supply impacted by mining activities, through implementation of Mitigation Measure 4.8-2(c), which requires replacement water supply for 30 properties. Further, to eliminate concern over groundwater well impacts that are not anticipated by the DEIR's analysis, Mitigation Measure 4.8-2(b) specifically incorporates the General Plan Policy 17.12 requirement for water replacement for unanticipated impacts to wells beyond the 30 properties for which replacement water is already being provided. As such, the DEIR provides substantial evidence that the project is in compliance with General Plan Policy 17.12.

Response to Comment Grp 21-37

The commenter generally asserts that the DEIR did not fully evaluate the project's impacts to water quality due to construction, dewatering discharge, erosion and sedimentation and placement of cemented-paste backfill. Contrary to the commenter's assertion, the DEIR fully analyzes impacts to water quality related to the project's dewatering discharge, construction, fill placement, erosion and sedimentation and use of cemented-paste backfill in Chapter 4.8-1 of the DEIR. Please also see Master Response 35 - Discharge to South Fork Wolf Creek. The commenter references comments from David M. Chambers as support for its arguments. Please see the separate responses to comments Grp 8-174 to Grp 8-200 with regard to responses to comments from David M. Chambers. The commenter asserts that no analysis of water quality and the project's ability to meet water quality standards has been performed; however, this is incorrect. For example, see Appendix K.4 which includes analysis of the project's proposed water treatment plant, and Appendix K.2 which includes groundwater quality analysis. Additionally, please see Master Response 8 - Mine Waste Characterization. With regard to the commenter's assertion that the DEIR's reliance on regulatory permitting requirements is inappropriate, the CEQA Guidelines state that compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards. (CEQA Guidelines Section 15126.4.) The DEIR's incorporation of water quality permit requirements from the Regional Water Quality Control Board (RWQCB) (see Mitigation Measures 4.8-1(a) through 4.8-1(e)) provides adequate mitigation for the referenced water quality impacts, as the permit requirements apply before project activities can commence, and the RWQCB's permit process includes strict regulatory requirements and performance standards, as outlined in the mitigation measures. Moreover, the commenter is

incorrect in asserting that the DEIR simply relies on a "trust us" approach and provides no analysis of water quality impacts. The potential for water quality impacts is addressed in detail in the DEIR and Appendices, for every aspect of the project, including analysis of existing water quality, mine water discharge treatment, erosion controls, chemical properties of historic and expected mine waste, and analysis of mitigation.

Response to Comment Grp 21-38

The commenter asserts that the DEIR is deficient because the conditional use permit is proposed for a term of 80 years; however, the likely term of the project's water quality permits would be shorter and therefore require renewals of those permits. This comment mirrors the arguments made in comment Grp 21-18 above. Please see Response to Comment Grp 21-18. The commenter also asserts that the DEIR should be revised and recirculated due to flaws in the groundwater supply and groundwater quality impact analyses. The County has determined that recirculation of the DEIR is not required as the factors set forth under CEQA Guidelines 15088.5 for recirculation are not met (please refer to Chapter 1 of this Final EIR for more discussion on this point).

Response to Comment Grp 21-39

The commenter generally asserts that the DEIR's noise analysis is inadequate and summarizes noise generating activities at the project site. The commenter also asserts that operational hours for tunnelling and blasting were not disclosed in the DEIR; however, as stated on page 4.7-28 of the DEIR, "[b]lasting activities are proposed to take place twice daily with blasting between shifts at 7AM and 7PM with 3 to 4 drift rounds blasted every 12 hours between shift changes and longhole blasts of approximately 3,300 tons of rock taking place once every 3-4 days." Further, as described in the PBS Technical Report, minor blasting (such as misholes in drift rounds) could be done periodically during work shifts but would be only a single hole per delay versus the four assumed in the PBS Technical Report for drift round blasting and consequently would result in only 25% of the vibration produced by drift round blasting. As such, contrary to the commenter's assertion, the hours of operation for blasting activities are disclosed in the DEIR, and blasting would typically occur at 7AM and 7PM, with some minor blasting at other hours, including nighttime hours.

Response to Comment Grp 21-40

The commenter generally asserts that the DEIR does not properly analyze or disclose the project's noise impacts. No specific deficiencies are identified in this comment; therefore, no further response is necessary.

Response to Comment Grp 21-41

The commenter asserts that the DEIR's noise analysis is deficient because the DEIR only analyzed project noise in comparison to County noise standards and did not analyze whether the project would result in a significant increase in ambient noise conditions regardless of the County standards. The commenter cites the *King and Gardiner Farms, LLC v. County of Kern* case and *Oro Fino Gold Mining Corporation v. County of El Dorado* case for the proposition that an EIR must analyze the increase in noise above ambient caused by a project rather than solely the County noise standards. However, the commenter is factually incorrect about the DEIR's noise analysis, as the County noise standards are not the only standard of significance used for the noise analysis. The project's DEIR also considered a substantial increase in ambient noise levels

to be a significant increase, even if the noise does not exceed the County noise standard. Please see Chapter 4.10.3, Table 4.10-5 of the DEIR, and Response to Comment Grp 21-133.

Response to Comment Grp 21-42

The commenter asserts that the DEIR did not examine the project's potential to generate nighttime noise and should analyze potential for sleep disturbance. Please See Response to Comment Grp 21-130.

Response to Comment Grp 21-43

The commenter restates its previous comment that the DEIR did not consider changes above ambient noise levels and only considered County noise standards. This is factually incorrect, as the DEIR analyzed impacts from noise increases that are still below County noise standards. Please see Chapter 4.10.3, Table 4.10-5 of the DEIR, and Response to Comment Grp 21-133.

Response to Comment Grp 21-44

The commenter asserts that the DEIR needs to analyze noise and vibration impacts over the entire mineral rights area. The DEIR analyzed noise impacts from all noise generating sources; however, the commenter is incorrect that tunnelling and blasting would be a noise generating activity throughout the entire mineral rights area. As opposed to vibration, audible noise from underground blasting can only propagate to surface from through the mine tunnels and shafts. Therefore, noise impacts from blasting are relative to a receptor's proximity to the shaft headframes at the Brunswick site and not the location of the underground workings. As stated on page 4.10-44 of the DEIR, the noise from blasting is less than significant even for the closest receptors to the Brunswick shaft headframe.

With regard to vibration impacts throughout the mineral rights area, while most blasting would take place at 1,000 feet below surface or deeper, a condition of approval has been added to the FEIR to limit blasting to 500 feet below the surface and deeper. Contrary to the commenter's assertion, the DEIR did not limit analysis of vibration impacts to only the Centennial or Brunswick sites; rather, the analysis modeled vibration impacts at multiple locations and under varying scenarios. (See DEIR Chapter 4.10-4.) As discussed in Chapter 4.10-4 of the DEIR and the PBS Technical Report, a maximum of 0.23 inches per second vibration is modelled where a longhole blast could occur directly beneath a receptor at 500 feet depth. Notwithstanding the rarity of this situation, such a blast might occur every three or four days between shift changes (7AM and 7PM) and would last for only seconds. At 500 feet depth and a horizontal offset of 1,400 feet, such a longhole blast would be undetectable by blasting seismograph (PPV <0.05 in/sec). Regular drift round blasting, occurring approximately twice daily over several seconds, is modelled to result in a maximum of 0.14 inches per second vibration at a depth of 500 feet directly beneath a receptor. Note that the 0.14 inches per second vibration that would occur at a receptor if blasting took place 500 feet directly below that receptor is less than the 0.40 inches per second vibration that the DEIR sets as the threshold below which there are "No significant concerns about public annoyance." (DEIR p. 4.10-22.) At 500 feet depth and a horizontal offset of 900 feet, a drift round blast would be undetectable by blasting seismograph (PPV <0.05 in/sec). Therefore, the DEIR appropriately considers vibration impacts to be less than significant after mitigation.

Response to Comment Grp 21-45

The commenter asserts that the DEIR is inadequate because it mistakenly mischaracterizes project operational noise sources as construction noise sources and therefore assumes that those



operations are exempt from County noise standards. The commenter implies that tunnelling and blasting may be considered "construction" noise sources by the DEIR rather than operational noise sources, such that the DEIR assumed that they are exempt from County noise standards. However, this is incorrect, as tunnelling and blasting were considered to be operational noise sources by the DEIR. (See DEIR Chapter 4.10-3.) Moreover, despite the fact that construction noise is considered exempt under the County Code (County Code Section L-II 4.1.7.D.8), the DEIR compared all construction noise sources to the applicable County noise standards and determined that some construction noise sources were temporarily significant and unavoidable despite the County Code construction noise exemption. (See DEIR p. 4.10-30.)

Accordingly, the DEIR appropriately categorized project activities as construction or operational activities, respectively. However, even if such activities were mischaracterized (which they are not), the DEIR compared construction activities to the County noise standards despite the construction noise exemption; thus, the DEIR contains an adequate analysis of noise impacts based on substantial evidence.

Response to Comment Grp 21-46

Please see Response to Comment Grp 21-45.

Response to Comment Grp 21-47

The commenter implies that the DEIR concludes that the impacts analyzed in Impact 4.10-2 of the DEIR were found to be less than significant because the County relied on the County Code's construction noise exemption. The commenter is confused about the conclusions of the DEIR, as the DEIR cites the County Code construction noise exemption for informational purposes, but ultimately concludes that the construction noise impact is "significant and unavoidable" despite incorporation of feasible mitigation due to the construction noise experienced at 8 receptors due to the potable water pipeline construction. (See DEIR Table 4.10-11; DEIR p. 4.10-30.) The commenter states that the impact conclusion should be changed to "significant and unavoidable" on page 4.10-30; however, the impact conclusion is already significant and unavoidable, despite incorporation of feasible mitigation.

Response to Comment Grp 21-48

The commenter asserts that operational hours for tunnelling and blasting were not disclosed in the DEIR; however, as stated on page 4.7-28 of the DEIR, "[b]lasting activities are proposed to take place twice daily with blasting between shifts at 7AM and 7PM with 3 to 4 drift rounds blasted every 12 hours between shift changes and longhole blasts of approximately 3,300 tons of rock taking place once every 3-4 days." Further, as described in the PBS Technical Report, minor blasting (such as misholes in drift rounds) could be done periodically during work shifts but would be only a single hole per delay versus the four assumed in the PBS Technical Report for drift round blasting and consequently would result in only 25% of the vibration produced by drift round blasting. As such, contrary to the commenter's assertion, the hours of operation for blasting activities are disclosed in the DEIR, and blasting would typically occur at 7AM and 7PM, with some minor blasting at other hours, including nighttime hours.

As opposed to vibration, audible noise from underground blasting can only propagate to surface from through the mine tunnels and shafts. Therefore, noise impacts from blasting are relative to a receptor's proximity to the shaft headframes at the Brunswick site and not the location of the underground workings. As stated on page 4.10-44 of the DEIR, the noise from blasting is less

than significant even for the closest receptors to the Brunswick shaft headframe. Notably, the DEIR states that "[t]he range of predicted worst-case blasting noise levels of 52 to 57 dBA Lmax is below the daytime, evening, and nighttime dBA Lmax criteria at the nearest receptors." (DEIR p. 4.10-45.) As such, the commenter's assertion that nighttime blasting was not analyzed and would result in significant impacts not disclosed in the DEIR is incorrect. Noise impacts from blasting at all hours were disclosed in the DEIR and found to be less than significant after mitigation. (Id.)

Response to Comment Grp 21-49

The commenter asserts that the DEIR is deficient because it does not evaluate noise impacts associated with the separate Centennial Site Cleanup project under the authority of DTSC. The Centennial Site Cleanup project is separate from the Idaho-Maryland Mine Project and its impacts are therefore not required to analyzed in the project's DEIR. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-50

The commenter asserts that the DEIR failed to adequately analyze noise impacts from placement and compaction of engineered fill and cites a separate comment from Salter (Comment Grp 21-131) for the proposition that the DEIR underestimates noise impacts by up to 14 dB, resulting in significant impacts at 11 receptors that were not disclosed by the DEIR. Please see Response to Comment Grp 21-131.

Response to Comment Grp 21-51

The commenter asserts that the DEIR underestimates the project's impacts because it compares project-related noise to ambient conditions near roadways. Please see Response to Comment Grp 21-133. The commenter also states that the DEIR did not consider changes above ambient noise levels and only considered County noise standards. This is factually incorrect, as the DEIR analyzed impacts from noise increases that are still below County noise standards. Please see Chapter 4.10.3, Table 4.10-5 of the DEIR, and Response to Comment Grp 21-133.

Response to Comment Grp 21-52

The commenter asserts that the DEIR is inadequate because it incorporates noise reducing project design features. As discussed in Responses to Comments Grp 21-135 to Grp 21-141, the Project Design incorporates numerous noise-reducing features such as placing equipment within enclosed buildings and use of silencers. The noise analysis was based on the implementation of these features, and as part of the Project Description, the County has authority to require that such features are installed during project construction and implementation. The commenter asserts that each feature needs to be specifically identified; however, CEQA does not require every piece of equipment to be specifically identified, only that the equipment be commercially available. Engineering level detail is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.). Furthermore, Mitigation Measure 4.10-3 requires a comprehensive noise monitoring program to be conducted of each facet of the operation to verify the modelling assumptions of the project and to ensure that compliance with the applicable Nevada County noise standards is being achieved at nearby sensitive receptors. If results indicate that noise standards are being exceeded, operations shall cease until additional engineering controls can be implemented as needed. The required mitigation measure will therefore ensure that any necessary engineering controls for reduction of noise are implemented for the project.

Nonetheless, to clarify that the noise reducing technology discussed in Chapter 4.10 of the DEIR is implemented through an enforceable mechanism, the County will require the following condition of approval be imposed as part of project approval:

> COA 7: The applicant shall be required to install all noise reducing project features and equipment included in the Project Description, and assumed in the noise impact analysis included in Chapter 4.10 of the DEIR. While the applicant is not required to use the specific brands and models assumed in the DEIR, the applicant shall be required to demonstrate that the noise reducing project features and equipment actually installed as part of the project achieve the same or better noise reduction as was assumed in the DEIR. The applicant shall be required to provide specifications on all installed noise reduction features and equipment to the County to verify that the noise reductions comply with the assumptions in the DEIR. Further, the County will verify and enforce use and operation of noise reduction equipment and features through implementation of Mitigation Measure 4.10-3.

Response to Comment Grp 21-53

This comment summarizes the arguments made by Salter in Comments Grp 21-143 and Grp 21-144. Please see Responses to Comments Grp 21-143 and Grp 21-144.

Response to Comment Grp 21-54

This comment summarizes the arguments made by Salter in Comment Grp 21-145. Please see Response to Comment Grp 21-145.

Response to Comment Grp 21-55

The commenter asserts that the DEIR needs to include more analysis of the existing environmental contamination conditions at the Centennial Site, in the event that the DTSC cleanup project is not completed. Section 1.3 of the DEIR provides an overview of conditions at the Centennial Site and an explanation regarding the baseline approach used by the DEIR. However, the commenter's concerns regarding the existing environmental contamination on the Centennial Site are misplaced because the project cannot utilize the Centennial Site for placement of engineered fill unless and until such cleanup work, under the authority of the DTSC, has been completed. The Project Description does not allow for placement of fill on the Centennial Site until such cleanup is completed, and the ongoing DTSC cleanup project precludes use of this site until the voluntary cleanup is complete. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-56

The commenter asserts that the DEIR fails to analyze or mitigate hazardous impacts relating to waste rock and mine tailings and cites the comment from the Baseline comment Grp 21-109. Please see Response to Comment Grp 21-109, Master Response 8 - Mine Waste Characterization, and Master Response 9 - Historical Mine Waste at Centennial Site.

Response to Comment Grp 21-57

Please see Response to Comment Grp 7-95.

Response to Comment Grp 21-58

The commenter asserts that the DEIR failed to analyze the cumulative hazard impacts of the separate DTSC project along with the project and specifically asserts that the DEIR should have analyzed the impacts of the Centennial DTSC Cleanup Project hauling hazardous materials along Brunswick Road in conjunction with the project. While the DTSC Cleanup project is separate from the project, the DTSC Cleanup project does not propose to haul hazardous material along Brunswick Road and proposes to cap any contaminated material in-place on the Centennial Site. Accordingly, the commenter's premise that the DTSC Cleanup project would have cumulative hazard impacts along with the project due to the DTSC Cleanup project hauling hazardous material is unfounded. The separate DTSC Cleanup project would be required to comply with applicable local, state and federal laws and regulations regarding release of hazardous materials, as such no cumulative impact is expected.

As discussed in the DEIR, "*In general, hazardous materials and other public health and safety issues are site specific and/or project-specific, and would not be significantly affected by other development within the project area. While the proposed project would involve haul of hazardous materials to and from the Brunswick Industrial Site via Brunswick Road, no other cumulative projects are anticipated to similarly haul hazardous materials along Brunswick Road on an ongoing basis. In addition, cumulative development projects would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community*." As concluded in the DEIR, the project along with other projects that are subject to local, state and federal requirements would not cause a cumulative hazard impact due to the application of those laws and regulations. The DTSC Cleanup project is clearly subject to ongoing state oversight, and therefore would not contribute to a cumulative hazard impact in connection with the project. Also, please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-59

The commenter generally states that the DEIR is inadequate because it fails to analyze the DTSC Cleanup project's impact on air quality, the project's impact on air quality that will occur if the DTSC Cleanup project does not occur, includes a contradictory project construction timeline, improperly relies on assumed mitigation measures, fails to mitigate significant air quality impacts from operational emissions of criteria pollutants, and that the health risk assessment fails to disclose essential information and lacks substantial evidence of its conclusions. The commenter's arguments are addressed in responses to the commenter's more specific comments that ensue in the letter. Please see Responses to Comments Grp 21-60 through Grp 21-67 below.

Response to Comment Grp 21-60

The commenter asserts that the project's DEIR must analyze air quality impacts from the DTSC Cleanup project, asserting that the DTSC Cleanup project is an essential part of the project. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-61

The commenter argues that the DEIR did not adequately address the project's air quality impacts that would occur in the situation where the Centennial Site clean-up is not completed within the life of the project and sale of waste rock and sand tailings were to occur sooner than anticipated. The DEIR analyzed the impacts of off-site hauling of rock material to the construction aggregate

market, starting in 2033; however, it was assumed that prior to 2033, rock material would be placed on the Brunswick engineered fill pile and Centennial Site engineered fill pile.

Based on public comments regarding the air quality and GHG impacts associated with hauling of rock material to construction aggregate purchasers earlier than anticipated, the applicant has agreed to a condition of approval that would require the applicant to use electric trucks for any offsite sale or transport of waste rock or sand tailings from the Brunswick site (other than to the Centennial Site) if such transport occurs prior to 2033. Hauling of material to offsite locations for use as construction aggregate starting in 2033 was already assumed in the DEIR's analysis; thus, the emissions impacts associated with this activity are already included in the DEIR, regardless of whether the Centennial Site is available for placement of fill material. The below condition would ensure that the project would not have greater air quality and GHG emissions impacts than analyzed under the DEIR even if the Centennial Site is not available for placement of engineered fill. The text of the condition of approval is provided below:

> COA 4: In the event that sand tailings or waste rock material is transported from the Brunswick Site prior to 2033 to locations other than the Centennial Site, all transport of such material shall be accomplished using electric vehicles.

Response to Comment Grp 21-62

The commenter asserts that the DEIR is inadequate because the Project Description states that project construction is expected to take 18 months; however, the air quality analysis assumes that the project construction would take only 12 months. Please see Master Response 24 - Project Construction Schedule.

Response to Comment Grp 21-63

The commenter asserts that the DEIR is deficient because the applicant proposed measures (APMs) included in the air quality analysis are not incorporated as mitigation measures or as part of the Project Description and therefore there is no assurance that these APMs will be implemented. As the applicant proposed these measures as part of the project, prior to analysis of air quality impacts of the project, they are properly considered part of the Project Description. Regarding project design, CEQA Guidelines 15070(b)(1) and 15126.4(a)(1)(A) specifically permit the incorporation of project design features into a project. Nonetheless, to clarify that the APMs are enforceable conditions, a condition of approval shall be imposed on the project, and incorporated into the MMRP to require that applicant proposed measures APM-AQ-1, APM-AQ-2, and APM-AQ3 will be implemented by the mine operator, as already discussed in Response to Comment Grp 21-7.

The commenter cites *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, for the proposition that the APMs should be considered mitigation measures rather than incorporated into the project, to allow for evaluation of the effectiveness of mitigation. However, unlike the situation in Lotus, the DEIR contains APMs, which were proposed by the applicant as part of the project, but also contains Mitigation Measure 4.3-1(a) and Mitigation Measure 4.3-1(b), which are evaluated separately from the project's pre-mitigation impacts. The project is clearly distinguishable from the situation in *Lotus*, which involved mitigation of Caltrans' impacts to old growth redwood roots based on incorporation of nine avoidance, minimization, and/or mitigation measures including methods of excavation in root zones, watering regimes, plant care, fill management, and replanting methods. Unlike the *Lotus* case where the mitigation was

incorporated as part of the project leading to a less-than-significant conclusion without analysis of those measures and based on a subjective judgment that was not clearly disclosed to the public, the project's criteria air pollutant emissions incorporating the APMs as part of the proposed project can be directly measured against numerical emissions thresholds established by the Northern Sierra Air Quality Management District. In other words, while the EIR in *Lotus* involved a subjective threshold related to root damage where the analysis was hidden from the public, the APMs in the DEIR relate to an objective threshold for which the public and decision makers can clearly assess whether the project (including the APMs) is below or exceeds. Finally, the incorporation of separate mitigation for this same air quality impact (Mitigation Measure 4.3-1(a) and Mitigation Measure 4.3-1(b)), also distinguishes the DEIR's APMs from the situation in *Lotus.*

Response to Comment Grp 21-64

Please see Response to Comment Grp 21-63.

Response to Comment Grp 21-65

The commenter asserts that the DEIR is deficient due to the lack of explanation on the reduction of criteria air pollutant emission impacts to a less than significant level. Please see Master Response 19 – NSAQMD Criteria Pollutant Thresholds during Operations.

Response to Comment Grp 21-66

The commenter asserts that the health risk assessment in the DEIR fails to disclose essential information and lacks substantial evidence to support its conclusions. Extensive documentation of project emissions in different phases of the project are provided in Appendix E.1 of the DEIR. Mitigation Measure 4.3-1(b) requires that prior to the initiation of construction, Rise Grass Valley Inc. or its designee shall submit a Construction Exhaust Emissions Minimization Plan which includes the use of Tier 4 Final engines for off-road equipment with engines equal to or greater than 50 horsepower. As discussed on pages 4.3-79 and 4.3-80 of the DEIR, this mitigation measure would result in a significant decrease of calculated cancer risk at the Maximally Exposed Individual Resident from 10.4 to 7.6 per million. Detailed emission data is provided in Appendix E.1 of the DEIR. As shown on pages 114 of Appendix E.1, the annual emissions of PM_{10} (used to calculate health risk from diesel exhaust) from offroad equipment in the unmitigated scenario is 0.27 tons/year, and as shown on page 118 of Appendix E.1, the annual emissions of PM_{10} from offroad equipment in the mitigated scenario is 0.08 tons/year. This substantial reduction in diesel exhaust emissions during construction results in a substantial reduction to health risk at the MEIR. A memo showing health risk isopleths, sensitive receptor locations, and health risk at the MEIR by pollutant and project phase has been prepared to clarify the results of the health risk assessment. Please see Dudek Health Risk Memorandum attached to the Final EIR as Appendix K. The cancer health risk exposure at the MEIR (see pages 1632-1634 of memo) is summarized in the table below. Pollutants with negligible associated health risk are excluded from the table. Construction emissions of asbestos and diesel exhaust comprise the majority of calculated health risk and the use of Tier 4 engines for construction in the mitigated scenario significantly decreases calculated health risk as shown in the below table.

Calculated Caner Risk at the MEIR

Activity	Cancer Risk per million Mitigated	Unmitigated
Construction - Asbestos in Dust	3.7	3.7
Construction - Diesel Exhaust	1.2	4.1
Operations - Asbestos in Dust	1.8	1.8
Operations - Diesel Exhaust	0.6	0.6
Operations - Arsenic in Dust	0.3	0.3
Total	7.6	10.4

Response to Comment Grp 21-67

Extensive documentation of project emissions in different phases of the project are provided in Appendix E.1 of the DEIR. A memo showing health risk isopleths and sensitive receptor locations has been prepared to clarify the results of the health risk assessment. Please see Dudek Health Risk Memorandum attached to the Final EIR as Appendix K. The commenters request visual representations of the results of the Health Risk Assessment (HRA) for the project. The HRA for the project describes the impact to the maximally exposed individual resident (MEIR), which is the residential receptor north of the Brunswick site. The isopleths shown on Exhibits A through D of the Dudek Memo at the Brunswick site are based on the HRA provided in the DEIR for residential receptors. There are no residential receptors in proximity of the Centennial site. In order to plot the isopleth of health risk in this area, a Worker Health Risk Assessment was prepared for the Final EIR. The locations of residential and worker receptors are annotated on Exhibits A through D of the memo. In the case of the calculated worker health risk, no isopleths are shown at the Centennial site because there is no location onsite or offsite where health risk exceeds a level of significance. The health risk to the maximally exposed individual worker (MEIW) is calculated in the memo. As described in the memo, all project emissions, including trucks, off-road equipment, underground/blasting/crushing, ore processing, fuel tank storage, backup diesel generators, and material handling were incorporated into the Worker Health Risk Assessment. The commenter requests detailed information on the activities and pollutants that comprise the calculated health risk at the MEIR. This information is provided on pages 1632 through 1637 of the Dudek Memo. The cancer health risk exposure at the MEIR (see pages 1632-1634 of memo) is summarized in the table below. Pollutants with negligible associated health risk are excluded from the table. Construction emissions of asbestos and diesel exhaust comprise the majority of calculated health risk and the use of Tier 4 engines for construction in the mitigated scenario significantly decreases calculated health risk. Asbestos emissions during construction are based on very conservative estimates (see Response to NSAQMD Comment Agcy 11-17). Asbestos during operations is also conservatively estimated, see Master Response 22 - Conservatism of Asbestos Assumptions. An Asbestos Dust Mitigation Plan is required for both construction and operations in order to minimize exposure of the public to naturally occurring asbestos.

Calculated Caner Risk at the MEIR

Activity	Cancer Risk per million Mitigated	Unmitigated
Construction - Asbestos in Dust	3.7	3.7
Construction - Diesel Exhaust	1.2	4.1
Operations - Asbestos in Dust	1.8	1.8
Operations - Diesel Exhaust	0.6	0.6
Operations - Arsenic in Dust	0.3	0.3
Total	7.6	10.4

Response to Comment Grp 21-68

The commenter asserts that the DEIR fails to adequately analyze or mitigate the project's GHG emissions. This is an introductory comment that summarizes several of the commenter's arguments. The commenter's specific arguments are addressed in Responses to Comments Grp 21-69 through Grp 21-92 below.

Response to Comment Grp 21-69

The commenter asserts that the DEIR fails to adequately analyze the Centennial Cleanup project's GHG emissions impacts. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-70

Please see Response to Comment Grp 21-14.

Response to Comment Grp 21-71

Please see Master Response 24 - Project Construction Schedule.

Response to Comment Grp 21-72

The commenter asserts that the project's commitment to use electrical (non-diesel) equipment for underground mining operations must be an enforceable condition of approval to be used in the GHG emission analysis and energy analysis. While the use of electrical equipment underground is an enforceable part of the Project Description, to clarify the analysis, the County has required the following condition of approval, as also shown in Chapter 4, Mitigation Monitoring and Reporting Program, of this Final EIR:

> COA 8: The applicant shall be required to use only electrical, pneumatic, or battery powered mining equipment in the underground mine.

Response to Comment Grp 21-73

Please see Response to Comment Grp 21-63.

Response to Comment Grp 21-74

Please see Master Response 27 - Greenhouse Gas Thresholds. The commenter states that the DEIR fails to adequately analyze certain GHG emissions generated during project operations, specifically, off-road vehicles and equipment, emergency generator use, underground blasting, and solid waste, etc. No evidence is provided to justify this claim. These GHG emissions sources

were clearly accounted for in the project-specific GHG modeling, as stated on page 80 of Appendix E.1 to the DEIR.

Response to Comment Grp 21-75
Please see Master Response 27 - Greenhouse Gas Thresholds.

Response to Comment Grp 21-76
Please see Master Response 27 - Greenhouse Gas Thresholds.

Response to Comment Grp 21-77
The commenter asserts that the DEIR fails to calculate the total amount of GHG emissions over the life of the project. However, the total amount of GHG emissions over the life of the project is not relevant to the applicable significance threshold. In addition, the annual anticipated GHG emissions for each year range is provided, such that a reader could calculate the sum easily, if desired. The commenter calculated this amount in its comment; thus, the DEIR did not fail in disclosing this information to the Public. The commenter fails to provide evidence as to why the failure to provide a sum of numbers already provided is a serious deficiency. Please see Master Response 27 - Greenhouse Gas Thresholds.

Response to Comment Grp 21-78
The commenter asserts that the DEIR must analyze operational emissions against a net-zero GHG threshold. Please see Master Response 27 - Greenhouse Gas Thresholds.

Response to Comment Grp 21-79
The commenter asserts that the DEIR's GHG mitigation offsets lack adequate performance standards and are improperly deferred. Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-80
The commenter asserts that the DEIR's GHG mitigation offsets are not additional, real, permanent, verifiable and enforceable. Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-81
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-82
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-83
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-84
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-85
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-86
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-87
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-88
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-89
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-90
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-91
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-92
Please see Master Response 28 - Greenhouse Gas Credits.

Response to Comment Grp 21-93
This comment is introductory and generally alleges that the DEIR fails to adequately analyze and mitigate the project's impacts on energy use. The commenter's specific arguments are addressed in Responses to Comments Grp 21-94 through Grp 21-97 set forth below.

Response to Comment Grp 21-94
The commenter asserts that the DEIR fails to analyze the energy use of the Centennial Cleanup project. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 21-95
The commenter asserts that the DEIR failed to evaluate the additional energy use that would result from the project if the Centennial Cleanup project does not occur, because rock would need to be transported to the aggregate market rather than to the Centennial site. The DEIR analyzed the impacts of off-site hauling of rock material to the construction aggregate market, starting in 2033; however, it was assumed in the DEIR that prior to 2033, rock material would be placed on the Brunswick engineered fill pile and Centennial Site engineered fill pile. Based on public comments regarding the air quality and GHG impacts associated with hauling of rock material to construction aggregate purchasers earlier than anticipated, the applicant has agreed to a condition of approval that would require the applicant to use electric trucks for any offsite sale or transport of waste rock or sand tailings from the Brunswick site (other than to the Centennial Site) if such transport occurs prior to 2033. Hauling of material to offsite locations for use as construction aggregate starting in 2033 was already assumed in the DEIR's analysis; thus, the energy use impacts associated with this activity are already included in the DEIR, regardless of whether the Centennial Site is available for placement of fill material.

Response to Comment Grp 21-96
Please see Master Response 24 - Project Construction Schedule. The 12-month project construction schedule assumed in the air quality analysis for purposes of conservatively estimating air pollutant emissions includes the same activities and energy use as an 18-month project construction schedule. The difference in the schedules is only that the 12-month schedule

assumes that many of the construction activities happened concurrently rather than sequentially. As such, the sum energy consumption under either scenario would be the same.

Response to Comment Grp 21-97

Please see Response to Comment Grp 21-63.

Response to Comment Grp 21-98

The commenter asserts that the DEIR's Alternative Analysis is inadequate, but does not identify any specific deficiencies in the analysis.

Response to Comment Grp 21-99

The commenter asserts that the DEIR failed to include a reasonable range of alternatives for the project because the DEIR mistakenly concluded that multiple impacts were less than significant when, according to the commenter, these impacts should have been determined to be significant and unavoidable. The commenter does not explain why the DEIR is incorrect about the other impacts listed in the comment. See responses to the commenter's other comments above and below regarding the DEIR's impact conclusions. The commenter also asserts that the DEIR should be revised and recirculated. The County has determined that recirculation of the DEIR is not required as the factors set forth under CEQA Guidelines 15088.5 for recirculation are not met. Please also see Response to Comment Grp 21-100.

Response to Comment Grp 21-100

As summarized in DEIR section 6.2, and provided in CEQA Guidelines section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis since they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the public and decisionmakers.

Response to Comment Grp 21-101

The commenter asserts that the project objectives are defined so narrowly that they essentially call for the project itself, and do not allow for meaningful comparison for the project and the alternatives. However, the commenter is incorrect that the project objectives were purposefully drafted to allow for automatic elimination of all alternatives and selection of the proposed project. Underground gold mining is an extremely capital-intensive business, which is the reason that daily ore production levels were set in project objective no. 1 at a level at which the project could realistically obtain financing to construct the full project buildout (1,000 tons per day). The commenter scoffs at this objective by arguing this is saying "the objective of the project is to implement the project;" however, financing and construction of a mine that will take in excess of 100 million dollars to construct would not be feasible with lower throughput levels than requested by the applicant in project objective no. 1. Notably, the historic mining operation averaged approximately 1,000 tons per day of production in the years before the forced closure in 1942 and the proposed throughput for the project proposed re-opening of the mine at a similar throughput is therefore a reasonable objective.

Regarding the commenter's sharp dismissal of project objective no. 2 (locate the project on property that Rise Grass Valley, Inc. owns that provides an existing access to the underground workings), the commenter appears to be unfamiliar with the fundamentals of geology and with CEQA Guidelines Section 15126.6. (Consideration and Discussion of Alternatives to the Proposed Project.) Economical quantities of gold only exist in very limited locations throughout the world; therefore, placement of Rise's gold mining project on land that it owns (which is known to contain gold - unlike most other properties) is clearly a more important project objective than would be the case for other projects where numerous locations might be suitable. Gold is a very rare mineral that does not occur on most properties; thus, Rise Gold cannot readily consider moving its project to alternative locations. As stated in CEQA Guidelines Section 15126.6(f)(2)(B), "in some cases there may be no feasible alternative locations for a geothermal plant or mining project which must be in close proximity to natural resources at a given location."

Accordingly, contrary to the commenter's assertion, the project objectives reflect the specialized nature of the project, not a narrowly defined set of objectives designed to eliminate consideration of any alternative.

Response to Comment Grp 21-102

The commenter asserts that the project alternatives are flawed because, like the project, they assume that the Centennial Cleanup Project will be completed. The commenter does not explain why the DEIR must assume the DTSC project is not completed for the purpose of analyzing alternatives to the project, and provides no legal authority for this position. Please also see Master Response 4 – Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 21-103

Please see Responses to Comments Grp 21-100 and Grp 21-101.

Response to Comment Grp 21-104

Please see Responses to Comments Grp 21-100 and 21-101. The commenter generally suggests a mixed-use employment center as an alternative but does not provide enough detail for the County to analyze this proposal (e.g., it is unclear which site the commenter is referring to). In footnote 14 the commenter asserts that the County's General Plan designates the Centennial site as "Industrial" whereas the City of Grass Valley designates the site as "Urban Medium Density" and asserts that the project would violate the County's General Plan policy 1.8.3. The commenter characterizes General Plan Policy as "calling for its land use designations to be consistent with the City's designations;" however, the commenter overstates the County policy of "consistency." Rather than require strict consistency, General Plan Policy 1.8.3 states that "the Nevada County General Plan Land Use Maps will generally reflect the City's/Town's General Plan land use mapping." (General Plan Land Use Element, p. 1-43 (emphasis added).) The project is not proposing to change the general plan designation of the Centennial site, and the Centennial site will retain its existing Industrial County General Plan designation that existed prior to the project being proposed. As the project is not proposing any change to the existing General Plan designation (or zoning) that currently exists, the commenter's argument that the project is causing a land use conflict between City and County zoning is baseless.

The last sentence of General Plan Policy 1.8.3, states "the County's Plan will not preclude implementation of the City's/Town's Plan by providing for a significantly more intensive land use than the City's/Town's Plan." The commenter implies that the project violates this policy with

respect to the Centennial Site because the Industrial land use designation in the County's General Plan allows more intense land uses than the City's Urban Medium Density designation. Again, the project is not inconsistent with this portion of Policy 1.8.3 as the project does not propose to change the General Plan designation of the Centennial Site. The General Plan designation of the Centennial Site was established by the County prior to and separately from the proposed project. Accordingly, even if the Industrial land use designation was inconsistent with the City's Urban Medium Density land use designation and allowed much more intense use, the project is not the cause of any alleged inconsistency. Moreover, the project is not proposing any specific Industrial land use and is therefore not creating a "more intensive land use" than allowed by the City's land use designation. Rather, the project merely proposes placement of engineered fill on the Centennial Site, which would create a level area adequate for future industrial use. Nonetheless, no industrial use is proposed, and the placement of engineered fill would also make the site more conducive to development of uses anticipated under the City's Urban Medium Density designation. The project does not include any entitlements that would require the Centennial Site to be developed for industrial use in the future. In summary, the project is not changing the land use designation of the Centennial Site and is not approving any specific land use that would conflict with the City's land use designation; therefore, the project is not in violation of General Plan Policy 1.8.3.

Response to Comment Grp 21-105

The commenter asserts that the County may not approve the proposed project because Alternative 2 (Elimination of Centennial Industrial Site) would meet nearly all of the project objectives and is the environmentally superior alternative. In support for its argument the commenter cites Public Resources Code Section 21002 for the proposition that "an agency may not approve a proposed project if a feasible alternative exists that would meet a project's objectives and would diminish or avoid its significant environmental impacts." (Comment Grp 21-105, emphasis added) However, Public Resources Code Section 21002 states that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects." (Emphasis added.) The commenter mistakenly uses the term "diminish" when the actual CEQA statute uses the term "substantially lessen," which has a different meaning, due to the qualifying term "substantially."

While the DEIR acknowledges that Alternative 2 may lessen some traffic impacts, it would still result in significant and unavoidable traffic impacts and all other significant impacts of the project would remain unchanged under Alternative 2. (DEIR pp. 6-21 to 6-29.) As such, while Alternative 2 would somewhat lessen traffic impacts, it is not an alternative that "would substantially lessen the significant environmental effects of such projects" and therefore Alternative 2 does not preclude approval of the proposed project. (Public Resources Code Section 21002 (emphasis added).)

The commenter cites *Citizens for Quality Growth v. City of Mt. Shasta* (1988) 198 Cal.App.3d at 443-45 in support of its argument; however, this case uses the "substantially lessen" standard from the CEQA statute rather than the different "diminish" standard used by commenter. (Id. At 438.) Further, *Citizens for Quality Growth* is distinguishable from the project, because in that case the City of Mount Shasta failed to make any findings regarding the infeasibility of the alternatives. In this case, the County has not yet made any findings regarding the project and will do so at the time of project approval or denial.

The other case cited by the commenter, *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 720, includes the same correct "substantially lessen" standard used in the CEQA statutes rather than the commenter's asserted "diminish" standard and also includes commentary on the *Citizens for Quality Growth* case (also cited by commenter), which shows that commenter's interpretation of that case was misguided. As stated by the court in *Kings County Farm Bureau,* "[c]ontrary to appellant's contention, *Citizens For Quality Growth* v. *City of Mt. Shasta, supra,* 198 Cal.App.3d 433, did not hold CEQA compelled adoption of one of the alternative projects if it would avoid the identified environmental damage … [i]t merely required the agency to weigh the feasibility of the proposed alternatives and to make findings regarding feasibility." The County will make any appropriate findings at the time of project approval or denial.

The commenter also cites CEQA Guidelines Section 15126.6(b) for the proposition that "the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." The commenter argues that under CEQA Guidelines Section 15126.6(b), Alternative 2 must be selected and approved rather than the proposed project even though Alternative 2 does not satisfy all of the project objectives. However, CEQA Guidelines Section 15126.6(b) relates to what alternatives should be discussed in an EIR, and does not include a mandate as to what alternative must be selected. In this case, the DEIR does include discussion of alternatives that do not satisfy all project objectives, and is therefore consistent with the requirements of CEQA Guidelines Section 15126.6(b).

Response to Comment Grp 21-106

The commenter summarizes its prior comments and then asserts that the DEIR should be revised and recirculated. Please see Responses to Comments Grp 21-1 through Grp 21-105. As discussed in more detail in the Introduction chapter of this Final EIR, the County has determined that recirculation of the DEIR is not required as the factors set forth under CEQA Guidelines 15088.5 for recirculation are not met.

Response to Comment Grp 21-107

This is an introductory comment. The commenter's specific comments and questions are addressed below.

Response to Comment Grp 21-108

The commenter asserts that the DTSC cleanup project and the mine project should be analyzed under one CEQA document. Please see Master Response 4- Cleanup Project is a Separate Project Under CEQA. Also see Section 1.3 of the DEIR regarding the DEIR's approach to the Centennial Industrial Site CEQA baseline.

Response to Comment Grp 21-109

The commenter asserts that the character of historic mine waste found on the Centennial site is evidence that the project will cause hazards and water quality impacts. The commenter also asserts that the DEIR's mitigation requirement of submitting a Report of Waste Discharge to the Regional Water Quality Control Board for placement of engineered fill is insufficient. Description of the waste rock and mine tailings, including the related analytical data, are presented in Chapter 4.8 of the DEIR and the analysis of air quality and health risk assessment are provided in Chapter 4.3 of the DEIR. Geochemical testwork of mine materials is presented in section 4.4 of Appendix K.2. Accordingly, the impacts associated with the chemical composition of the rock that will be

mined at the project site is included in multiple sections of the DEIR. The commenter dislikes that these discussions are not placed into the Hazards section of the DEIR; however, the individual impacts related to the chemical composition of the rock are analyzed in the most appropriate sections of the DEIR for those impacts.

The commenter asserts that based on the quality of historic mine waste at the project sites, the project would "almost certainly result in numerous new contaminated waste sites that pose a threat to the public and the environment." However, the proposed project would produce mine waste with lower sulfide and metal content than those produced historically. Further, the historic mine waste has been determined to be Group C mining waste (Please see Master Response 9) from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity. Please see Master Response 9 – Historical Mine Waste at Centennial Site. While the commenter alleges that mitigation requiring submittal of a Report of Waste Discharge, and compliance with water quality standards is not proper mitigation, compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards. (14 CCR Section 15126.4.)

The same paragraph on page 4.8-50 of the DEIR, cited in this comment, discusses the data sets used to evaluate the potential impacts on water quality related to the placement of engineered fill. Based on that information, the DEIR concludes that there would be a potentially significant impact related to the placement of engineered fill (at page 4.8-51, Conclusion paragraph) and provides Mitigation Measure 4.8-1(e). This mitigation measure lists the evaluations that the Water Board will use to determine the appropriate mining waste classification, which would be based on existing data, as presented in the DEIR, and future data, to be provided in the Report of Waste Discharge. Determination of the mining waste classification would define the CCR Title 27 specifications for construction of the disposal units that will contain the engineered fill. The Title 27 specifications identify the measures that would be required to prevent any leaching of hazardous materials and other non-hazardous constituents at levels that would exceed applicable water quality standards. Please see Master Response 8 – Mine Waste Characterization. As noted in Master Response 8, Mitigation Measure 4.8-1(e) has been revised in response to the CVRWQCB comment letter on the DEIR for clarification purposes (see Response to Comment Agcy 5-4). The revised mitigation language clarifies that, in accordance with Title 27 of the California Code of Regulations (CCR), the applicant shall prepare and implement a Waste Characterization Plan which shall be incorporated into the approved WDR. The purpose of the Characterization Plan is to continually evaluate the different forms of mining wastes and to appropriately classify these wastes as Group A, Group B, or Group C based on an assessment of the potential risk of water quality degradation posed by each waste. Through the WDR these wastes shall be managed, treated, stored, or disposed of in a manner that is protective of water quality. The applicant shall not sell or utilize waste rock and tailings from the project for construction aggregate or fill purposes offsite (i.e., sites other than the applicant's Brunswick and Centennial sites) unless such material has been tested and confirmed to qualify as Group C mining waste under California Code of Regulations Section 22480 and the approved WDR. The specific methods, volumes and frequency of characterization shall be established in the approved WDR.

Response to Comment Grp 21-110

The analysis provided in Chapter 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. Pursuant to Nevada County General Plan Policy 17.12, the project would address this by installing a potable water supply line in East Bennett Road and providing individual well owners with a connection to the potable water line. No significant impacts to domestic water wells are predicted in the Greenhorn, Woodrose, Beaver or other areas. The predictions include the use of a 100% safety factor, multiple sensitively scenarios, which have been peer reviewed by the County's independent expert consultant. However, the DEIR acknowledges that without the implementation of a groundwater monitoring plan and well mitigation plan, the project could result in a significant impact to groundwater supplies.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented.

The commenter states it would not be possible for pre-dewatering baseline levels to be determined when they would be based on an assessment that would not start until after dewatering begins. However, the commenter is not correct in its understanding of the required mitigation. Mitigation Measure 4.8-2(a)(1) requires water-level monitoring data for a minimum of 12 months before commencement of dewatering of the mine. This data will be used to establish the baseline for each well before commencement of mine dewatering. As such, the commenter is incorrect that groundwater monitoring and baseline data collection is deferred until after dewatering.

As stated in Section 3.0 of the GMP, the drawdown caused by project dewatering will propagate outward over time. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Obviously, the dewatering of the mine workings cannot take place until the appropriate permits are in place and the CEQA process is complete.

The commenter asserts that the collection of groundwater data from monitoring wells as part of Mitigation Measure 4.8-2(a) is not appropriate because it defers the mitigation to the future. However, deferred mitigation may be appropriate where a local agency commits itself to mitigation and specific performance criteria are articulated. (*San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670-671; see also *North Coast Rivers Alliance v. Marin Municipal Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 647 [upholding deferred mitigation measure for potential pile-driving impacts on special-status fish species]; *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1448–1450 [a deferred approach may be appropriate where it is not reasonably practical or feasible to provide a more complete analysis before approval and the EIR otherwise provides adequate information of the project's impacts].) Deferred mitigation measures are also explicitly permissible under the CEQA Guidelines. (See 14 CCR Sec. 15126.4(a)(1)(B).)

In this case, the deferral of setting up a monitoring well network until after project approval is appropriate, because Mitigation Measure 4.8-2(a) and Mitigation Measure 4.8-2(b) include specific performance criteria that ensure impacts will be mitigated. Further, the commenter's criticism is misplaced, because the collection of data from monitoring wells, even if done as part of the DEIR process, would not change the impact analysis. The groundwater impact analysis was based on a computer model of regional groundwater flow, which is already calibrated against levels of individual groundwater wells under existing (pre-dewatering) conditions. Additional measurements would not substantially inform or change that analysis.

In addition, as discussed in Master Response 15 – Adequacy of Groundwater Monitoring Wells, to provide property owners additional assurance regarding impacts of mine dewatering, a condition of approval will be imposed on the project requiring that monitoring of domestic water wells will be conducted upon request for property owners within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. Some of these properties do not have a domestic water well but to ensure that well owners are not excluded all owners will be contacted by the Company.

Response to Comment Grp 21-111

The commenter states that the DEIR does not appropriately acknowledge the uncertainty associated with groundwater supply in fractured bedrock and implies that the groundwater model used in the DEIR is not appropriate for the project site. Please see Master Response 14 - Adequacy of Groundwater Model. Page 25 of DEIR Appendix K.3 acknowledges that there are uncertainties in groundwater modelling and states that the predicted contours are based upon the numerical groundwater flow model and the assumptions inherent in the model. Actual, in-field measured water levels may be different from the predicted water levels due to heterogeneities in the hydrogeologic system.

Response to Comment Grp 21-112

The commenter asserts that the water level measurements used to calibrate the groundwater model are insufficient. However, the groundwater model is calibrated to measured water levels in domestic wells and not just the water level in the Union Hill Mine.

Itasca simulated pre-historical mining conditions (before any mining had taken place). Itasca calibrated the model against current water levels measured in wells outside of the mine area. (DEIR Appendix K.3, Section 4.5). Using the simulated groundwater from the pre-historical mining condition, Itasca calibrated the model using the known inflow rates and underground mine workings from two periods of mining - the Idaho mine in 1918 and the entire connected Idaho-Maryland-Brunswick mine in 1956. The model was also calibrated against the known level of water in the Union Hill Mine in 1956. (Appendix K.3, Section 4.6 pages 21-22). The drain nodes for the mine workings were turned off and mine voids were simulated with a zone of high K and the drains along Wolf Creek (which currently drain the mine) were added at their known elevation. Please see Itasca Clarification of Modeling Components Memo attached to the Final EIR as Appendix O. The model was then compared against current water levels measured in wells in the mine area. The model was found to be correctly calibrated to the current measured water levels. (DEIR Appendix K.3, Section 4.5 page 22).

Response to Comment 21-113

The commenter argues that the groundwater model is inadequate because it predicts water levels to recover after dewatering ceases to a specific range of water level rather than a specific exact water level. As stated on page 25 of Appendix K.3, the model is not designed to simulate seasonal or annual changes resulting from variations in groundwater recharge associated with variations in precipitation and groundwater recharge that would occur over the model simulation period. Therefore, a simulated value is expected to be within the range of seasonal water level variation measured in domestic wells.

In addition to the eight wells shown in Figure 4-8 of the report, as discussed on page 22 of Appendix K.3, the comparison between simulated and measured groundwater levels is shown in Figure 4-9, which shows that the simulated hydraulic heads in 2019 reasonably agree with the measured groundwater levels in numerous other wells in the area. As shown in Figure 4-9, wells with higher quality hydrograph data show higher correlation with simulated water level. Furthermore, as discussed on page 22 of Appendix K.3, the hydraulic conductivity (k) values derived from the groundwater flow model calibration are within the range of EMKO's estimated K values (See Section 3.3.5 of Appendix K.2) and literature values.

Figures 4-8 and 4-9, of Appendix K.3 show that the model reliably predicts historical water levels in domestic wells. Water-level measurements in domestic wells can be influenced by many factors, such as seasonal variations, pumping variations, measurement errors, and so forth. The Groundwater Monitoring Plan (Appendix K.8 of the DEIR) recommends the installation of 30 groundwater monitoring wells at 15 locations to assess variations in groundwater levels. The water-level data from specially designed monitoring wells is more reliable because the data will not be subject to uncertainties associated with individual domestic wells. Water levels will be collected at least 12 months prior to the implementation of dewatering of the existing mine workings. As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining, is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess how drawdowns in the water-bearing zones, for example, the fractured bedrock at the project site, propagate with time as a result of pumping. The water-level data will be used to update the model.

Response to Comment Grp 21-114

The commenter asserts that the groundwater model used for the DEIR did not properly simulate drainage of groundwater from existing mine workings. However, in the calibration of the model during recovery (1956 to 2019), mine voids were simulated with a zone of high K (5,000 ft/day) and high specific yield (effective porosity of 50%) for the area with drifts and raises. The drain nodes for the mine workings were turned off. The drains along Wolf Creek were simulated as drains with surveyed elevations from 2,497 ft to 2,502 ft amsl. Please see Itasca Clarification of Modeling Components Memo attached to the Final EIR as Appendix O.

Response to Comment Grp 21-115

The commenter summarizes its comments from Comments Grp 21-110 through 21-114. Please see Responses to Comments Grp 21-110 through Grp 21-114.

Response to Comment Grp 21-116

This comment is a reproduction of Figure 4.8-7 of the DEIR. Comment noted.

Response to Comment Grp 21-117

The commenter asserts that the selection of a 10% reduction threshold for significant groundwater well supply impacts is not justified. The selection of the 10% reduction as a threshold of significance is discussed in Section 3.2.1, page 80, of Appendix K.2 of the DEIR.

Drawdowns within wells completed in unconfined aquifer conditions are sensitive to the amount of drawdown that occurs as a percent of the total water column. This sensitivity is due to the reduction in the effective transmissivity that occurs as the height of the water column decreases in unconfined aquifers. Simulations using the Theis equation (Domenico and Schwartz, 1990) indicate that reductions in the water column of 20 percent to 40 percent could cause the production rate of the well to become unstable by incrementally decreasing the water column much more than would occur under existing conditions. For this analysis, a 100 percent factor of safety is applied to the potential reduction resulting in unstable conditions, such that a criterion of 10 percent of the water column is used to define wells that might be substantially affected by dewatering of the underground mine workings.

The characteristics of domestic wells in the area is discussed in Sections 3.3 and 4.2 of Appendix K.2 of the DEIR. The position of the well pumps is not known but are not likely positioned with the pump intake barely above the water level. Normal seasonal fluctuation occurs in the groundwater level of 10 ft to 30 ft or more. A water well pump would likely be placed closer to the bottom of the well casing to be below the drawdown created from its own pumping and take advantage of storage volume of the well.

The commenter also states that the DEIR does not describe how drawdown would be determined relative to baseline conditions. Mitigation Measure 4.8-2(a)(1) requires water-level monitoring data for a minimum of 12 months before commencement of dewatering of the mine. This data will be used to establish the baseline for each well before commencement of mine dewatering and would capture seasonal variation in each monitoring well. Further, Mitigation Measure 4.8-2(a)(3) requires the preparation of potentiometric-surface contour maps showing the groundwater elevations across the site. Mitigation Measure 4.8-2(a)(4) requires that for each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings. A potentiometric map is a map of the water table elevation contours which is constructed from the measurements at monitoring wells. The water level in domestic water wells in the mine area can be estimated from this map and the water column for each well can be calculated based on the estimated water level and depth of each well.

As discussed on page 16 of the GMP (Appendix K.8 of the DEIR), actual monitoring well installation locations will be surveyed, and a map of the installed well locations superimposed upon a map or aerial photograph. The locations of domestic wells, project boundaries, and other relevant features will be included on this map. The map will serve as the basis for constructing potentiometric surface maps for baseline water levels. Potentiometric-surface contour maps show the groundwater elevations across the site.

In addition, as discussed in Master Response 15 – Adequacy of Groundwater Monitoring Wells, to provide property owners additional assurance regarding impacts of mine dewatering, a condition of approval will be imposed on the project requiring that monitoring of domestic water wells will be conducted upon request for property owners within or nearby the predicted 1-ft

drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. Some of these properties do not have a domestic water well but to ensure that well owners are not excluded all owners will be contacted by the Company.

Response to Comment Grp 21-118

The commenter asserts that selection of the 10% reduction of water column as a threshold is unsubstantiated. Please see Response to Comment Grp 21-117.

The commenter asserts that under General Plan Policy 17.12, the correct threshold for determining when a mining project may threaten quantity or quality of water supply, is "expert opinion". The analysis provided in Chapter 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. No significant impacts to domestic water wells are predicted in other areas. The predictions include the use of a 100% safety factor, multiple sensitivity scenarios, and the analyses have been peer reviewed by the County's independent expert consultant. However, the DEIR acknowledges that without the implementation of a groundwater monitoring plan and well mitigation plan, the project could result in a significant impact to groundwater supplies.

Response to Comment Grp 21-119

The commenter asserts that to properly comply with General Plan Policy 17.12, the applicant needs to complete a detailed water supply inventory for all wells within the mineral rights boundary including a buffer zone, investigate details for each well, and develop a plan for each well to ensure that immediate water supply can be provided. The proposed analysis suggested by the commenter is not warranted, because there is no evidence that drawdown could impact the entire mineral rights area, given that there is only gold mineralization in certain limited areas. Further, sensitivity studies used in the groundwater model to simulate expanded mining areas did not significantly change the drawdown impacts. Moreover, the groundwater model and water supply analysis included in the DEIR, along with the mitigation provided in Mitigation Measures 4.8-2(a) and 4.8-2(b), provide substantial evidence of the DEIR's conclusions and also provides compliance with General Plan Policy 17.12.

As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining, is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess how drawdowns in the water-bearing zones, for example, the fractured bedrock at the project site, propagate with time as a result of pumping. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. As discussed in the Groundwater Monitoring Plan, 30 groundwater monitoring wells will be installed at 15 locations, not 15 monitoring wells. The locations of the monitoring wells are strategically placed between the mining zone and domestic wells to monitor the potential drawdown extent as the result of mining and assess the potential impacts on domestic wells. As discussed in Section 6.0 of Appendix K.3, after each monitoring well has been installed and developed, the wells will undergo a hydraulic test to obtain hydraulic-conductivity information. As discussed on pages 2-3 of the Groundwater Monitoring Plan (Appendix K.8 of the DEIR) assessment of impacts of water-level changes in domestic wells is difficult to perform when

examining each domestic well on an individual basis because of operational and depth considerations for each well.

The characteristics of domestic wells in the area are discussed in Sections 3.3 and 4.2 of Appendix K.2 of the DEIR. The example in the comment of "a monitoring well could be placed in proximity to an existing supply well and respond very differently to changing water levels in the mine during dewatering if a water-bearing bedrock fracture intersects on of the wells, but not the other" is speculative. This behavior of drawdown can only occur if there were continuous fracture networks that connect the mine with one of the wells. However, as discussed in Appendix K.2, mine workings are not connected to the wells by through-going fractures, but are instead interconnected by a complex pattern of many fractures present throughout the bedrock (page 81 Appendix K.2). Both EMKO's analysis and Itasca's model show that there is currently drawdown from the partially dewatered mine workings and that there will be drawdown from future dewatering. The evidence shows that the fractures are ubiquitous but are not large and continuous. Thus, the monitoring wells will encounter the same fracture networks as the domestic wells and the evidence against continuous fractures is strong. Domestic wells in each different area tend to behave in a similar way (as described in Sections 3.3. and 4.2 of Appendix K.2 to the DEIR).

As discussed in Section 3.3.2 and shown on Sheet 12 of Appendix K.2 of the DEIR, over 1,200 Water Well Driller Reports (also known as Well Completion Reports) available from the California Department of Water Resources (DWR)'s online database for private domestic wells are located within approximately one to two miles of the project site. Many of these wells are geolocated by property location in the DWR database while some are only located by the US Public Land Survey System (PLSS) township, range, and section. In areas within the predicted 1-foot drawdown from the groundwater model, wells with only general PLSS locations in the DWR database were matched to properties and plotted. The well database was also augmented with well data from previous applicant Emgold, which provides additional well information within the 1-foot drawdown isopleth that is not available in the DWR database. All available details about well construction and testing in the area of the 1-foot drawdown isopleth were reviewed and tabulated from the Well Completion Report or Emgold records and are provided and discussed in Section 3.3.2 of Appendix K.2., which are available for the majority of properties. The Well Mitigation Plan has been clarified to include measures to identify any wells not in the well database and gather individual well characteristics should an impact be predicted by the Groundwater Monitoring Plan. The revised Well Mitigation Plan is attached to the Final EIR as Appendix D. The commenter states that a complete inventory of domestic water wells within and beyond the mineral rights boundary is required for the analysis of the DEIR. However, wells outside the 1-ft drawdown were not specifically analyzed for impacts from mine dewatering because they would experience negligible drawdown and therefore would not be impacted by mine dewatering. More effort in including these wells in the well database would not change the analysis or conclusions of the DEIR and therefore is not required.

Nevertheless, as discussed in Master Response 15 – Adequacy of Groundwater Monitoring Wells, to provide property owners additional assurance regarding impacts of mine dewatering, a condition of approval will be imposed on the project requiring that monitoring of domestic water wells will be conducted upon request for property owners within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure

1 of Master Response 15. Some of these properties do not have a domestic water well but to ensure that well owners are not excluded all owners will be contacted by the Company.

Response to Comment Grp 21-120

The Groundwater Monitoring Plan already incorporates the collection of 12 months baseline data from monitoring wells. The applicant has ownership of all previous well monitoring data conducted by Emgold from numerous domestic water wells in the area over multiyear periods. Additional detail has been added to the Well Mitigation Plan, which is attached to the FEIR as Appendix D for clarity of the measures that would be undertaken under this plan.

Response to Comment Grp 21-121

The commenter asserts that the project will have significant impacts related to groundwater dependent biological resources. As discussed on page 121 of Appendix K.2 of the DEIR, discharge of treated water to South Fork Wolf Creek would prevent the lowering of the groundwater levels along the reach of South Fork Wolf Creek because the full dewatering volume would be discharged to the creek, whereas only a small fraction of the groundwater that was removed from the subsurface would come from that area. Thus, the potential increased recharge due to the enhanced base flow in South Fork Wolf Creek would more than offset any effects from dewatering in the area near the creek. Along Wolf Creek, the change in base flow would be a small percentage of the existing flow, with NID releases during the summer being a dominant factor in the dry season.

As discussed on page 3.31 of the DEIR, a buried 48-inch culvert crosses the Brunswick Industrial Site. The culvert transports off-site surface drainage from Brunswick Road and a portion of the watershed to the east and south of the Brunswick Industrial Site. South Fork Wolf Creek originates from the outlet of this 48-inch culvert. The primary source that feeds this section of the creek, upstream of the proposed discharge point, is therefore not associated with groundwater nearby the area.

As such, the project would not lower groundwater levels along the creeks, and consequently would not affect groundwater dependent biological resources. Please see Master Response 33 – Groundwater Dependent Vegetation.

Response to Comment Grp 21-122

The commenter assumes that if the Centennial site was not available for fill placement that fill would be immediately hauled to offsite locations. However, if the Centennial site were not available, fill placement would take place initially at the Brunswick site rather than being hauled to local and regional construction projects. For the purpose of the Air Quality analysis, it was assumed that construction would start in 2021 which has already passed. It is not known when construction would actually start but it could not be before 2023, given the current project schedule. Construction has been assumed for the purpose of the analysis to take 1 year. The placement of fill at the Brunswick site would be placed over a duration of an estimated 6 years, immediately following the completion of construction. Based on the placement of fill at the Brunswick site rather than Centennial, on-road vehicle miles traveled (VMT) and associated emissions would be reduced for this initial phase of operations, as compared to the analysis included in the DEIR. However, assuming that the Centennial site was still not available after this time, offsite hauling of all materials, up to 60 miles one-way, would then commence in year 2033.

A realistic scenario therefore is to use the emissions rates presented for the year 2027 for NOx (see pages 215ff of the pdf document Appendix E.1) rather than the 2021 emission rates used in the commenter's provided calculation. Since logging and chipping at the Centennial site would not be taking place in this alternate scenario, this activity would be removed from the maximum daily NOx emissions. It should also be noted that the maximum daily NOx emissions are calculated for comparison to Northern Sierra Air Quality Management District (NSAQMD) thresholds, rather the annual emissions. As such, the analysis assumes 100 trips per day in the calculation of daily emissions rather than the average 50 trips per day for trucks hauling engineered fill.

Maximum daily project emissions of NOx for the Year 2027 of 100.2 pounds per day is shown in Table 16 of Appendix E.1. After removal of logging associated emissions (41 pounds per day) and on-site haul trucks (3.5 pounds per day – see pages 230 and 231 of Appendix E.1 pdf), the daily NOx emissions without any fill trucking is 55.7 pounds per day NOx. With the shift to off-site hauling, daily NOx for truck hauling would be 69.2 pounds per day, which can be calculated using the 2027 NOx emission rates (page 218 of Appendix E.1 pdf) and VMT, trips, and idling time for off-site hauling (2,190,700 VMT per year for fill haul trucks – see page 246 of the Appendix E.1 pdf). The total NOx emissions per day in this scenario would be approximately 125 pounds per day, which would be at NSAQMD significance threshold level B.

A similar analysis can be made for greenhouse gas emissions using the emission factors, annual VMT, and idling minutes contained within Appendix E.1 of the DEIR. Assuming hauling of all fill off-site starting in 2027, this scenario would result in a total of 9,800 metric tons CO_2e per year, which would also be below the threshold of significance.

Based on the preceding considerations, this scenario, whereby the Centennial Site would not be available for fill placement, would not change the significance determination or conclusions presented in the D EIR for either criteria air pollutants or GHGs. Nevertheless, as noted in Master Response 4, a condition of approval shall be imposed on the project to require that in the event the Centennial Site is not immediately available for placement of engineered fill, that sand tailings or waste rock material transported offsite prior to 2033 would be transported using electric vehicles.

Response to Comment Grp 21-123

Please see Response to Comment Grp 21-63.

Response to Comment Grp 21-124

Please see Master Response 19 – NSAQMD Criteria Pollutant Thresholds during Operations.

Response to Comment Grp 21-125

Please see Response to Comment Grp 21-66.

Response to Comment Grp 21-126

Please see Response to Comment Grp 21-67.

Response to Comment Grp 21-127

Please see Master Response 27 - Greenhouse Gas Thresholds.

Response to Comment Grp 21-128

The County has determined that recirculation of the DEIR is not required as the factors set forth under CEQA Guidelines 15088.5 for recirculation are not met. Please see the Introduction chapter of this Final EIR for a more detailed discussion of recirculation criteria, pursuant to CEQA Guidelines 15088.5.

Response to Comment Grp 21-129

Nighttime noise is thoroughly addressed in the project's noise study. Appendix B of the project noise study (DEIR Appendix L), presents the results of 50 individual days of noise surveys representing 24-hour noise level measurements (including every nighttime hour), conducted at 12 locations in the project vicinity. This extensive noise survey data was utilized to adjust the County's daytime, evening, and nighttime noise level standards to reflect the baseline ambient conditions so that noise impacts could be properly evaluated relative to County standards during ***all*** hours of the day. The results of those adjustments are contained in Table 6 of the project noise study. As noted in Table 9 of the project noise study, off-site hauling would be limited to the hours of 6 am to 10 pm, effectively avoiding the most sensitive nighttime periods when the potential for sleep disturbance would be greatest. The engineered fill activities occurring at both the Brunswick and Centennial Sites are proposed to occur between the hours 7 am - 3:30 pm, also avoiding the more sensitive nighttime hours. While nighttime processing operations are proposed at the Brunswick Site, the most significant noise-generating activities would occur within sound-treated buildings. Figure 10 of the project noise study clearly illustrates the nighttime noise generation of the Brunswick operations, illustrating that exterior noise levels during nighttime hours are predicted to be approximately 40 dBA or less at the nearest residences. Additional information pertaining to the more detailed comments contained in the Salter letter is provided in the specific responses to those comments below.

Table 17 of the project noise study contained in DEIR Appendix L inadvertently included predicted average (Leq) noise levels for engineered fill operations at the Brunswick Site in the column identified as maximum (Lmax) noise levels. This table was included as Table 4.10-14 of the DEIR. In addition, Table 16-A (Table 4.10-12 of the DEIR) and 17 of the project noise study inadvertently included preliminary, not final, modelling run results. These adjustments further affect the combined daytime noise Table 21 of the Noise Report (DEIR Appendix L), which is included in the DEIR as Table 4.10-19. Thus, Tables 4.10-12, 4.10-14, and 4.10-19 are hereby corrected in the Final EIR, as shown below.

Table 4.10-12
Centennial Industrial Site: Engineered Fill Activity Noise Levels

Receptor	Minimum Distance	Predicted Noise Level		Daytime Noise Criteria		Criteria Exceeded?	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
1	500	~~54~~56	~~61~~71	63	81	**NO**	**NO**
2	600	~~50~~52	~~60~~68	68	86	**NO**	**NO**
8	1000	~~44~~51	~~42~~65	55	75	**NO**	**NO**

Note: Engineered fill placement, grading and compaction activities would be limited to daytime hours. As a result, only the daytime criteria are utilized for the assessment of potential noise impacts for this activity.
Source: Bollard Acoustical Consultants, Inc. (2021).

Table 4.10-14
Brunswick Industrial Site: Engineered Fill Activity Noise Levels

Receptor	Minimum Distance	Predicted Noise Level		Daytime Noise Criteria		Criteria Exceeded?	
		L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
15	1400	45	~~45~~50	55	75	**NO**	**NO**
16	1600	46	~~46~~57	53	75	**NO**	**NO**
17	2000	40	~~40~~51	61	75	**NO**	**NO**
18	1600	47	~~47~~59	55	74	**NO**	**NO**
19	1300	40	~~40~~42	55	74	**NO**	**NO**
20	1000	46	~~46~~48	62	75	**NO**	**NO**
21	700	47	~~47~~50	60	75	**NO**	**NO**
22	500	52	~~52~~57	61	75	**NO**	**NO**
23	400	55	~~55~~61	63	75	**NO**	**NO**
24	350	50	~~50~~60	65	80	**NO**	**NO**
25	650	50	~~50~~63	65	75	**NO**	**NO**
26	300	51	~~51~~61	55	69	**NO**	**NO**
27	600	46	~~46~~49	55	69	**NO**	**NO**
28	500	47	~~47~~51	55	69	**NO**	**NO**
29	1200	40	~~40~~41	55	69	**NO**	**NO**
30	1800	~~32~~27	~~32~~30	55	69	**NO**	**NO**

Note: Engineered fill placement, grading and compaction activities would be limited to daytime hours. As a result, only the daytime criteria are utilized for the assessment of potential noise impacts for this activity.

Source: Bollard Acoustical Consultants, Inc. (2021).

Table 4.10-19
Predicted Combined Noise Levels from All Daytime Sources at Nearest Receptors

Receptor	Project Daytime Noise Generation		Daytime Noise Criteria		Criteria Exceeded?	
	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}
1	56	~~68~~71	63	81	**NO**	**NO**
2	54	~~67~~68	68	86	**NO**	**NO**
3	39	46	66	87	**NO**	**NO**
4	37	43	60	75	**NO**	**NO**
5	29	34	54	71	**NO**	**NO**
6	29	34	55	72	**NO**	**NO**
7	29	33	54	71	**NO**	**NO**
8	~~38~~52	~~48~~65	55	75	**NO**	**NO**
9	35	41	53	71	**NO**	**NO**
10	34	40	52	71	**NO**	**NO**
11	34	42	52	72	**NO**	**NO**
12	33	41	54	74	**NO**	**NO**
13	34	43	55	75	**NO**	**NO**
14	41	48	55	75	**NO**	**NO**
15	~~44~~45	55	55	75	**NO**	**NO**
16	~~45~~46	~~51~~57	53	75	**NO**	**NO**
17	43	~~49~~51	61	75	**NO**	**NO**

18	47	~~53~~59	55	74	**NO**	**NO**
19	41	50	55	74	**NO**	**NO**
20	47	55	62	75	**NO**	**NO**
21	47	58	60	75	**NO**	**NO**
22	~~51~~52	62	61	75	**NO**	**NO**
23	55	67	63	75	**NO**	**NO**
24	50	66	65	80	**NO**	**NO**
25	49	67	65	75	**NO**	**NO**
26	51	68	55	69	**NO**	**NO**
27	46	57	55	69	**NO**	**NO**
28	~~46~~47	57	55	69	**NO**	**NO**
29	40	50	55	69	**NO**	**NO**
30	34	39	55	69	**NO**	**NO**
Source: Bollard Acoustical Consultants, Inc. (2021).						

In neither case did the corrected tables result in identification of exceedance of the project's standards at any of the nearest potentially affected noise-sensitive receptors. Additional information pertaining to the more detailed comments contained in the Salter letter is provided in the specific responses to those comments below.

The project proposes several specific measures designed to minimize the transmission of sound from project operations and equipment into the neighboring community. Preliminary noise impact analysis revealed that noise control measures would be required of certain aspects of this project to satisfy the County's noise standards at nearby residences. As a result, the applicant elected to incorporate such industrial noise control measures into the project design and description so as to avoid impacts from the outset. Such "pre-mitigating" of a project's noise generation is common practice. The statement that the project fails to include assurances that the project will not result in noise impacts is incorrect. In fact, an extensive noise monitoring program will be required by Mitigation Measure 4.10-3 of the DEIR upon project start-up and thereafter for the expressed purpose of assuring compliance with the County's noise standards and avoiding noise impacts. Additional information pertaining to the more detailed comments contained in the Salter letter is provided in the specific responses to those comments.

In response to the question as to how blasting at the Brunswick site would be 20 dB quieter at the surface than at the Sutter Gold Site, the commenter is directed to the third and fourth paragraphs of page 58 of the noise analysis prepared for the project. Those paragraphs specifically state that the Sutter Gold shaft is horizontal, whereas the Idaho-Maryland Mine shafts are vertical. In addition, the Idaho-Maryland Mine portals will be smaller than the Sutter Gold shafts. Finally, the Idaho-Maryland Mine portals will be enclosed in buildings providing at least 20 dBA of sound attenuation, whereas the Sutter Gold portal was not. The net effect of these differences is expected to provide blast noise levels of a minimum of 20 dB lower than those generated at Sutter Gold.

Response to Comment Grp 21-130

Comment states that nighttime noise and sleep disturbance analysis should be included. As noted in the Response to Comment Grp 21-129 of this letter, nighttime noise is thoroughly addressed in the project's noise study. Appendix B of the project noise study (DEIR Appendix L) presents the results of 50 individual days of noise surveys representing 24-hour noise level measurements

(including every nighttime hour), conducted at 12 locations in the project vicinity. This extensive noise survey data was utilized to adjust the County's daytime, evening, and nighttime noise level standards to reflect the baseline ambient conditions so that noise impacts could be properly evaluated during all hours of the day. The results of those adjustments are contained in Table 6 of the project noise study.

As noted in Table 9 of the project noise study, off-site hauling would be limited to the hours of 6 am to 10 pm, effectively avoiding the sensitive nighttime periods when the potential for sleep disturbance would be greatest. The engineered fill activities occurring at both the Brunswick and Centennial Sites are proposed to occur between the hours of 7 am - 3:30 pm. While nighttime operations are proposed at the Brunswick Site, the most significant noise-generating activities would occur within sound-treated and insulated buildings. (DEIR 4.10-24.) Figure 10 of the project noise study (Figure 4.10-8 of the DEIR) clearly illustrates the nighttime noise generation of the Brunswick operations, disclosing that exterior noise levels during nighttime hours are predicted to be approximately 40 dBA or less at the nearest residences. Evaluations of sleep disturbance frequently focus on maximum instantaneous noise levels (Lmax), or sound exposure levels (SEL) for discrete individual events. As noted in project noise study Table 22 (Table 4.10-20 of the DEIR), predicted cumulative nighttime maximum noise exposure from all project noise sources would range from 15 dBA to 49 dBA Lmax at the nearest residences. These predicted nighttime maximum noise levels are an average of 39 dBA ***below*** the applicable nighttime maximum noise level standards. The closest any predicted maximum nighttime noise exposure would get to the applicable nighttime noise standard would occur at Receptor 16, where predicted maximum noise levels would be 19 dB ***below*** the applicable nighttime noise standard. These results confirm that significant nighttime noise impacts were not identified for this project and that additional analysis of nighttime noise exposure is unwarranted.

Response to Comment Grp 21-131

Commenter believes the calculated noise level from engineered fill operations would be greater than modeled in the DEIR. A description of engineered fill placement and compaction operations is provided on DEIR page 4.10-31. As noted in the last paragraph of this page, "maximum noise levels were predicted based on the closest proximity of the heavy equipment to each receptor whereas average noise levels were predicted based on the assumption that the earthmoving equipment would be spread out on the project site". As a result, the distances to the receivers shown in Table 4.10-14 are used to compute maximum noise levels at the nearest receptors, but not average noise levels at those receptors. Average noise levels associated with engineered fill operations at both the Brunswick and Centennial sites were computed assuming the fill areas were "area" noise sources within the SoundPlan noise prediction model, thereby placing the collective noise center of the engineered fill operations further from the boundaries of the fill operations. A sound power level of 120 dBA was applied to the area noise source representing the engineered fill operations (see Lw value of 120 dBA in Appendix F of the project noise study (contained within Appendix L of the DEIR). Because average noise levels associated with engineered fill operations were computed assuming the equipment would be spread out on the site (as will actually occur), computed average noise levels associated with engineered fill operations will be lower than computed maximum noise levels associated with that same equipment operating at the closest point to the residences. Table 1 of the Salter letter (incorporated here by reference), provides Salter's computations of noise levels from an 85 dBA noise source associated with engineered fill operations. The levels computed by Salter are based

on a sound level decay rate of 6 dB per each doubling of distance from the noise source, which is consistent with spherical spreading of sound from a point source of noise. However, spherical spreading of sound is only one factor affecting the propagation and attenuation of sound over distance and Salter ignored all other factors affecting attenuation. Other factors affecting sound attenuation which were considered in the SoundPlan model, but which were ignored by the Salter computations, include: atmospheric absorption, shielding by intervening topography or structures, ground absorption, and attenuation caused by tree cover (which is extensive in the area). Another reason the Salter levels were computed to be so much higher than the average noise levels reported in Table 4.10-14 of the DEIR is that Salter is comparing their computed worst-case maximum (Lmax) sound levels against computed average noise levels (Leq), which is not a consistent, apples-to-apples, comparison and will, of course, present a skewed result. CEQA does not require a worst-case scenario analysis, especially one based on maximum sound levels and assuming all equipment will be at the same location.

Response to Comment Grp 21-132

Please see Response to Comment Grp 21-131.

Response to Comment Grp 21-133

In this comment Salter appears to be recommending evaluation of noise impacts relative to median (L50) or background (L90) levels at the nearest receptors. However, the footnotes to Nevada County General Plan Table 9.1 (Noise Standards), which is reproduced as DEIR Table 4.10-4, contains the County's requirements for evaluating compliance with the County's noise standards. Footnote a of GP Table 9.1 specifically states: "Compliance with the above standards shall be determined by measuring the noise level based on the **mean average** of not less than three (3) 20-minute measurements for any given time period. Additional noise measurements may be necessary to ensure that the ambient noise level is adequately determined (emphasis added). Although median (L50) and background (L90) noise levels are lower than average (Leq) noise levels measured during the project's ambient noise surveys, the County's noise standards are provided in terms of averages (Leq) and maximum (Lmax) noise levels, not in terms of median or background noise levels. As a result, the evaluation of ambient conditions for this project focused on average and maximum noise levels, consistent with County noise standards. It should be noted that median noise levels and certainly background noise levels generated during engineered fill operations would be considerably lower than predicted average noise levels for those operations. As such, an evaluation of the project's noise impacts relative to median or background ambient conditions would require utilizing the project's median and background noise generation for a consistent comparison. However, because the County's adopted noise level standards are written in terms of average and maximum noise levels, the impact evaluation conducted for the project appropriately utilized measured average and maximum noise levels to establish baseline ambient conditions, and an evaluation using other descriptors would be inconsistent with the adopted County noise policy.

Please also see Response to Comment Grp 12-28.

Response to Comment Grp 21-134

This comment is similar to Comment Grp 21-133. As a result, the commenter is referred to the Response to Comment Grp 21-133.



Response to Comment Grp 21-135

Commenter believes the DEIR underestimates the potential noise impact from mining. The applicant is proposing that the Sound Transmission Class (STC) 54 construction be utilized where identified in the noise study. It is clear from the DEIR noise analysis that noise control measures would not only be required of this operation but that the applicant is proposing to implement those measures as part of project design and made a condition of approval of the project. (DEIR 4.10-24.) As such, the DEIR does provide the type of disclosure being requested in this comment. Please also see Response to Comment Grp 21-52.

Response to Comment Grp 21-136

Comment is concerning the use of an industrial silencer to provide sound attenuation for the ventilation fans. This comment is similar to Comment Grp 21-135. As with Comment Grp 21-135, the applicant is aware that high-performance industrial silencers would be required for the ventilation fans. As noted in this comment and as stated on Page 4.10-41 of the DEIR, "This reference noise level was projected to the nearest representative receptors to the Brunswick Industrial Site, including the effects of a **silencer providing comparable sound attenuation as the other industrial buildings proposed at the site** (emphasis added). Hence, the DEIR discloses that an industrial silencer is proposed for the shaft ventilation fans.

Response to Comment Grp 21-137

The commenter is concerned with the description of the water treatment plant components provided by the Project Applicant, and whether it is consistent with the project plans, which it is. (DEIR p. 4.10-42.) The 90 dBA noise level at a distance of 5 feet suggested in the Salter comment is irrelevant as the proposed water treatment plant building will be 8,500 square feet in size. Although noise levels within the water treatment plant building could perhaps reach 90 dB at a distance of 5 feet from certain operating equipment, the overall levels within the large building would be far lower. Based on the size of the building, interior noise levels within the water treatment plant building were projected to be approximately 75 dBA. The Salter comment fails to recognize that the predicted noise level of 28 dBA (or less) from the water treatment plant would be 27 dB ***below*** the nighttime noise level standard applicable at the nearest residence. As such, even using Salter's erroneous assumption that sound levels inside the water treatment plant would be 15 dB louder than identified in the DEIR, the resulting levels at the nearest residence would still be 12 dB ***below*** the applicable nighttime noise level standard at the nearest residence. Drawing C-100 and C-101 of Appendix K.4 of the DEIR shows the proposed location of mechanical equipment associated with the water treatment plant. As shown on Drawing C-100, the air/compressor blower for the aerator and the solid separation system are located in their own isolated room, which will allow for extensive enclosure for noise mitigation. Two finish water pumps are located outside of the water treatment building. These pumps would likely be centrifugal pumps and could be enclosed for noise attenuation, if necessary. A submersible pump would be located on the south end of the water treatment pond where an existing metal platform and vertical culverts designed for pump placement are present. This vertical culvert structure provides noise attenuation and could be further improved by installing a cover. The submersible pumps would likely be fully submerged underwater which further attenuates noise from the pump. The exact specifications of all equipment types and engineered enclosure are either not known at this time or could change. It is for this reason that CEQA does not require every piece of equipment to be specifically identified, only that the equipment be commercially available. Engineering level detail is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare*

(1999) 70 Cal.App.4th 20, 26.). Furthermore, Mitigation Measure 4.10-3 requires a comprehensive noise monitoring program to be conducted of each facet of the operation to verify the modelling assumptions of the project and to ensure that compliance with the applicable Nevada County noise standards is being achieved at nearby sensitive receptors. If results indicate that noise standards are being exceeded, operations shall cease until additional engineering controls can be implemented, as needed. The required mitigation measure will therefore ensure that any necessary engineering controls for reduction of noise from the compressor are implemented for the project.

As stated on page 4.10-43 of the DEIR, noise level measurements conducted by Bollard at the Auburn California Wastewater Treatment Plant determined that noise levels of approximately 50 dBA were recorded at a distance of 500 feet from the plant. This noise was generated primarily by pumps and an aeration system and therefore has some similarities to the proposed water treatment plant for the project. Based on a reference level of 50 dBA at 500 feet, the predicted level at the nearest residence 900 feet away would be approximately 45 dBA even without the building. This level would be satisfactory relative to the 55 dBA Leq nighttime noise level standard applicable at the nearest residence. Nonetheless, the water treatment plant building is proposed to be constructed of sound attenuating materials, as disclosed in the noise study prepared for the DEIR, to ensure compliance with County noise standards.

As such, no additional analysis of water treatment plant noise generation or revisions to the DEIR are considered to be warranted.

Response to Comment Grp 21-138

The comment states that all equipment must be specifically identified in the DEIR. As noted on Page 4.10-43 of the DEIR, the four diesel generators will be located inside of the generator building, and would be used for emergency power during interruptions to grid power from PG&E. The overall noise level within the generator building is estimated in the DEIR as being 105 dBA. The applicant is proposing that the STC 54 construction identified in the noise study Appendix D be utilized for this building and has incorporated the STC 54 rating into the project design. It should be noted that there are options for specific components of the generator and other project equipment, and because current equipment models may change by the time specific orders are placed for that equipment, the exact specifications of all equipment types are either not known at this time or could change. It is for this reason that CEQA does not require every piece of equipment to be specifically identified, only that the equipment be commercially available. Engineering level detail is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.). However, the estimated noise generation of the various equipment types are based on equipment substantially similar to that which will ultimately be utilized for the project. Generator enclosures, mufflers, and cooling air silencers are also commonly manufactured and can reduce noise from generators substantially in addition to the noise attenuation of the building. For example, a 1.2 MW Triton enclosed generator is reported to have a noise level of 70 dBA[10] at 7m distance. This is substantially les than the 105 dBA assumed in the analysis of the DEIR. Furthermore, Mitigation Measure 4.10-3 requires a comprehensive noise monitoring program to be conducted of each facet of the operation to verify the modelling assumptions of the project and to ensure that compliance with the applicable Nevada County

[10] https://tritonpower.com/wp-content/uploads/2022/04/1425kVA-Triton-Rental-Grade-Diesel-Generator-TP-RV1425-T4F-RENTAL-TWIN-PACK.pdf

noise standards is being achieved at nearby sensitive receptors. If results indicate that noise standards are being exceeded, operations shall cease until additional engineering controls can be implemented, as needed. The required mitigation measure will therefore ensure that any necessary engineering controls for reduction of noise from the compressor are implemented for the project.

Response to Comment Grp 21-139

Page 4.10-43 describes the general parameters of the mine air compressor. Similar construction is proposed for the compressor building as for the generator building and other noise-generating components of the project. More specific information is not required by CEQA as engineering level detail is not required in an EIR. (*Dry Creek Citizens Coalition v. County of Tulare* (1999) 70 Cal.App.4th 20, 26.) Large compressors used for underground mine air are sophisticated machines and enclosed units which provides noise attenuation without consideration of the building itself. For example, a 7 bar Atlas Copco compressor with 3,200 CFM capacity is reported to have a noise level of 75 dBA[11] at the workstation of the compressor. This is substantially les than the 110 dBA assumed in the analysis of the DEIR. Furthermore, Mitigation Measure 4.10-3 requires a comprehensive noise monitoring program to be conducted of each facet of the operation to verify the modelling assumptions of the project and to ensure that compliance with the applicable Nevada County noise standards is being achieved at nearby sensitive receptors. If results indicate that noise standards are being exceeded operations shall cease until additional engineering controls can be implemented, as needed. The required mitigation measure will therefore ensure that any necessary engineering controls for reduction of noise from the compressor are implemented for the project.

Response to Comment Grp 21-140

The County's approval of the project would not grant the applicant the ability to generate noise at ***any*** level in the neighboring community. Rather, the community will be protected against the potential for ***excessive*** noise by virtue of the fact that the applicant will be required to demonstrate compliance with the County's noise standards through a detailed noise monitoring program, which is a mitigation measure (Mitigation Measure 4.10-3) and will be a condition of approval for the project. As noted in the DEIR (page 4.10-43), the concrete sleeve of the silo and the headframe building is predicted to substantially reduce maximum noise levels generated by shaft-skipping operations. In addition to the steel cladding used to construct the headframe, the STC 54 metal building walls would provide additional attenuation of this noise source. The estimated shaft-skipping noise level is predicted to be attenuated to levels below 50 dBA Lmax at the nearest residences, which would be satisfactory relative to the County's applicable nighttime noise level standards.

Response to Comment Grp 21-141

The comment states that without requiring noise reducing measures it fails to protect the area from excessive noise. As stated above, the noise reducing measures, or “upgrades” as referred to by the commenter, are incorporated into the project design and the project is only approved with those upgrades included. Additionally, the conditions of approval for the project will require these measures. Please see Response to Comment Grp 21-52.

[11] https://www.atlascopco.com/content/dam/atlas-copco/compressor-technique/oil-free-air/documents/ga-355-500/2935036820%20GA%20355-500%20leaflet%20EN%20Antwerp_LR.pdf

Response to Comment Grp 21-142

Commenter opines that it does not agree with the DEIR's analysis regarding blasting vibrations. Please see Responses to Comments Grp 21-143 and Grp 21-144.

Response to Comment Grp 21-143

The project does not expose residents to 0.4 in/sec vibrations on a regular basis for the rest of their lives. Blasting activities are intermittent. As discussed in Chapter 4.10-4 of the DEIR and the PBS Technical Report, a maximum of 0.23 inches per second vibration is modelled where a longhole blast could occur directly beneath a receptor at 500 feet depth. Notwithstanding the rarity of this situation, such a blast might occur every three or four days between shift changes (7AM and 7PM) and would last for only seconds. This level of vibrations is approximately half of the 0.4 inches per second the commenter defines as "borderline unpleasant" based on Figure 3.10 from Bulletin 656. This level of vibrations would be "distinctly perceptible" and approximately 1/5th of the level considered "mildly unpleasant" based on the Caltrans table of human response to blasting ground vibration provided by the commenter. At 500 feet depth and a horizontal offset of 1,400 feet, such a longhole blast would be undetectable by blasting seismograph (PPV <0.05 in/sec).

Regular drift round blasting, occurring approximately twice daily over several seconds, are modelled to result in a maximum of 0.14 inches per second vibration at a depth of 500 feet directly beneath a receptor. At 500 feet depth, and a horizontal offset of 900 feet, a drift round blast would be undetectable by blasting seismograph (PPV <0.05 in/sec).

Historic mining was completed to approximately 1600 feet depth and the majority of future mining would be below the historic mine. At this distance, regular drift round blasting and longhole blast would be undetectable by blasting seismograph (PPV <0.05 in/sec) at receptor locations directly above the blast location. Commenter's characterization of blasting activities and vibration is misleading, assuming a near constant, standard and uniform ground vibration, but is contradicted by both the Technical Blasting Report and DEIR. As commenter states, 0.4 in/sec vibration limit might be appropriate in a short-term event. Episodic underground blasting no more than twice per day is a short-term event.

Response to Comment Grp 21-144

The comment suggests restrictions on evening and nighttime blasting vibration operations. Commenter fails to note that the project is not subject to regulations under the Surface Mining Control and Reclamation Act of 1977, which deals *exclusively* with the regulation of surface coal mining operations. Non-coal mining is regulated by each State under its own laws and regulations. Given the foregoing, it is not surprising that the OSMRE Blasting Guidance Manual also applies exclusively on surface blasting to uncover surface coal deposits. There is no analogy that can be drawn between surface blasting a coal mine under federal regulations and minor blasting 1600 feet underground under state regulations.

Blasting noise is discussed in Chapter 4.10-3 of the DEIR and the worst-case maximum noise levels at the nearest noise-sensitive receptors would range from 52 to 57 dBA Lmax. The range of predicted worst-case blasting noise levels of 52 to 57 dBA Lmax is below the daytime, evening, and nighttime dBA Lmax criteria at the nearest receptors.

As discussed in Chapter 4.10-4 of the DEIR and the PBS Technical Report, a maximum of 0.23 inches per second vibration is modelled where a longhole blast could occur directly beneath a

receptor at 500 feet depth. Historic mining was completed to approximately 1600 feet depth and the majority of future mining would be below the historic mine. At this distance, regular drift round blasting and longhole blast would be undetectable by blasting seismograph (PPV <0.05 in/sec) at receptor locations directly above the blast location. Please see Response to Comment Grp 21-143.

As described in the PBS Technical Report, blasting normally occurs between shift changes at approximately 7AM and 7PM. This is normal practice in underground mining so that work heading can be ventilated before the new crew arrives at their work area. Minor blasting (such as misholes in drift rounds) could be done periodically during work shifts but would be only a single hole per delay versus the four assumed in the PBS Technical Report for drift round blasting, and consequently, would result in only 25% of the vibration produced by drift round blasting.

Response to Comment Grp 21-145

Commenter suggests that the noise study does not substantiate its conclusions regarding noise at the Brunswick site portal. On Page 58 of the project noise study (DEIR Appendix L), the following statement from the project blasting analysis is quoted in the discussion of air overpressure caused by underground blasting: "Air overpressure is caused by numerous factors including the explosive detonation, movement, and collapse of a mine face which are in open air. In underground mining, especially the type proposed at the Idaho-Maryland Mine, there would be no air overpressure produced on the surface. The blast would not cause this pressure wave to form or an audible sound produced. **The air overpressure from the underground blasting at the proposed mine would be zero**." (Emphasis added by BAC). As noted in the study, and in light of this statement, the conditions at the Sutter Gold Mine while informative in the study's conclusions, differ significantly from the Idaho-Maryland Mine. The assessment of maximum blasting noise levels at the mine surface based on blasting measurements conducted at the Sutter Gold Mine site is considered to be very conservative.

In response to the question as to how blasting at the Brunswick site would be 20 dB quieter at the surface than at the Sutter Gold Site, the commenter is directed to the third and fourth paragraphs of page 58 of the noise analysis prepared for the project (DEIR Appendix L). Those paragraphs specifically state that the Sutter Gold shaft is horizontal whereas the Idaho-Maryland Mine shafts are vertical. In addition, the Idaho-Maryland Mine portals will be smaller than the Sutter Gold shafts. Finally, the Idaho-Maryland Mine portals will be enclosed in buildings providing at least 20 dBA of sound attenuation, whereas the Sutter Gold portal was not. The net effect of these differences is expected to provide blast noise levels of a minimum of 20 dB lower than those generated at Sutter Gold.

Group Letter 22

March 30, 2022

To: Matt Kelley, Senior Planner
Nevada County Planning Department Staff
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
Email: matt.kelley@co.nevada.ca.us
DEIR Comment Email: idaho.mmeir@co.nevada.ca.us

Grp 22-1

The Sierra Foothills Audubon Society's mission is to educate ourselves and others to the variety and beauty of our natural environment and protect our wildlife and natural places. We are located in Nevada County and have over 1,000 members in Nevada County, Placer County, and Yuba County.

We are writing in response to the Draft Environmental Impact Report for the Idaho-Maryland Mine Project.

Biological Resources

Sierra Foothills Audubon has been supporting a bird banding study by Gold Country Avian Studies since 2018 at the Bennett Street Grasslands banding station within 1/2 mile from the proposed Idaho-Maryland Mine.

Section 4.4-2 of the DEIR states: "Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status wildlife species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Based on the analysis below and with implementation of mitigation, the impact is less than significant."

Grp 22-2

Page 4.4-31 -The only avian species called out in this section is the California Black Rail
Note: The landmark Rosenberg et al. study indicating that we have lost ~30% of our birds in the last 50 years, so we must not take actions that will put more bird species on a special status.

Page 4.4-38 "California black rail (Laterallus jamaicensis coturiculus) – CA State Threatened California black rail inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. The species requires water depths of approximately one inch that does not fluctuate during the year and dense vegetation for nesting habitat. Centennial Industrial Site: The species has been identified within five miles to the southeast and southwest of the Centennial Industrial Site. Suitable habitat for this species occurs within the large marsh wetlands within the eastern section of the Centennial Industrial Site, though these are anticipated to be removed during remediation activities. Nevertheless, as previously discussed, this action has already been analyzed in an independent CEQA document with DTSC as the lead agency.

However, out of an abundance of caution, in the event that the currently proposed remediation boundary limits were somehow modified by DTSC prior to commencement of remediation, this EIR addresses the possibility that some amount of freshwater emergent marsh wetland habitat may remain on the Centennial Industrial Site post-remediation."

We do not see the Draft EIR addressing actions for protecting habitat for this species.

Grp 22-3

Gold Country Avian Studies has submitted to the county, California Natural Diversity Database (CNDDB) detections of special status species in an email to county planner Matt Kelley on March 10, 2021 and attached a zip file of pdfs all submissions and a list of all bird species detected and captured at the site. There have been over 15 separate Special Status detections (of one or more individuals) submitted to CNDDB. A physical list of those detections was provided to all planners in a folder at the meeting.

The data indicates that the SF Wolf Creek may be used regularly during migration season by the endangered Willow Flycatcher, and species of special concern – Olive Flycatcher, Yellow-breasted Chat and Yellow Warbler.

Empidonax traillii willow flycatcher
State rank: S1/S2; critically imperiled/imperiled in the state at subspecies level (State listing of the full species includes all subspecies.)
CESA (California Endangered Species Act): Endangered
USFS: Sensitive
USFWS: Bird of Conservation Concern

Contopus cooperi olive-sided flycatcher
State rank: S3 vulnerable
CDFW: Species of Special Concern
IUCN: Near Threatened
NABCI: Yellow Watch List
USFWS: Bird of Conservation Concern

Icteria virens yellow-breasted chat
State rank: S3 = Vulnerable
CDFW: Species of Special Concern

Setophaga petechia yellow warbler
State rank: S3/S4 Vulnerable
CDFW: Species of Special Concern
USFWS: Bird of Conservation Concern

The DEIR must include recognition of these species as Special Status and protect them accordingly.

We ask that Rise Gold perform studies in all seasons to verify species that could be impacted by the mine both at Centennial and east Brunswick.

Grp 22-4

The Madrone Peer Review Report produced from a request of Raney concluded on page 8 for Cooper's Hawk that "for consistency we would recommend that the author add a sentence regarding the species' potential to occur within the study area. We feel that the potential to occur is high." Please add that sentence to the DEIR.

Hydrology and Water Quality

Mine Dewatering

Grp 22-5

Page 4.8-32 "As previously discussed, the proposed project includes mine dewatering and discharge of the treated groundwater to the South Fork Wolf Creek."

There is no discussion of impacts to avian species that changes in the volume and quality of water will have on the food obtained from the riparian habitat. The DEIR should address this issue.

Noise and air quality

Table 4.3-11 indicate 36,500 Engineered fill trucks trip per year plus 120,788 employee trips per year. This additional traffic on Centennial Drive and East Bennett Roads will cause excessive noise and air quality impacts that would affect nesting birds in the area.

Grp 22-6

In a study published in the January 2016 Proceedings of the National Academy of Sciences, researchers found that adults and nestlings of three bird species including the Western Bluebird showed multiple signs of chronic stress caused by noise pollution, including skewed stress hormone levels, due to increased anxiety, distraction, and hypervigilance.

The DEIR should address this issue.

Thank you for your consideration of these comments.

Donald L Rivenes

Donald L Rivenes
rivenes@sbcglobal.net
Conservation Chair
Sierra Foothills Audubon Society

GROUP LETTER 22: DONALD RIVENES, SIERRA FOOTHILLS AUDUBON SOCIETY

Response to Comment Grp 22-1
Comment noted. This is an introductory comment and does not pertain to an environmental issue in the DEIR.

Response to Comment Grp 22-2
Please see Master Response 37 - Birds and Raptors. As noted by the commenter, the California black rail was analyzed in the DEIR and Mitigation Measure 4-4.2(d) was provided to mitigate potential impacts. Note that the California Black Rail was considered to have a very low likelihood of presence onsite. The imposed mitigation measure requires both preconstruction surveys and preparation of a watercourse/wetlands/riparian management plan. The project has been designed to limit potential impacts to the riparian areas surrounding Wolf Creek and South Wolf Creek and no specific habitat protection measures are provided beyond the mitigation measures identified in the DEIR. Given the limited amount of surface disturbance to riparian areas that are commonly utilized by the California black rail, the very low likelihood of presence on the site, and implementation of the mitigation measures, this impact is considered less than significant.

Response to Comment Grp 22-3
Please see Master Response 37 - Birds and Raptors.

Response to Comment Grp 22-4
Comment noted. The DEIR already concluded that "[t]he Centennial Industrial Site and Brunswick Area contain many larger trees, several of which contain suitable habitat for nesting raptors, including suitable nesting sites for Cooper's hawk." (DEIR p. 4.4-76.) As such, potential for presence was already acknowledged by the DEIR, and the DEIR then concluded that "on-site removal of vegetation could result in adverse effects to nesting raptors and other birds protected under the MBTA should they be nesting on-site prior to commencement of construction." (Id.) As such, a potential impact to this species was already assumed by the DEIR. Mitigation Measure 4.4-2(g) was therefore included requiring preconstruction surveys and buffers from nests if the species is present.

Response to Comment Grp 22-5
Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Grp 22-6
Noise impacts to wildlife and bird species was analyzed in Impact 4.4-2 and determined to be less than significant. Air Quality impacts were assessed in Chapter 4.3 of the DEIR and were found to be less than significant. The commenter provides no evidence that the project's incremental increase in regional emissions would cause significant impacts to bird species.

Group Letter 23

March 31, 2022

Matt Kelley, Senior Planner

Nevada County Planning Department

950 Maidu Avenue

Nevada City, CA 95959

Re: Idaho-Maryland Mine Project Draft EIR comments

To: Matt Kelley, Senior Planner

From: Barbara Rivenes, Sierra Nevada Group/Sierra Club

Grp 23-1 The Sierra Nevada Group of the Sierra Club has concerns about the Idaho-Maryland Mine re-opening in Nevada County. Some of our Group has worked with Community Environmental Advocates Foundation on their research of the Idaho-Maryland Mine Draft Environmental Impact Report findings. We would like to associate our comments with their submitted DEIR comments. However, we also have a few more specific comments and discussion to add here.

Grp 23-2 As part of the Sierra Club which is our nation's largest and most influential grassroots organization with millions of members and supporters, the Sierra Nevada Group serves approximately 1400 members in Nevada, Yuba and Sierra counties. Our mission includes working to promote clean energy, safeguard the health our communities and protect wildlife through activism, public education, lobbying and legal action.

The California Environmental Quality Act (CEQA) is an important tool to help communities understand the scope and impact of a project being proposed. As such, it requires that all the information regarding the proposed project be examined and found to be complete and answer all the questions that could arise should the project be approved. In the case of the Idaho-Maryland Mine re-opening, clearly a large industrial venture will pose a considerable impact on its rural residential neighbors and the nearby city.

Grp 23-3 The release of the Idaho-Maryland Mine DEIR enumerated the number of impacts the re-opening would have. That number was a staggering 83 potential impacts with 3 that would not be able to be mitigated and the other 80 were considered to be significant or less than significant and could be successfully mitigated below that level.

Following are a few of the incomplete and inadequate responses to the impacts raised in the Draft EIR and ones that we have serious concerns regarding.

Grp 23-4

CEQA issues: CEQA requires the DEIR to identify the whole of the project's activities as a single and complete project in order to analyze its potential impacts. The full project includes the use of the toxic laden Centennial property as a repository for "engineered fill" from the mine. It assumes that the property will have been cleaned up in advance, but does not discuss this clean-up and its impacts as part of the project. Those environmental impacts rightfully need to be described, enumerated and counted as part of the entire project. A CEQA requirement is to identify the "whole" of the project as single and complete project and should not have parts excluded. It could lead to an underestimation of impacts and not inform the public of the actual harm this project could cause.

The Centennial cleanup is not a stand alone project and the considerable impacts of grading, traffic, air quality and wetland disturbance associated with it should be added to the project as a whole. It is a serious failure of the Draft EIR not to have incorporated the impacts of the Centennial site cleanup as part of the project.

Grp 23-5

Noise: Calculations regarding the changes in noise levels in the Brunswick industrial site where the actual mine entrance is located along with various mine and waste processing, two silos, mine dewatering and filtration pond, truck loading and unloading and most of the employees was found in the DEIR calculations not to exceed normal decibels. The project's location is surrounded by a rural residential neighborhood with generally low ambient noise thresholds.

An expert in noise and vibration analysis noted that this project includes many operations that will occur at nighttime hours. In addition, many of the nearby sensitive receptors are located away from notable sources of ambient noise and therefore receive very low nighttime background noise. The project's noise levels could be 20 to 35 decibels louder than the current median/background ambient noise levels, causing a severe impact. The DEIR fails to address sensitive receptors located farther away.

Grp 23-6

Groundwater: Groundwater resources are extreme concern. The proposed Project would significantly affect local groundwater resources by dewatering the mine thereby lowering groundwater levels. The DEIR recognizes that 242 well owners will be affected, but assumes others in the vicinity will not be dramatically effected, but merely have their wells lowered a couple of feet. Looking forward to positive indications of drought and future climate change, this arbitrarily low impact threshold is invalid.

Grp 23-7

The mitigations proposed are inadequate with respect to the number of affected well-owners in the large area of uncertainty. Monitoring should be required for at least three years.

Grp 23-8

Further, the groundwater modeling done for the DEIR is limited to a very narrow region. More basic data needs to be gathered and a valid groundwater hydrological model must be built. These and other pressing groundwater issues need to be rectified in the DEIR and possibly recirculated.

The above are just a few of the 83 impacts which have not been adequately addressed by the proponents.

Grp 23-9

Conclusion: 482 citizens came to a Planning Commission meeting on the Idaho-Maryland DEIR and about 100 people spoke. Each shared their legitimate concerns about either the inadequacies of the report or of the outsized impact that a large industrial project will have on some neighborhoods in particular or the ambience of the area in general.

Machines rumbling around beneath homes, blasting, trucks laden with toxic dust particles (impossible to contain), nighttime noise/glare, 7 stories of "engineered fill" on two properties within ¼ mile of a city of 36,000 people.

Grp 23-10

A creek, Wolf Creek and South Fork Wolf Creek, borders each of these mine properties and will be impacted by dewatering and being used as a conduit for used mine water.

The overall environmental damage is significant and cannot be adequately mitigated.

Thank you for your attention to my comments on behalf of the Sierra Nevada Group of the Sierra Club.

Barbara L. Rivenes

Barbara Rivenes, Vice-chair

GROUP LETTER 23: BARBARA RIVENES, SIERRA NEVADA GROUP OF THE SIERRA CLUB

Response to Comment Grp 23-1
This is an introductory comment. The commenter acknowledges their concurrence with comments provided by Community Environmental Advocates. Please see responses to Group Letters 7 and 8. Responses to specific comments are provided below.

Response to Comment Grp 23-2
The commenter provides a summary of its membership and mission. Comment noted.

Response to Comment Grp 23-3
The commenter expresses general concerns regarding the project and the findings of the DEIR. Please see Master Response 1. The commenter's specific comments are addressed below.

Response to Comment Grp 23-4
The commenter states that the Centennial cleanup is not a separate project. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 23-5
The commenter states that an expert in noise noted that the project noise levels could be 20 to 35 decibels louder than current ambient noise levels, causing a severe impact. Please see Response to Comment Grp 21-130 and 21-133. The commenter states that the DEIR fails to address sensitive receptors located father away but provides no information on these sensitive receptors. Noise impacts to sensitive receptors have been appropriately evaluated in the DEIR. See Chapter 4.10 of the DEIR.

Response to Comment Grp 23-6
The commenter mischaracterizes the DEIR when stating that the DEIR "recognizes that 242 well owners will be affected" by the project. The analysis of the DEIR concludes that proposed mining operations could result in significant effects to seven domestic water supply wells (see page 4.8-66 of the DEIR).

The commenter states the threshold for impact to domestic water wells used in the DEIR is invalid due to drought and climate change. Please see Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 - Drought and Climate Change. The commenter asserts that the impact threshold used to determine significant dewatering impacts is "arbitrary" and "invalid" but does not suggest a different threshold nor explain why the threshold is inappropriate. The commenter implies that a drawdown of a few feet would be significant, but a drawdown of this level would likely have no impact on groundwater well function. In addition, as noted in Master Response 15, the applicant has provided a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Grp 23-7
The commenter states that mitigation for well owners is insufficient and monitoring should be required for at least three years. Please see Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 - Drought and Climate Change. As noted in Master Response 15, the applicant has provided

a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Grp 23-8

The commenter states that more data needs to be gathered to build a valid groundwater model. Please see Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 - Drought and Climate Change.

Response to Comment Grp 23-9

The commenter states that other impacts in the DEIR have not been adequately addressed and other commenters have concerns with the DEIR and the project. The commenter provides no specifics on these inadequacies and is directed to Section 4 of the DEIR and Master Response 1. The commenter's specific comments are addressed above in Responses to Comments Grp 23-1 to Grp 23-8.

Response to Comment Grp 23-10

This is primarily a conclusory comment. For concerns related trucks and dust, see section Impact 4.3-2 of Chapter 4.3, and Mitigation Measure 4.3-2 (Asbestos Dust Mitigation Plan) of the DEIR. The commenter's opposition to the project will be provided to the County decision makers for their consideration.

Group Letter 24

Jeff Lauder, PhD
Executive Director
Sierra Streams Institute
117 New Mohawk Rd., Suite H
Nevada City, CA 95959

April 4th, 2022

Mr. Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959-7902 (530) 265-1423
Via email: Idaho.MMEIR@co.nevada.ca.us

Mr. Kelley:

SSI is a regional watershed science organization based in Nevada City, California, dedicated to increasing watershed stewardship capacity throughout the Sierra Nevada region.

Our mission is to promote scientific knowledge and stewardship of Sierra Nevada watersheds through research, restoration, education, and community science.

Grp 24-1

We work with local, state, and federal agencies as well as universities and community groups to find solutions to the problems that afflict Deer Creek, Bear River and other watersheds throughout the region that share the challenges resulting from a century and a half of gold mining, development, and agriculture. SSI's emphasis on rigorous science and consistent data collection provides the basis for restoration decisions that are made on behalf of watersheds, and makes us an especially valuable partner of local, state and federal government agencies who lack the funding and capacity to gather their own data.

The following letter summarizes Sierra Streams Institute's (SSI) comments on the Draft Environmental Impact Report (DEIR) that relate to some of our areas of research and expertise.

Grp 24-2

1. The hydrologic analyses of the impacts of flow from dewatering discharges to the South Fork of Wolf Creek are insufficient to assess effects on the benthic aquatic life of the stream, and need to provide data on the existing conditions upstream and downstream of the point of discharge (reference to Chapter 4.8 of the DEIR) and the effects of long-term sustained high flows from dewatering discharges to this small creek.

SIERRA Streams INSTITUTE

Grp 24-3

2. Chemical analyses given in Tables 4.8-2 and Appendix K2 Table 3.6 are incomplete and inadequate to evaluate toxicity of the mine dewatering effluent before and after treatment and must report real values with improved analytical detection methods and value ranges from locations throughout the drowned mine workings.

Grp 24-4

3. The long-term impact of Arsenic (As) is of concern since it is a human carcinogen and aquatic toxin. Figure 4.7-1 indicates that less than half of the Brunswick site was sampled for toxic metals. The number of samples and data on As levels in current mine water, as well as levels of As in existing rock and tailings at the Brunswick site are insufficient. Page 590 and Figure 4.7-1 discusses elevated levels of As at one part of the Brunswick site. The report says "*the material beneath this southeastern paved area was likely imported to the site and did not originate from mining operations at the Brunswick Mine Shaft*". This is speculation and more areas of the site need to be assessed for toxic metals including As.

Grp 24-5

4. The DEIR fails to address the hazardous conditions of the Centennial site and respective actions. Hazardous levels of As, lead, nickel, cyanide (free), nickel and mercury (a neurotoxin) are located in the soil of the Centennial site. There is currently no proposed plan in the DEIR that connects the cleanup of this site to its proposed use for depositing engineered fill. Heavy metal content of the engineered fill is needed to properly assess risk. Long-term contamination should be a concern for water resources and appropriate handling is required. Of note is that post-project Superfund cleanup of nearby Lava Cap site has cost more than one million dollars per year so far for the past decade. Centennial cleanup would likely be similar in expense (cost estimates come directly from EPA).

Thank you for consideration of our comments

Sierra Streams Institute

117 New Mohawk Rd. Ste. H Nevada City, CA 95959 (530) 470-6037

GROUP LETTER 24: JEFF LAUDER, SIERRA STREAMS INSTITUTE

Response to Comment Grp 24-1
Comment noted. This is an introductory comment and does not provide a comment on an environmental issue associated with the project.

Response to Comment Grp 24-2
Please see Master Response 35 - Discharge to South Wolf Creek and Master Response 36 - Flows in South Fork Wolf Creek. As explained in detail in those Master Responses, discharge into South Wolf Creek was extensively analyzed looking at the potential degradation of water quality, increase in erosion, and increase in flow. These impacts were all considered less than significant. Please also see Response to Comment 31-12 regarding benthic macroinvertebrates.

Response to Comment Grp 24-3
The commenter characterizes the chemical analysis information provided in DEIR Chapter 4.8, Hydrology and Water Quality, as "incomplete and inadequate" but does not provide explanation. Subsection 4.8.4 of Chapter 4.8 provides a summary of the groundwater sampling used to analyze existing water quality and identify water treatment measures. A detailed discussion of groundwater sampling to characterize existing water quality is found in section 3.4, Water Quality, of Appendix K2, "Groundwater Hydrology and Water Quality Analysis" prepared by Dr. Andy Kopania of EMKO Environmental. As discussed in these two documents, groundwater samples occurred on three separate occasions to identify overall water quality. Samples were taken from various depths within the New Brunswick shaft and from the drains where groundwater drains from underground workings. Water quality sampling locations are found on Sheets 2 and 3 of Appendix K2. Water samples were provided to California Laboratory Services, a lab certified with the California State Water Resources Control Board (SWRCB), to conduct the analysis. Appendix K2, Tables 3.5 – 3.9, provide the field parameters measured and laboratory analytical results for the samples collected. The result of the water sampling provided in these tables are "real values" based on extensive and representative sampling of the existing groundwater.

Response to Comment Grp 24-4
Please see Response to Comment Grp 24-3 above regarding water sampling conducted for this project.

The commenter questions whether sufficient analysis of arsenic was conducted. Please see Master Response 10 - Explosives, Reagents, and Brunswick Fill. As explained in DEIR sections 4.7.4 and 4.7.2, a Phase I and II was conducted by NV5 and a second Phase I was conducted by the County's consultant, ECM. As stated on DEIR page 4.7-20, the overall purpose of the Phase I and II studies "was to provide Nevada County with knowledge of the full range of environmental issues and liabilities associated with the project sites and satisfy requirements of American Society for Testing and Materials (ASTM) Standard E1527-13, the CERCLA, and Innocent Landowners, Standards for Conducting All Appropriate Inquiries (40 CFR part 312)."

DEIR Figure 4.7-1 shows soil sampling locations conducted by NV5 on the Brunswick property. As discussed in subsection 4.7.2, NV5's Phase II analysis included excavation of 36 exploratory trenches, collection of mine waste and soil samples, and laboratory analysis for metals. NV5 obtained 68 samples from the 36 exploratory trenches. The samples were delivered to ACZ Laboratories, Inc. and analyzed for total arsenic (EPA Method 6010B). In addition, a subset of eight samples was analyzed for total concentrations of Title 22 (CAM 17) metals (EPA Methods 6010/7471) and Acid Base Accounting (ABA; Modified Sobek). Arsenic concentrations detected in mine waste samples were relatively low except for the mixed soil and rock fill beneath a five-

acre paved area near the Brunswick Road entrance, within approximately 300 feet southwest of Brunswick Road, as depicted in Figure 4.7-1, which contained total and soluble arsenic concentrations that exceeded regulatory benchmarks (i.e., the total threshold limit concentration [TTLC] for arsenic of 500 milligrams per kilogram [mg/kg]).

Due to the elevated arsenic levels, the DEIR identified a potentially significant impact and required Mitigation Measure 4.7-2(a). Mitigation Measure 4.7-2(a) requires that if disturbance of the mine waste beneath the southeastern paved area within the Brunswick Industrial Site is proposed as part of the project, the site-specific arsenic concentration data resulting from the Phase I/II ESA prepared by NV5 for the proposed project shall be furnished to the project contractor(s) so the contractor(s) can comply with applicable health and safety requirements accordingly. The project contractor(s) shall retain a Certified Industrial Hygienist to develop specific handling procedures for the mine waste, including dust mitigation. Mine waste shall not be removed from the site without regulatory approval by the RWQCB or DTSC. Verification of proper handling and disposal of the mine waste shall be provided to the Nevada County Planning Department. As such, appropriate levels of sampling for arsenic and other chemicals has already been performed, and appropriate mitigation has been required to ensure impacts are less than significant.

Response to Comment Grp 24-5

The commenter asserts that the DEIR fails to address the conditions of the Centennial site and the cleanup project. Please see Master Response 4 - Cleanup Project is a Separate Project under CEQA, and Master Response 9 - Historical Mine Waste at Centennial Site.

Group Letter 25

SOUTH YUBA RIVER CITIZENS LEAGUE

April 4, 2022

Matt Kelley
Senior Planner
Nevada County Planning Department
950 Maidu Avenue
Nevada City, CA 95959-8617
Matt.kelley@co.nevada.ca.us
530-265-1423

RE: Nevada County Idaho-Maryland Mine Draft Environmental Impact Report

The South Yuba River Citizens League (SYRCL) respectfully submits comments and recommendations for the Draft Environmental Impact Report (DEIR) as required by the California Environmental Quality Act (CEQA) for Rise Gold Corporation s (Rise Gold) proposed re-opening of the Idaho-Maryland Mine (Project or Mine)[1]. We request that these comments be received regarding the substance of the environmental review and the potential impacts of an active gold mine on our watersheds and community.

Grp 25-1

In summary, SYRCL s comments are focused on the following resources, as defined in CEQA, that will be impacted by the Project:

- Agriculture and Forestry Resources
- Air Quality, Greenhouse Gas Emissions, and Energy
- Biological Resources
- Hydrology and Water Quality

[1] County of Nevada, Community Development Agency, Planning Department (2022). Draft Environmental Impact Report. *Idaho-Maryland Mine Project.* Prepared by Raney Planning and Management, Inc.

313 Railroad Ave., Suite 101 | Nevada City, CA 95959 | (530) 265-5961 | www.yubariver.org

SYRCL appreciates the 30-day extension by the County granting additional time for the public to review and provide comments on this matter. Robust public engagement is vital to truly assess the environmental impacts of this Mine to our community and precious waterways.

Introduction

SYRCL was founded in 1983 by grassroots activists determined to protect the South Yuba River from dams. Ultimately, SYRCL won permanent protections for 39 miles of the South Yuba River under California s Wild and Scenic Rivers Act. Today, SYRCL is the central hub of community activism to protect, restore, and celebrate the Yuba River watershed. With 39 years of achievements, 3,500 members and 1,000 active volunteers, SYRCL is doing great things for the Yuba and Bear River watersheds. Some of our work includes restoring wild salmon populations and habitat, headwater meadow restoration, and large-scale forest health and fire resiliency planning.

Grp 25-2

SYRCL is committed to advocating for long-term solutions for a sustainable water future in the Yuba River watershed, especially in light of the climate crisis.[2,3] The negative environmental impacts of gold mining range from water, soil, and air pollution to large-scale seismic instability and extraordinary unmitigated energy consumption. In California, outdated and ineffective land management strategies and the impacts of climate change have further exacerbated the historical environmental impacts from mining. Each of the important potential environmental issues are explored in more detail below. SYRCL is watchdogging the Project due to negative mining impacts within the Yuba and Bear River watersheds from past operations and analysis from recently proposed projects to reopen gold mines within the watershed; therefore, SYRCL has grave concerns about future mining activities.

SYRCL encourages the County to utilize the wealth of community and organizational resources during this environmental review process and welcomes additional consultation.

[2] See South Yuba River Citizens League Strategic Plan, 2019-2023. https://yubariver.org/strategic-action-plan/

[3] IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. In Press. *Accessed online at:* https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf?msclkid=640609b1b45911ecBe0e2d36b3d8146d

I. Overarching Comments

Two projects, one set of impacts

Grp 25-3

Separating the Centennial Industrial Site Remedial Action Plan project impacts from the Idaho-Maryland Mine project impacts misrepresents the impacts that will be experienced by the community. While it is reasonable that the California Department of Toxic Substances Control is Lead Agency for the Centennial Site Remedial Action Plan, separating these two directly related projects misrepresents the fundamentally linked impacts that Grass Valley and Nevada County will, factually, endure. As stated in the Idaho-Maryland Mine Project Draft Environmental Impact Report (DEIR) "...engineered fill would be transported by truck from the Brunswick Industrial Site and placed on approximately 44 acres of the Centennial Industrial Site to create approximately 37 acres for potential future industrial use." At minimum, traffic, dust, and noise impacts will be considerable. Dividing project impacts across two functionally linked "sub-projects" serves only to conceal or reduce the significance of impacts.

The 'Substantial Evidence' and 'Practicable and Reasonable' Standards

Grp 25-4

While CEQA analysis may only need to meet a standard of 'practicable and reasonable' in developing data, analysis, and determining the level of significance of impacts, the State CEQA Guidelines (guidelines) first require meeting a standard of 'substantial evidence.'[4] The guidelines state, "The findings required ... shall be supported by substantial evidence in the record."[5] Substantial evidence, "...means *enough relevant information and reasonable inferences from this information* that a fair argument can be made to support a conclusion..." [emphasis added]. Many of the specific concerns identified below point to inadequate and insufficient data or information used to draw conclusions. The 'practicable and reasonable' standard must be considered in the context of (1) making data available, or (2) characterizing data, to ensure there is 'substantial evidence' in the record for the lead agency and community to make an informed decision. The guidelines also state, "The draft EIR which is sent out for public review must reflect the independent judgment of the lead agency. The lead agency is responsible for the adequacy and objectivity of the draft EIR."[6]

Risk embedded in uncertainty is 'relevant information'

Risk is embedded in the decision-making process when conclusions are made in the absence of adequate information. Drawing foundational conclusions about significance of

[4] *For CEQA guidelines, see* 14 CCR § 15384 (a)(b)
[5] *See* 14 CCR § 15091 (b)(a)
[6] *See* 14 CCR § 15084 (e)

impacts based on non-existent, small, or outdated data, or inadequately characterized uncertainty exacerbates risk. There are many examples throughout the DEIR of this failing, some specifically identified below, which must be corrected or properly characterized. Without such a characterization, decision makers and the community cannot fully understand the risks associated with relying on the conclusions. Explicitly articulating uncertainty and the inherent decision risk to which it leads is, as stated in the guidelines, "... relevant information and reasonable inferences from this information..."[7]

The DEIR must articulate the uncertainty underlying conclusions that have been based on inadequate or insufficient data or information. The DEIR, as written, leaves it to the reader to decode and comprehend the decision risk embedded in the uncertainty resulting from the use of inadequate information. The DEIR must either provide demonstrably statistically significant data sets to support its conclusions, or specifically articulate the nature and extent of the uncertainty of the conclusions in a statistically correct manner.

Downstream impacts

The DEIR does not consider downstream impacts of the Project, and instead wrongly narrows its environmental analysis to only the Project footprint. Due to the nature of biological resources, especially streams and rivers, this narrowed approach is unfounded and does not capture direct Project impacts to downstream ecological communities[8].

Grp 25-5

Groundwater pumping will result in increased flows in South Fork Wolf Creek and will have several negative environmental impacts. Increased flows will cause channel scouring, which will alter aquatic communities, especially macroinvertebrate communities. Macroinvertebrates are a food source for many aquatic species and are essential food for salmonid species. Additionally, increased flows will cause changes to water chemistry and turbidity, which will affect vegetation communities and wildlife habitat. It is inappropriate to narrow environmental impact analysis to only the geographic boundary of the Project when it will have direct impacts to biological and other resources downstream. These impacts must be assessed so they may be mitigated.

Below we reference several instances where downstream impacts were not considered.

Grp 25-6

I. Agriculture and Forestry Resources

[7] *See* 14 CCR § 15384(a)
[8] Richey, J. E., & Swanson, F. J. (1989). The river continuum concept: a basis for the expected ecosystem behavior of very large rivers?. In Proceedings of the International Large River Symposium. Can. Spec. Publ. Fish. Aquat. Sci (Vol. 106, pp. 49-55).

An impact indicated in the DEIR[9] is the potential loss of forest land or conversion of forest land to non-forest use. The DEIR claims this impact is *less than significant,* however, it provides no clear indication of how the threshold of significance" is determined. In fact, the DEIR states that 25 acres of forest land would be lost on the Project site. No clear line of logic or facts are cited to support this determination, aside from speculation. Further, overall character of forestry resources was not assessed on the Project site, meaning no data about forest quality, health, or age of stands (including old growth) were used in this determination.

Additionally, the analysis of cumulative impacts ignores major factors affecting Sierran forests, including forest loss due to disease and pests, climate change, drought stress, and the current reality for Sierran forests—catastrophic wildfire[10]. The Project would undoubtedly contribute to the loss of California forests. Discussion of cumulative impacts to Agriculture and Forestry is incomplete without a thorough assessment of impacts in the above context.

II. Air Quality, Greenhouse Gas Emissions, and Energy

Grp 25-7

The DEIR has insufficient mitigation measures to reduce NOx, ROG, and PM10 emissions to a less-than-significant" level[11]. The proposed measures are the very minimum required by the local regulatory agency responsible for air quality management and only reduce these emissions for a one-year period. These emissions should be monitored and mitigated for the entire 80-year lifetime of the Project, and the DEIR should include a proposal that proves mitigation efforts would consistently reduce emissions to a less-than-significant level.

Grp 25-8

Additionally, asbestos and silica are toxic air contaminants that will become respirable due to mining operations[12]. There is no identified safe" threshold for these air pollutants[13], meaning any amount of these materials in the air is a danger to human health. Asbestos and silica have been inappropriately categorized as *fugitive dust*[14], which subverts regulations for toxic air contaminants. If regulated as fugitive dust, toxicity and cumulative effects are not considered, which is a danger to local public health. Asbestos and silica must be

[9] *See* DEIR sec. 4.2-3 (p. 4.2-18)
[10] Paudel, A., Coppoletta, M., Merriam, K., & Markwith, S. H. (2022). Persistent composition legacy and rapid structural change following successive fires in Sierra Nevada mixed conifer forests. Forest Ecology and Management, 509, 120079.
[11] *See* DEIR sec. 4.3-1 (p. 4.3-66 thru 4.3-79)
[12] *See* DEIR sec. 4.3-1 (p. 4.3-61)
[13] *See* 40 CFR Part 61, Subpart M (EPA Asbestos National Emission Standard for Hazardous Air Pollutants)
[14] *See* DEIR sec. 4.3-1 (p. 4.3-61)

considered as toxic air contaminants to ensure proper mitigation and to limit impacts to human health.

Grp 25-9

Due to extreme wildfires in California, our community is already enduring severely compromised air quality much of the year. Ensuring this project will not contribute further to dangerous air quality is essential to protect the health of our community and the environment.

III. Biological Resources

Grp 25-10

The analysis of Biological Resources in the DEIR is insufficient because there is an overall lack of sufficient references to appropriately recent data and science. In many instances the only information cited to support conclusions are general references made to decades-old reports or poorly executed surveys onsite. In other instances, no site-specific data is used to support conclusions of "low likeliness"—even when conditions would reasonably suggest high probability for a species to occur (i.e., suitable habitat exists onsite, and the species is known to occur near the Project site).

The DEIR also insufficiently analyzes impacts to Aquatic Resources and Riparian Habitat. Specifically, the DEIR does not include analysis of impacts to ecologically connected downstream resources and understates the significance of impacts to Riparian Habitat.

Grp 25-11

SYRCL appreciates the third-party peer review of the biological resources reports prepared by Greg Matuzak Environmental Consulting because it improves objectivity and transparency. However, SYRCL concurs with issues noted by the peer review[15]. One such issue is the timing of the special-status plant surveys, which were conducted during seasons where plants are not present or blooming. The proposed solution, which is to conduct additional surveys before ground disturbance, is not adequate unless it provides the same opportunity for public input as this environmental review.

We describe the above issues in more detail below.

Vegetation Communities and Special Status Plants

Grp 25-12

The DEIR s analysis of endangered plant species relies heavily on a single outdated report from 1973[16]. Using this report, especially as a primary source of information, is unreasonable and does not constitute 'substantial evidence.' Local climate has shifted drastically from the 1970s, and changes in environmental conditions must be accounted for

[15] *See* DEIR sec. 4.4.1 (p. 4.4-1)
[16] *See* DEIR sec. 4.4-1, Table 4.4-5 (p. 4.4-22), "a report in 1973"

when considering which special status species may exist on the Project site. The environmental analysis of special status plants should use the best available science and data, or appropriate and current survey methods to capture an accurate understanding of onsite resources. It is unscientific and unreasonable to conclude that a species has "low likeliness to occur" if underlying data is flawed or lacking. Several conclusions were made, specified below, without any site-specific data at all. Asstated in our 'Overarching Comments' section above, this does not meet the CEQA guideline 'substantial evidence' standard.

Grp 25-13

Additionally, the special-status plant surveys were conducted outside the blooming period for many special-status plant species with potential to occur in the Project area. In fact, vegetation communities which are the foundation of habitat for several special status species can be found throughout the project site. Although the DEIR states that follow up surveys will be required before any ground disturbance, the lack of accurate baseline information is concerning, and does not meet the 'substantial evidence' standard. Any additional surveys should occur as part of the DEIR process and include ample time for public review and comment. At minimum, the DEIR should state the uncertainties or confidence level of conclusions. Specific issues with the analysis of this resource are as follows:

Grp 25-14

- The DEIR did not indicate what native plant species exist in the understory of each listed forest type[17].

Grp 25-15

- Project impacts were noted as *significant* for the federally endangered Pine Hill Flannelbush[18], a beautiful species native to the region. Eighteen individual flannelbushes would be destroyed as a direct result of Project operations. Although mitigation measures have been proposed, (such as seed collection, transplantation, and monitoring), the main goal should always be to prevent loss, rather than mitigating for it afterward. Mitigation is not always effective or monitored adequately. Additionally, cumulative impacts of the Project on the species were not considered.

Grp 25-16

- Finger Rush, a native species in the Project region, was considered to have a low potential to exist on the site[19]. This conclusion is unreasonable and unsupported by evidence because (1) the plant occurs less than one mile away, and (2) surveys were completed outside key identification period.

[17] *See* DEIR sec. 4.4.2 (p. 4.4-5 thru 4.4-10)
[18] *See* DEIR sec. 4.4.2 (p. 4.4-24 thru 4.4-25)
[19] *See* DEIR sec. 4.4.2 (p. 4.4-27)

7

Grp 25-17

- Sierra blue grass, a native species in the Project region, was considered to have a moderate potential to exist on the site[20]. This conclusion is unreasonable because this species thrives in lower montane coniferous forest, which is a dominant vegetation community on the Project site. Additionally, it is unclear if field surveys occurred during key identification periods.

Grp 25-18

- The Dubious pea, a CNPS List 3 species was surveyed outside its key identification period[21]. Therefore, the conclusion that it has low potential to occur because it was not identified during the surveys is unreasonable.

Grp 25-19

- The DEIR improperly excluded Layne's ragwort from analysis.

Aquatic Resources and Riparian Habitat

The DEIR improperly asserts that a baseline for the Centennial Industrial Site aquatic resources cannot be established due to the planned remediation efforts[22]. Although the DEIR states that disturbance acreages were conservatively estimated, shifting and unclear baselines are inappropriate for environmental analyses.

Grp 25-20

California has lost roughly 97% of its historic wetland habitat[23]. The remaining wetland and riparian habitat are hotspots for biodiversity in California, with many endemic and migratory species using this habitat for some part of their life history[24]. Further, riparian- and wetland-dependent species are being listed as threatened or endangered at higher rates than terrestrial species[25]. Therefore, any impacts to this precious resource should be very closely considered in environmental analyses due to the amplified consequences of impacts. Indeed, the DEIR lists many impacts to riparian habitat, including permanent fill at the Centennial site, Project encroachment on Wolf Creek, and loss or disturbance of over one-half acre on the Brunswick site[26]. Downstream wetlands and riparian habitat should also be included. Although the DEIR claims impacts will be less than significant with mitigation, it provides no clear evidence to support this claim[27]. Not only must mitigation measures be adequate, but they also must cover downstream impacts and provide

[20] *See* DEIR sec. 4.4.2 (p. 4.4-27)
[21] *See* DEIR sec. 4.4.2 (p. 4.4-29 thru 4.4-30)
[22] *See* DEIR sec. 4.4.2 (p. 4.4-10)
[23] Nelson, Charles et al. "The Central Valley Historic Mapping Project." California State University, Chico, Department of Geography and Planning, Geographic Information Center, Apr. 2003. Accessed at: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/docs/cmnt081712/sldmwa/csuchicodptofgeographyandplanningcentralvalley.pdf
[24] Mittermeier, Russell A., et al. Fresh Water: The Essence of Life. CEMEX, 2010.
[25] Reis, V., Hermoso, V., Hamilton, S. K., Ward, D., Fluet-Chouinard, E., Lehner, B., & Linke, S. (2017). A global assessment of inland wetland conservation status. Bioscience, 67(6), 523-533.
[26] *See* DEIR sec. 4.4
[27] *See* DEIR Table 2-1

evidence that they will be effective. If uncertainty exists about effectiveness of mitigation measures, the DEIR must articulate these uncertainties.

Grp 25-21

Further, the DEIR excluded from its analysis (1) the Western Ridged Mussel, a sensitive aquatic species that could be impacted by degraded water quality from mining operations, and (2) the Vernal pool fairy shrimp.

Special Status Wildlife

Grp 25-22

Several conclusions about special status wildlife are based on reconnaissance-level" biological surveys[28]. This survey method provides only general information on the presence or potential presence of sensitive species. This method is based only on information available at the time of the survey and onsite conditions that were present on the date(s) the site was visited. Reconnaissance-level surveys should be considered a preliminary effort, where more due diligence is necessary to understand with confidence the presence or absence of special status wildlife in the Project area. The following special status wildlife species were evaluated with only reconnaissance-level information:

- California black rail[29]: The DEIR's conclusion that this species has low likeliness to occur is unreasonable because (1) reconnaissance-level surveys are not 'substantial evidence' to support this conclusion, (2) the species has been identified within 5 miles of the Project area, (3) suitable habitat exists onsite, and (4) this is a highly mobile species.

Grp 25-23

- Foothill yellow-legged frog[30]: The DEIR's conclusion that this species is unlikely to occur is unreasonable because (1) reconnaissance-level surveys are not 'substantial evidence' to support this conclusion, and (2) suitable habitat for this species exists just downstream of the project within an area that would be directly impacted by project operations[31].

Grp 25-24

Additionally, the DEIR unreasonably concluded that the following species are unlikely to occur in the Project area.

- Townsend's big-eared bat[32] (p. 433): The DEIR unreasonably concluded that this species has low potential to occur within the Project area. However, it occurs less

[28] *See* DEIR sec. 4.4.2 (p. 4.4-36 thru 39, 52 thru 53)
[29] *See* DEIR sec. 4.4.2 (p. 4.4-39)
[30] *See* DEIR sec. 4.4.2 (p. 4.4-37)
[31] Public comment by Bear Yuba Land Trust staff at the County of Nevada, Planning Commission, meeting regarding the Idaho-Maryland Mine DEIR. March 24, 2022.
[32] *See* DEIR sec. 4.4.2 (p. 4.4-36)

than three miles away from the Project area and suitable habitat exists on the Project site. Further, onsite habitat was not even surveyed. Thus, it is unreasonable to conclude that this species has low likeliness to occur onsite when a population exists so close to the site, and suitable habitat is available onsite. Site-specific data and monitoring are necessary to support such a conclusion.

- Hoary bat and Pallid bat[33]: – The DEIR concludes that these species are unlikely to occur on the Project site. In reaching this conclusion, it references recent data (a CDFW report from 2019), but the conclusion that both have low likeliness to occur seems unreasonable without site-specific data. An onsite survey should be conducted to support this conclusion because suitable habitat exists onsite.

Grp 25-25

The DEIR excludes several aquatic wildlife species that could be impacted by project operations. Steelhead, Rainbow trout, Chinook salmon, and North American green sturgeon all rely on the Bear River below Camp Far West Reservoir for critical habitat that supports their continued survival. These listed species are particularly affected because they are vulnerable to low flows, increased sedimentation, and toxic contamination. Additionally, soil erosion also increases fine sediment in streams, damaging spawning and rearing habitat for salmon downstream, such as the local spring-run Chinook salmon.

Grp 25-26

Lastly, the DEIR unreasonably excludes several species listed under the California Endangered Species Act (CESA). The Willow flycatcher (listed as Endangered under CESA) is a riparian bird that has been documented only two miles downstream of the project site at a Bear Yuba Land Trust Conservation Easement and was not analyzed in the DEIR[34]. Bears, deer, and mountain lions have also been documented using the South Fork of Wolf Creek. The DEIR is incomplete without a thorough analysis of potential impacts to these species.

IV. Hydrology and Water Quality

Grp 25-27

Hydrology and Water Quality has been poorly analyzed in the DEIR. The Overarching Comments section above describes, generally, issues with this resource analysis. Here, we describe these issues in more detail.

The hydraulic analysis only considers existing onsite conditions and doesn't consider climate change precipitation scenarios. Modeling efforts need to account for extreme variability, especially considering the 80-year lifetime of this project.

[33] *See* DEIR sec. 4.4.2 (p. 4.4-39)
[34] Public comment by Bear Yuba Land Trust staff at the County of Nevada, Planning Commission, meeting regarding the Idaho-Maryland Mine DEIR. March 24, 2022.

Grp 25-28

Additionally, in its analysis of Hydrology and Water Quality, the DEIR fails to draw meaningful conclusions between an observation or set of observations and an appropriate response. An example of this occurs when discussing Flooding[35]. This section indicates the project site is located within a FEMA Special Flood Hazard Area (SFHA). There is no discussion about how this magnitude of flood risk could impact mine operations, and no discussion about how the Project could impact the SFHA potentially increased flood crest elevation. The DEIR should model how the project will alter the FEMA Special Flood Hazard Area in aggregate of all development within the SFHA upstream and downstream of the project site. The model must analyze if surface water elevation will not increase beyond the FEMA designated thresholds. The DEIR must also discuss how the presence of infrastructure relevant to the project footprint could be affected by flooding, especially those areas used as part of water treatment.

Issues with Water Quality

Grp 25-29

- The DEIR does not disclose or discuss any surface water quality data. Without baseline information about water quality in South Fork Wolf Creek, changes in water quality due to mine operations can't be measured or adequately evaluated.

Grp 25-30

- The DEIR does not address legacy mining impacts. The mercury lost to the environment during the hydraulic mining era still persists in and continues to cause health advisories throughout the Sierra Nevada, including the Bear River. Unfortunately, due to use of mercury in hydraulic mining, loss of mercury during the Gold Rush was estimated to be 10 to 30 percent per season,[36] totaling about 10,000,000 pounds across California[37]. Many parts of the Yuba and Bear River watersheds are listed as impaired due to mercury contamination under the Clean Water Act Section 303(d), including the confluence of Wolf Creek and Bear River, which is downstream of the Project[38]. During rain events these areas contribute to elevated levels of metals and sediments in our local streams and rivers. The Project could increase sedimentation and erosion, and has the potential to disturb contaminated land. The DEIR should (1) analyze whether Project operations will contribute to legacy mining impacts that already exist within and around the Project

[35] *See* DEIR sec. 4.8.2 (p. 4.8-24)
[36] Bowie, A.J. 1905. A practical treatise on hydraulic mining in California: New York, Van Nostrand, p. 313.
[37] Churchhill, R.K.. 2000. Contributions of mercury to California's environment from mercury and gold mining activities; Insights from the historical record, in Extended abstracts for the U.S. EPA sponsored meeting, Assessing and Managing Mercury from Historic and Current Mining Activities, November 28-30, 2000, San Francisco, Calif., p. 33-36 and S35-S48.
[38] *See* 33 U.S. Code § 1313 (d).

area, and (2) Rise Gold should prepare an adequate mitigation plan for legacy mining impacts before, during, and after project operations cease in 80 years.

Grp 25-31

- The DEIR does not adequately analyze potential impacts of using Ammonium Nitrate on water quality[39].

Grp 25-32

- The DEIR does not discuss the extent of contamination in the historic flooded mine tunnels, and does not describe, with adequate detail and specificity, how the water will be treated. These omissions may result in serious health consequences for our community.

Issues with Hydrology

Grp 25-33

- The DEIR uses point in time hydrologic measurements and fails to identify when those measurements were taken with more specificity than month and year[40]. The frequency and timing of hydrologic measurements in low-order stream systems is paramount to understanding water quality. Without specificity in sampling timing, it is impossible to know the range of baseline conditions. Without specific and hydrologically relevant sampling, the DEIR is missing essential information necessary to analyze impacts.

Grp 25-34

- The hydrologic analysis only considers existing conditions[41]. It does not consider changes to impervious surfaces (e.g., parking lots and buildings). Additions of such surfaces would result in shorter lag-times and a flashier hydrograph—which means water moving faster through developed areas of the project have less opportunity to be absorbed into the soil. More swift surface water will contribute to greater rates of erosion. Planned changes, which would impact project effects on hydrology, should be accounted for in this analysis.

Grp 25-35

- The groundwater analysis lacks the necessary spatial and temporal rigor to conclusively state that "... there are not any direct connections... between the domestic wells and any of the underground mine workings."[42] The difference between seasonal variation in residential water elevations and those observed at the New Brunswick Shaft (Figure 4.8-5) do not conclusively prove that there is no hydrologic connection between the mine and residential wells. Ground water follows the same laws of physics as surface water but with significantly slower

[39] *See* DEIR p. 4.3-56
[40] *See* DEIR sec. 4.8.2
[41] *See* DEIR sec. 4.8.2
[42] *See* DEIR sec. 4.8.2 (p. 4.8-13)

response times to external signals (e.g., rainfall) and changes in porosity (e.g., fractures). Changes to porosity, such as that caused by mine shafts, will fundamentally alter the nature and magnitude of the signal that groundwater may respond to. The argument that because groundwater elevations are not changing in unison across space and through conditions with different porosity in no way proves that there is not a hydrologic connection. The DEIR does not demonstrate that there is no groundwater connection between the existing mine shafts and future mine shafts, and potentially impacted residential wells. To conclude otherwise has placed the cart firmly before the horse—complete and accurate modeling efforts must guide this analysis in order to provide 'substantial evidence' for these conclusions.

Grp 25-36

- Related to the above bullet, the DEIR analysis of groundwater seepage, draw down, and depression cone[43] does not appear to address future conditions. Analysis and modeling by EMKO and Itasca use analytical models which rely on "current seepage into the shaft" (EMKO) and "current conditions" (Itasca) when modeling the groundwater cone of depression. However, current conditions represent the tunnels as full of water. When drained as part of operations, the slope of the hydraulic gradient line will steepen thus increasing the rate of seepage into the tunnels and alter the groundwater cone of depression. For an adequate analysis of this resource, these future conditions should be addressed.

Grp 25-37

- The DEIR inappropriately uses annual precipitation rates based on *historic data* rather than predicted climate change scenarios[44]. Local hydrology has already changed compared to historic data and will continue to change. Precipitation is expected to shift from snow- to rain-dominated with greater inter-annual variability.[45] A model that appropriately incorporates climate change must account for longer periods of drought with infrequent high intensity rain events and consider low, medium, and high greenhouse gas emissions scenarios and regionally relevant assumptions. Further, this type of analysis should be done for all portions of the DEIR that address impacts to surface and/or ground water, including water use and use impacts as related to existing water infrastructure.

Grp 25-38

- The DEIR estimates that there are 1,118 acre-feet (385,000,000 gallons) of water in the mine[46]. It estimates it would take 160 days to pump all water out of the mine, which suggests a pumping rate of approximately 10 acre-feet (2.4M gallons) of

[43] *See* DEIR sec. 4.8.2 (p. 4.8-19 thru 21)
[44] *See* DEIR sec. 4.8.2 (p. 4.8-37)
[45] Swain, D. L., Langenbrunner, B., Neelin, J. D., & Hall, A. (2018). Increasing precipitation volatility in twenty-first-century California. Nature Climate Change, 8(5), 427-433.
[46] *See* DEIR sec. 4.8.2 (p. 4.8-42)

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water per day. The onsite retention pond capacity is 40 acre-feet, or 23 acre-feet with two feet of freeboard. Therefore, the retention pond only has approximately two days of processing storage assuming a maintained two feet of freeboard. Two days of storage is a very small threshold in terms of hydrologic events, especially with climate change expectations and increasing occurrences of atmospheric rivers, such as the October 2021 rainfall events. The following bullets list concerns and unanswered questions regarding groundwater pumping and pond capacity.

Grp 25-39

- How fast will water be treated? Anything less than 2.4M gallons per day means the pond will fill faster than it's being treated. If the pond fills, will they slow or stop pumping? Additionally, how, when, and by whom are those decisions made and enforced?

Grp 25-40

- It is unclear how rainfall is considered as related to pond capacity. When and if the pond fills, what are the protocols to prevent overflow and mitigate the risk of catastrophic overflow or failure of the pond walls caused by rapid erosion?

Grp 25-41

- Freeboard of two feet is only enough to accommodate a 24-hour 100-year storm, but it has tight margins (Two-foot freeboard holds 6.6 acre-feet, and a 100-year storm modeled 5.7 acre-feet). After 24 hours, little room will remain in the storage pond, assuming it does not rain in the days leading up to and after the 100-year 24-hour storm. 100-year precipitation events are often longer than 24 hours, with some lasting for days[47]. The small buffer in storage is likely to result in spill of untreated water during major precipitation events.

Grp 25-42

- The DEIR does not address settling of solids or fill rate in the pond. Although it mentions cleaning every 10 years, there is no information on how that interval was calculated[48]. Rather than a time-bound cleaning cycle, the DEIR needs to clarify what conditions trigger the need for cleaning and clearly outline all of the metrics which will be considered as necessitating cleaning, what thresholds in each metric dictate the need for cleaning, and how, by whom, and with what frequency will each metric be monitored and enforced.

Grp 25-43

- How quickly can processing rates be ramped up or down as related to precipitation or other changing conditions? Additionally, what emergency backup protocols are in place? The project should have emergency shut offs

[47] Swain, D. L., Langenbrunner, B., Neelin, J. D., & Hall, A. (2018). Increasing precipitation volatility in twenty-first-century California. Nature Climate Change, 8(5), 427-433.
[48] *See* DEIR sec. 4.8.2 (p. 4.8-42)

for groundwater pumping if sensors detect pond water surface elevation has exceeded an unspecified safety threshold. Additionally, groundwater pumping rates should automatically decrease if processing slows. In addition, the DEIR should clarify how changes in pumping rates will impact the rate at which mine shafts re-flood and what safety protocols are in place for personnel working underground and the community if planned clean up cannot occur prior to evacuation of the mine shafts.

Grp 25-44 The above issues and questions must be addressed in order to provide 'substantial evidence,' as required by the CEQA guidelines. The DEIR lacks evidence to support conclusions that water treatment facilities and protocols are adequate under future climate change conditions and 80 years of operation. Without more information, the public can't understand hydrologic risks associated with the project, and these risks can't be properly mitigated and managed over time.

VI. Appendix N: Water Supply Assessment

Grp 25-45 The Water Supply Assessment[49] is deeply flawed and based on inaccurate assumptions. The claim that Rise Gold would be a net water producer" is false and misleading and ignores the body of science that proves that surface and groundwater are fundamentally linked[50]. Surface and groundwater, together, constitute the water bank" for our community. With the large number of well owners per capita and continued drought in the County, mining activities are likely to have a major impact on water security in the region.

Grp 25-46 The Assessment claims, without substantial evidence, that operations would only impact 31 wells[51], while past analyses to reopen the mine estimated an order of magnitude more wells would be impacted for a smaller project[52]. The flaws in the underlying assumptions must be addressed in order to ensure no County residents will lose access to fresh water they currently enjoy.

Grp 25-47 The DEIR states that, to mitigate for possible impacts to groundwater wells, municipal water will be installed for any home that could be potentially impacted. Nevada Irrigation

[49] *See* DEIR Appendix N: Water Supply Assessment
[50] Levy, Zeno et al. "Groundwater Quality in the Yuba River and Bear River Watersheds, Sierra Nevada, California." US Department of the Interior, United States Geological Survey. September 2017. Accessed at: https://pubs.usgs.gov/of/2017/1115/ofr20171115.pdf
[51] *See* DEIR Appendix N: Water Supply Assessment, p. 9
[52] County of Nevada, Community Development Agency, Planning Department (2008). Draft Environmental Impact Report. *Idaho-Maryland Mine Project.* More information about this project can be found here: https://www.mining.com/emgold-moves-forward-with-idaho-maryland-project-permitting/#:~:text=Emgold%20is%20in%20the%20advanced%20stage%20of%20permitting,followed%20by%20the%20original%202005%20Project%20Permit%20Applications.?msclkid=814d9c3bb46611ecca7d0c1c2e9c08ebb

District (NID) has confirmed it has enough water to supply the 31 homes that the DEIR currently estimates based on flawed analysis (likely a gross underestimation). If 300+ wells are affected, as has been modeled in the past, there is no guarantee that NID would be able to supply that water. Additionally, the long-term plan for the new municipal water infrastructure is unclear. Would Rise Gold be responsible for maintaining the infrastructure? Will residents' water rates be subsidized or paid by Rise Gold if water rates are more expensive than well pumping costs? Who is responsible for maintaining infrastructure if Rise Gold goes out of business? And lastly, how will new construction not already connected to City or NID service within the Project s groundwater impact zone get water?

Grp 25-48

VII. **Conclusion**

We appreciate the County's time and dedication to improving the environmental review of this project. We also appreciate the robust public participation and the opportunity to provide written comments on this Draft Environmental Impact Report. At this time, there are still severe and dangerous deficiencies with the DEIR—our community needs a thorough evaluation to understand the potential environmental impacts of the Idaho-Maryland Mine in the context of past and proposed future gold mining operations.

Grp 25-49

We welcome the opportunity to provide further input or to further support the County's environmental review efforts. For coordination, clarification, or discussion of any issues raised in this letter, please do not hesitate to contact our Executive Director, Melinda Booth, or Policy Manager, Keiko Mertz, by email or phone (530-265-5961).

Sincerely,

Melinda Booth, Executive Director
melinda@yubariver.org

Keiko Mertz, Policy Manager
keiko@yubariver.org

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GROUP LETTER 25: KEIKO MERTZ, SOUTH YUBA RIVER CITIZENS LEAGUE

Response to Comment Grp 25-1
Comment noted. This is an introductory comment and does not provide a comment on an environmental issue associated with the project. Please see below responses to comments.

Response to Comment Grp 25-2
Comment noted. This is an introductory comment and does not provide a comment on an environmental issue associated with the project.

Response to Comment Grp 25-3
Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 25-4
The commenter characterizes the legal standard for "substantial evidence" under CEQA. Comment noted. The commenter asserts that the DEIR's conclusions are based on inadequate data, and must disclose the risks associated with the nature of the data used. This comment is general in nature and does not point to specific errors with the DEIR. The DEIR is a good faith attempt by the County to provide a comprehensive description of the project, identification of project's impacts based on substantial technical study and analysis, enforceable mitigation measures, and potential alternatives that could reduce significant impacts. The DEIR was based upon almost 40 technical studies that were peer reviewed by the County and/or the County's independent experts. These technical studies included analysis of aesthetics, water quality, biology, cultural resources, and numerous others and served as the foundation for the DEIR's impact analysis, significance determinations, and mitigation measures. The County believes the level of technical analysis supporting the impact analysis and significance determinations represent substantial evidence that will allow the decision-makers to make informed decision making about the environmental impacts of the proposed project.

Response to Comment Grp 25-5
Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 34 - Resident Fish, Master Response 38 - Foothill Yellow Legged Frog and California Yellow Legged Frog, and Master Response 35 - Discharge to South Wolf Creek, and Response to Comment Grp 31-12 regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Grp 25-6
As discussed in Chapter 4.2.1 of the DEIR, Existing Environmental Setting (subsection Forest Resources), the project site is not zoned for forest land or timberland uses. The project site does have lands meeting the definition of forested land (10 percent or more of native tree cover) and timberland (available for, or capable of, growing a crop of trees). As noted in Impact 4.2-3, the amount of forest and timberland converted by this project is insignificant compared to the available forest and timberland resources in the County and Statewide. For example, the conversion of 25 acres within the project site is approximately 35% of the resources within the project site, and less than 1/10 of 1 percent of the County forestlands per the General Plan. The EIR correctly concluded this impact is less than significant.

Response to Comment Grp 25-7

Please see Master Response 19 – NSAQMD Criteria Pollution Thresholds during Operations. As discussed in Master Response 19, the project incorporates all mitigation measures required by the NSAQMD to reduce impacts related to NOx, ROG and PM10 to a less than significant level; and also includes applicant proposed measures such as use of Tier-4F engines which further reduces impacts. The County has concluded that the project's NOx, ROG and PM_{10} impacts are less-than-significant after incorporation of NSAQMD measures and the applicant proposed measures.

Response to Comment Grp 25-8

The commenter asserts that health risk from asbestos and silica were not considered and that the DEIR mis-analyzed these substances as fugitive dust. The commenter's assertion is incorrect. Asbestos and silica (crystalline, respirable) are included in the Air Toxics Hot Spots program and are analyzed in the Health Risk Assessment used for the DEIR in accordance with OEHHA guidelines.

As stated on page 4.3-42 of the DEIR, the NSAQMD's cancer and noncancer thresholds to assess health risk significance for CEQA are consistent with what are used for the AB 2588 risk assessment procedures. The threshold of significance for health risk is an increased cancer risk of >10 cases per million persons. OEHHA has developed chronic reference exposure level (REL)'s for assessing noncancer health impacts from long-term exposure. OEHHA has established a REL for Crystalline silica (quartz, cristobalite, tridymite) of respirable size (defined as 4 micrometer particle aerodynamic diameter). A chronic REL is an airborne level of a chemical at or below which no adverse health effects are anticipated in individuals indefinitely exposed to that level. As discussed on page 4.3-79 and shown in Table 4.3-21 of the DEIR, the threshold of significance for chronic exposure is a Hazard Quotient of 1. The Chronic Hazard Quotient is equal to the annual average concentration at the receptor location divided by the Chronic REL. The Health Risk Assessment prepared for the project's DEIR concludes that the non-cancer chronic health risk, which includes silica, to the most sensitive receptor will be below these thresholds (see Table 4.3-21 of the DEIR).

The Health Risk Assessment is based on conservative assumptions. Please see Master Response 22 – Conservatism of Asbestos Assumptions and Master Response 21 – Conservatism of Silica Assumptions.

Nevertheless, the DEIR concludes that the project could result in a significant impact with respect to exposing receptors to substantial concentrations of asbestos and requires mitigation to reduce the impact to a less than significant level. Mitigation Measure 4.3-2 of the DEIR requires the submission of an Asbestos Dust Mitigation Plan (ADMP) to Northern Sierra Air Quality Management District (NSAQMD) for review and approval. The ADMP has minimum requirements as described in the mitigation measure. Additional measures, such as air monitoring if required by the NSAQMD, would be detailed in the ADMP. The NSAQMD may revise the ADMP on the basis of air monitoring. Components of the ASUR Plan will become part of the approved ADMP and other components will be used as company policy and procedures to assist with compliance with the ADMP.

Response to Comment Grp 25-9

Please see Master Response 1.

Response to Comment Grp 25-10

Please see Master Response 30 - Biological Study Technical Adequacy, regarding the level of biological technical study prepared for this project. It should be noted, the DEIR included a twelve-page appendix with over 150 references. In addition, each biological technical report included as an appendix to the DEIR includes a references section.

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Grp 25-11

The commenter asserts that the analysis of biological resources in the DEIR is inadequate because the biological studies ae inadequate, old and not site-specific. Please see Master Response 30 - Biological Study Technical Adequacy, Master Response 33 - Groundwater Dependent Vegetation, Master Response 37 - Birds and Raptors, Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog, and Master Response 36 - Rare Plants.

Response to Comment Grp 25-12

The reference to 1973 included in Table 4.4-5 referenced by the commenter is the last time an occurrence of that species was identified and reported to CNDDB. The CNDDB was queried in 2019, and supplemental information contained in the CNDDB includes when records were reported; in this case the records were reported in 1973. This information is pertinent to the analysis as it provides an understanding of how widespread the species may occur in the region. Please see Master Response 30 - Technical Study Adequacy, discussing the significant amount of site-specific technical study and peer review that informed the DEIR.

Response to Comment Grp 25-13

Please see Master Response 31 - Rare Plants, and Master Response 30 - Biological Study Technical Adequacy.

Response to Comment Grp 25-14

Appendices F-6 and F-11, botanical surveys for the Centennial and Brunswick Industrial Sites, included a full list of plant species identified during on-site surveys as Appendix A to each report.

Response to Comment Grp 25-15

As the commenter notes, Pine Hill flannelbush will be impacted by the proposed project. Mitigation Measure 4.4-1(a) includes requirements for a Habitat Management Plan in order to mitigate impacts to the species. The commenter does not identify any specific deficiencies with the analysis or mitigation measures other than a preference for avoidance. It should be noted the project was designed to avoid the majority of Pine Hill flannelbush onsite, as shown on DEIR Figure 4.4-9. The commenter asserts that cumulative impacts related to Pine Hill flannelbush were not considered in the DEIR; however, this is incorrect. Cumulative impacts to special-status species including Pine Hill flannelbush were analyzed in Impact 4.4-6 of the DEIR, in which impacts were considered not to be cumulatively considerable.

Response to Comment Grp 25-16

Please see Master Response 31 - Rare Plants.

Response to Comment Grp 25-17

Please see Master Response 31 - Rare Plants. As discussed in Appendix F-11, Table 1, the closest species occurrence is seven miles to the east and last identified over 50 years ago. This species was not identified during rare plant surveys during 2019 and 2020.

Response to Comment Grp 25-18

Please see Master Response 31 - Rare Plants. As discussed in Appendix F-11, Table 1, the closest species occurrence is three miles from the study area and last identified over 90 years ago. This species was not identified during rare plant surveys during 2019 and 2020.

Response to Comment Grp 25-19

Layne's ragwort, a CNPS 1B.2 list species, has not been previously mapped within 5 miles of the project site per the most recent CNDDB update (expires on November 1, 2022), nor is it included in the most up to date 9 quad CNDDB search (9 Quad CNDDB search with Grass Valley Quad as central quad run on April 20, 2022). Additionally, it has never been documented in Nevada County in the CNDDB. The species blooming period is between April and August and was not identified within the project site during surveys conducted in July and August 2019 and in June 2022. Given the species was not known as a special-status plant species that has previously occurred within either 5 miles of the project site or within the 9 quad CNDDB search, and given the local botanists with 15+ years of local experience each that conducted botanical and special-status plant surveys within the project area had no previous knowledge of the species being located within the greater Grass Valley region, the species was not considered as a focal species in the pre-survey background research. However, given the species was not identified within the project site during the blooming period for the species in 2019 and 2022, the species is considered absent from the project site and the project will have no impact on the species.

Response to Comment Grp 25-20

Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

The DEIR demonstrates that the potential impacts to riparian habitat are mitigated to a less than significant level through implementation of mitigation measures 4.4-3(a-d). These measures include but are not limited to implementation of Watercourse/Wetlands/Riparian Areas Management Plans for the Centennial Industrial Site and Brunswick Industrial Site, avoidance or compensatory mitigation

Response to Comment Grp 25-21

The project area does not contain vernal pools, and therefore, habitat for vernal pool fairy shrimp is not present within the project area. As a result, they were not assessed within the DEIR. The western ridged mussel is not listed by either the state or federal Endangered Species Act, and is not a California species of concern. This species does not have sufficient rarity to be considered special-status and require analysis under CEQA. Furthermore, even if this species was listed in the future, the species has not been documented to occur in Nevada County. The project will have no impact on vernal pool fairy shrimp and no impact on the western ridged mussel.

Response to Comment Grp 25-22

Please see Master Response 37 - Birds and Raptors, and Master Response 30 - Biological Study Technical Adequacy.

Response to Comment Grp 25-23

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog and Master Response 30 - Biological Study Technical Adequacy.

Response to Comment Grp 25-24

The DEIR (see Impact 3.4-4) conservatively concludes a potential impact to bat species despite determining bat species have a low likelihood of occurring onsite. Mitigation Measure 4.4-2(f) provides extensive detail regarding the survey of bats, specifically that surveys shall occur no more than seven days prior to surface disturbance, reporting requirements if bats are not found, passive removal if bats are identified, and avoidance until breeding roosts have dispersed. This mitigation measure allows for potential bats to be identified, prevented from returning to disturbance areas, and/or avoidance of bats to limit the potential for impact. As a result, this impact was considered less than significant following mitigation.

Response to Comment Grp 25-25

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 34 - Resident Fish, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. Given that the project will not adversely impact water temperature, water quality or cause increased sedimentation movement or erosion, and will not result in low flows, the project will not cause adverse impacts to the fish species mentioned by the commenter.

Response to Comment Grp 25-26

Please see Master Response 37 - Birds and Raptors, regarding the willow flycatcher. Bears, deer, and mountain lions are not special-status species and therefore, were not included in the DEIR.

Response to Comment Grp 25-27

The commenter states generally that hydrology and water quality were not adequately analyzed in the DEIR, and that the DEIR should consider climate change precipitation scenarios. The impact on water quality and hydrology of climate change is speculative as there is no consensus on whether climate change will result in reduced or increased recharge in certain areas of California and to what extent and when that impact will occur. Please see Master Response 16 – Drought and Climate Change. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As analysis of the project and climate change's combined impacts on hydrology and water quality amounts to speculation, no further response is necessary. Nonetheless, the drainage calculations and detention basins are specifically designed to respond to the drainage requirements of the County of Nevada. The Nevada County drainage requirements indicate that new storm drain systems and channels shall be designed to convey the 10- and 100-year, 24-hour storm event. In addition, the County EIR consultant prepared a water supply assessment (WSA) for the proposed project (see Appendix N), the information from which is presented in DEIR Chapter 4.11. The WSA evaluated the adequacy of NID's total projected water supplies, including existing water supplies



and future planned water supplies, to meet the existing and projected future water demands, including those future water demands associated with the proposed project, under all hydrologic conditions (Normal Years, Single Dry Years, and Multiple Dry Years) (see DEIR page 4.11-8). As such, the DEIR hydrology analysis made every attempt to conservatively analyze project conditions under both heavy rainfall and drought conditions where appropriate.

Response to Comment Grp 25-28

The commenter asserts that the DEIR failed to analyze impacts related to a portion of the project site within the FEMA special flood hazard area (SFHA). However, this comment mischaracterizes the extent of the FEMA SFHA and misunderstands the discussion within the DEIR. The discussion in the DEIR specifically cited in this comment (page 4.8-24 in Chapter 4.8.2) states:

> "…the only part of either project site that is located within a flood hazard zone is the northern edge of the Centennial Industrial Site along Wolf Creek."

As discussed in Impact 4.8-3 (at page 4.8-74), any placement or grading of materials to create usable industrial areas on the Centennial Site would occur outside of flood hazard zones. Given that the project will not encroach on the SFHA, there would be no effect on the hydrology of Wolf Creek and no further analysis is needed.

Response to Comment Grp 25-29

The commenter asserts that the DEIR does not include any baseline data for surface water quality; however, this statement is incorrect. Baseline surface water quality data are discussed on pages 4.8-23 and 4.8-24, based on a more detailed discussion in Section 3.4.1.2 of Appendix K.2 of the DEIR. The data are presented in Tables 3.8, 3.9, and 3.10 of Appendix K.2. The surface water quality data are evaluated further in Section 3.4.2 and plotted on Figures 3-12, 3-17, 3-18, and 3-19 of Appendix K.2.

Response to Comment Grp 25-30

The commenter asserts that the DEIR fails to account for legacy mining impacts, and specifically that the DEIR did not consider mercury impacts on the Property as a result of historic hydraulic mining. However, hydraulic mining never occurred at the Idaho-Maryland Mine site and there is no evidence that mercury was ever used at the site. Therefore, there are no known legacy impacts to which the project could contribute. Furthermore, the water samples collected from the New Brunswick shaft, and from Wolf Creek in 2018, were analyzed for a range of total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and mercury. These analyses include the suite of industrial chemicals that could potentially occur as a result of legacy mining operations at the site and other adjacent past industrial activities. Other than the occurrence of cis-1,2-dichloroethylene, there were no detections of any other organic chemicals or mercury. As stated on page 4.8-21 of the DEIR, the compound cis-1,2-dichloroethylene (cis-1,2-DCE) is detected in all samples from the New Brunswick shaft at concentrations ranging from 1.8 µg/L to 4.2 µg/L. This compound generally occurs as a breakdown product of the industrial solvent trichloroethylene (TCE) or the dry-cleaning solvent tetrachloroethylene (PCE). Neither of these parent compounds were detected in any of the water samples. The presence of cis-1,2-DCE in the water samples from the New Brunswick shaft could be due to two potential sources. One potential source is historic solvent use within the New Brunswick mine for equipment repair or maintenance. The second potential source is seepage of shallow groundwater into the New Brunswick shaft from the adjacent former SPI Mill site, located to the southeast. The Mill site was known to have industrial solvent impacts, including cis-1,2-DCE, in shallow groundwater in the past. If future mining activity disturbs areas where some unknown residual chemicals currently reside, the monitoring required

under the Central Valley Water Board WDR permits (see Mitigation Measure 4.8-1(a)) would detect any exceedances of water quality standards and the treatment systems would need to be adjusted, if necessary, to maintain compliance with discharge requirements.

Response to Comment Grp 25-31

As discussed on page 4.8-48 of the DEIR, the primary residual components of the ammonium nitrate-fuel oil (ANFO) used for blasting, ammonia and nitrate, are very soluble and mobile in water. This means that any blasting residuals would be continually removed from the mine over time through the dewatering system. The proposed WTP is designed to treat ammonia and other blasting residuals that might occur due to incomplete detonation. Thus, when the mine is allowed to flood again following the completion of mining, there is no reasonable potential that residuals from former blasting activities would cause a violation of any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. As stated on page 4-5 of Appendix K.4, low concentrations of NH3 may occur as a result of explosives used during periods of active mining and will be removed by the aeration process. If required, the efficiency of this aeration can be enhanced by increasing the pH. This will generate more of the gaseous form of NH3 which can be stripped from the water. Therefore, as a contingency component for Fe (and Fe/As), Mn, and ammonia treatment, sodium hydroxide (NaOH) will be included in the permitting efforts for pH adjustments should it become necessary to add alkalinity to the water for Fe (along with Fe/As) and Mn treatment, or to treat NH3 more efficiently or in higher concentrations than have been previously detected. In regard to ammonia treatment, this may occur as a result of explosives used during periods of active mining. Also see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 25-32

As discussed in the Response to Comment Grp25-30 above, the water samples collected from the New Brunswick shaft, and from Wolf Creek in 2018, were analyzed for a range of total petroleum hydrocarbons (TPH), semi-volatile organic compounds (SVOCs), volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and mercury. These analyses include the suite of industrial chemicals that could potentially occur as a result of legacy mining operations at the site and other adjacent past industrial activities. Appendix K.4 of the DEIR provides the Water Treatment Plant Design Report, upon which the analysis of potential effects from mine dewatering and treated water discharge is based, in part. Please see Master Response 35 - Discharge to South Fork Wolf Creek.

Response to Comment Grp 25-33

The commenter asserts that the DEIR is inadequate because the hydrologic measurements are provided with month and year, but not day. However, the commenter does not explain how the requested information relates to an impact that was not disclosed or mitigated under CEQA. As stated in Chapter 4.8.1 of the DEIR, the information upon which the hydrology and water quality analysis is based is provided in Appendices K.1 through K.9 of the DEIR. Details regarding the dates and times of the hydrology measurements are provided in Appendices K.1 and K.2. Appendix I of Appendix K.2 includes a near-continuous (15 minute) streamflow data recorded since January 24,2020 at South Fork Wolf Creek.

Response to Comment Grp 25-34

The commenter asserts that the DEIR failed to consider the impacts of impervious surfaces and the associated hydrology impact, and instead only considers baseline conditions. The analysis in Chapter 4.8.2 of the DEIR, as referenced by footnote 41 in this comment, presents the existing environmental setting, also referred to as baseline conditions, consistent with CEQA. Analysis of



the effects of planned changes that would occur as a result of the project, including parking lots and other impervious surfaces, are provided in Section 4.8.4, and are also discussed in Appendices K.1, K.2, and K.5 of the DEIR.

Response to Comment Grp 25-35

The commenter asserts that the DEIR does not include adequate data and analysis to prove that there is no connection between the groundwater wells and the underground mine workings. The discussion on page 4.8-13 of the DEIR, as referenced in footnote 42 in this comment, is based on a more detailed analysis in Section 3.3.3.3 in Appendix K.2 of the DEIR (as footnoted on page 4.8-13). The analysis in Appendix K.2 provides a more detailed comparison of water levels in the mine compared to rainfall amounts. Appendix K.2 also includes discussions of the water levels in the private domestic wells in the mine vicinity, in Section 3.2.2.1. As noted in that discussion, not only are the seasonal responses in the wells different than that in the existing mine workings, but the groundwater levels in the wells are also approximately 50 feet to over 400 feet shallower than the groundwater level in the mine. These data provide substantial evidence of a lack of any direct hydraulic connection between the wells and the mine workings. The modeling work conducted in Appendix K.2 and Appendix K.3 further support this conclusion. The DEIR concluded that there is a potential impact to groundwater wells due to dewatering and provided mitigation including a groundwater monitoring plan and the construction of a potable water line for 30 parcels, as well as a requirement that the mine operator replace water supply for any other impacted wells. This analysis was peer-reviewed by the County's groundwater experts, who concurred with the analysis that the impact would be less than significant after mitigation.

Response to Comment Grp 25-36

The commenter asserts that the DEIR's groundwater analysis did not consider future conditions; however, this statement is incorrect. The EMKO (Appendix K.2) and Itasca (Appendix K.3) models are calibrated using existing conditions, as is standard practice in groundwater modeling. The calibrated models are then used to predict future conditions due to the expanded and dewatered underground workings. See, for example, Section 4.2.2 of Appendix K.2 and Section 5.2 of Appendix K.3 for discussion of the modeled effects of future mining conditions.

Response to Comment Grp 25-37

The commenter asserts that the DEIR did not account for climate change scenarios with respect to water supply impacts. Please see Response to Comment Grp 25-27 above relating to climate change scenarios. The specific discussion in the DEIR cited in footnote 44 is describing the groundwater model developed by Itasca and presented in Appendix K.3 of the DEIR. It is appropriate for the groundwater model to use long term averages based on historic rainfall data because part of the model development is to calibrate the model output to past observations. Furthermore, while there are publications that indicate that precipitation patterns are evolving as the climate evolves, there is no technical basis upon which to predict exact changes or to quantify the specific change in the long-term averages over time. Such an effort would be speculative, which is not considered substantial evidence under CEQA. In addition, the rainfall data used throughout the analysis in the DEIR and the supporting appendices is shown on Figure 3-4 of Appendix K.2 of the DEIR. As shown on that figure and discussed in the related narrative, rainfall patterns in the project area are already subject to lengthening periods of drought and an increase in high-intensity rainfall events. During the period considered (1967 through 2018), the annual rainfall varied from a minimum of 18.48 inches to a maximum of 95.93 inches. Figure 3-4 also shows that over this period, there has been a reduction in the number of years of sequential above-average rainfall and an increase in the number of below-average rainfall years. Thus, the

potential influences suggested in this comment are already reflected in the data used for the analysis.

Response to Comment Grp 25-38

The commenter generally summarizes information presented in the DEIR. Please see Responses to Comments Grp -39 25to 25-44 below with respect to the commenter's specific questions and statements.

Response to Comment Grp 25-39

The commenter asks how quickly the water will be treated and how the operational decisions are made with regard to pumping speed. Appendix K.4 of the DEIR describes the design and operation of the water treatment system. The treatment plant would be sized to treat the maximum pumping rate from the mine of 2,500 gpm (3,600,000 gallons per day). The initial dewatering of the mine requires the pumping of the water volume currently in the flooded mine, as well as groundwater inflow into the mine. If this maximum pumping rate is not achieved during initial dewatering due to operational concerns, the duration of time to complete initial dewatering would be extended. The pumping rates during initial dewatering would be determined by company management and supervisors in accordance with relevant permit requirements and operational concerns. The discharge from the mine into South Fork Wolf Creek will be governed by the Central Valley Regional Water Quality Control Board, who will have enforcement authority over discharges from the mine. Please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 32 - Temperature of Mine Water Discharge.

Response to Comment Grp 25-40

The commenter asks how rainfall is considered related to water treatment pond capacity, and questions whether the pond has sufficient capacity to handle storm events. The site drainage plan for the Brunswick site routes the majority of precipitation run-off from the site to the proposed storm water detention basin, not the water treatment pond, as shown in Drawing H-4 of Appendix K.5. Section 4.5 of Appendix K.2 discusses the 6.4-acre catchment area where precipitation runoff would inflow into the water treatment pond and confirms that the designed freeboard volume is more than adequate to retain the runoff from an extreme storm event. An emergency overflow spillway prevents water from overflowing the water treatment pond berm and mitigates the risk of catastrophic overflow or failure of the pond walls caused by rapid erosion. (See DEIR pp. 4.8-73 to 4.8-74.) The spillway would be reconstructed during the replacement of the southwestern pond dam.

Response to Comment Grp 25-41

The commenter questions whether the freeboard provided in the water treatment pond is sufficient to handle storm events. As discussed in Appendix K.5, design storm depths for these events were attained from information published on the National Oceanic and Atmospheric Administration (NOAA) "Hydrometeorological Design Studies Center, Precipitation Frequency Data Server" website for the specific location of the Brunswick Site (Station Nevada City (04-6136). The PDS-based precipitation frequency estimate for a 100-year storm over durations from 24 hours to 7 days and the daily precipitation inflowing into the water treatment pond (6.4-acre catchment area) is shown in the table below. The water treatment plant has a designed capacity of 2,500 gpm which is equivalent to 11-acre feet per day and is more than sufficient to manage the estimated precipitation over multiple days during a 100-year storm event.

Duration	Total Precipitation inches	Precipitation to water treatment pond (acre feet) Total	Daily
24 hours	10.7	5.7	5.7
2 days	14.9	7.9	2.2
3 days	18.2	9.7	1.8
4 days	20.4	10.9	1.2
7 days	25.2	13.4	0.9

https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca

Response to Comment Grp 25-42

The commenter asserts that the DEIR does not analyze settling of solids, nor fill rate of the water treatment pond. However, the commenter is incorrect, as these issues are addressed in the DEIR. The settling of solids, impact to volume, and cleaning of the water treatment pond is discussed in detail in Section 5.4 of Appendix K.4 to the DEIR.

Response to Comment Grp 25-43

The commenter questions how the processing rates can be adjusted if necessary due to precipitation or changing conditions, and what protocols will be in place to adjust pumping and evacuate the mine tunnels. The water treatment plant is designed for a maximum treatment rate of 2,500 gallons per minute and all equipment would be in place to increase treatment to this capacity at any time it was necessary. Pumps in the underground mine would pump water to the water treatment pond and can be turned on and off as necessary by mine employees. Supervisors on surface can communicate with underground and surface workers though radio communications to provide necessary instructions. The water treatment pond provides water storage capacity so that the mine pumping and water treatment are not required to be identical but would average the same rates over a day or several days. As discussed in section 4.5 of Appendix K.2, at the maximum mine dewatering rate of 2,500 gpm, the pond has the capacity to hold the volume of water that would be dewatered during two days of pumping. At the maintenance dewatering rate of 850 gpm, the pond has the capacity to hold the volume of water that would be pumped over more than six days. This capacity allows time for any necessary maintenance or repairs to the water treatment plant without curtailment of underground dewatering. As discussed in Section 5.4 of Appendix K.4, the removal of sludge from the water treatment pond can be achieved with slurry pumps. Therefore, the periodic removal of settled solids would not require the curtailment of mine dewatering. In addition, the underground mine has a substantial capacity if it were ever necessary to curtail water pumping for an extended period of time. An estimate of the volume of existing mine workings is provided in Section 3.3.3.2 of Appendix K.2 with the lower levels (2300 – 3280 level) having a volume of 84-acre ft and the entire mine having a total volume of 1,183 acre-ft. At an average inflow rate of 850 gpm (3.75-acre ft per day) it would take approximately 22 days for the lower levels of the mine to flood and approximately 314 days for the entre mine to flood.

Response to Comment Grp 25-44

The commenter asserts that due to the issues it raised in comments Grp 25-39 to 25-44, the DEIR does not provide substantial evidence that the DEIR's conclusions are correct. Please see Responses to Comments Grp 25-39 to 25-44. The DEIR provides substantial evidence to support the conclusions of the environmental analysis in the DEIR.

Response to Comment Grp 25-45

The commenter asserts that the water supply assessment and groundwater analysis in the DEIR are flawed and based on inaccurate assumptions because they ignore the link between groundwater and surface water. However, the groundwater model and hydrologic analysis discuss in detail the linkage between surface water and groundwater, which is fundamental to the analysis. As shown in Figure 4-5 of Appendix K.3, the regional groundwater flows westerly past the project site. Some groundwater enters the mine workings, is pumped to surface, treated and discharged into South Fork Wolf Creek where it flows to Wolf Creek and then to the Bear River. The project produces treated water that is discharged to South Fork Wolf Creek (rather than flowing underground) and does not change the overall water balance. The DEIR's analysis was reviewed by the County's independent groundwater experts, who concurred with the DEIR's analysis and conclusions.

Response to Comment Grp 25-46

The commenter asserts that the DEIR's groundwater analysis is flawed because it predicts less wells to be impacted than previous assessments. However, previous assessments have come to similar conclusions as the current analysis despite the use of simplistic analytic solutions. Please see Master Response 13 – Historic Hydrogeologic Assessments, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 – Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 25-47

The commenter questions whether there would be sufficient water to supply 300+ wells if the mine caused a larger drawdown than expected. The DEIR's analysis concluded that only 7 wells would be impacted and conservatively provided mitigation to supply potable water to 30 parcels, despite the fact that less wells are expected to be impacted. This analysis was reviewed by the County's independent groundwater experts, who concurred with the DEIR's analysis and conclusions. There is no evidence that 300+ wells would be impacted, and this impact is speculative. The County is not required to analyze speculative impacts under CEQA. (CEQA Guidelines Section 15384.)

The analysis provided in Chapter 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. Pursuant to Nevada County General Plan Policy 17.12, the project would address this by installing a potable water supply line in East Bennett Road and providing individual well owners with a connection to the potable water line. No significant impacts to domestic water wells are predicted in the Greenhorn, Woodrose, Beaver or other areas. The predictions include the use of a 100% safety factor, multiple sensitively scenarios, and have been peer reviewed by the county's independent expert consultant. However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(b) requires that if, based on the GMP, it is determined that mining operations are resulting in a significant impact to groundwater wells, the Project Applicant shall be responsible for providing a comparable supply

of water to such homes or businesses whose wells are significantly impacted. Please also see Master Response 15 – Adequacy of Groundwater Monitoring Wells.

The assumption that impacts to water wells outside of the East Bennett area would occur, and which would require mitigation is speculative and the mitigation that would be performed for this scenario is not known. Therefore, it is not appropriate to include in the Water Supply Assessment.

Response to Comment Grp 25-48

The proposed extension to the NID potable water system would be part of NID infrastructure and therefore would be owned and maintained by NID. Certain properties along E. Bennett Road that are not currently NID customers will be compensated for the use of up to 400 gallons per day of water. The compensation would be at the NID rate at the time of use. There is one vacant property in the East Bennet area. This property would be provided a NID water meter and the capacity charge would be paid by the applicant. If a home is built at this location in the future, the owner would be responsible for water use charges. Please see the revised Well Mitigation Plan, attached as Appendix D to the Final EIR.

Response to Comment Grp 25-49

The commenter summarizes its prior comments and generally asserts that the analysis in the DEIR is inadequate. Please see Responses to Comments Grp 25-1 to Grp 25-48 for responses to the commenter's specific assertions and questions.

Group Letter 26

THE SIERRA FUND

204 Providence Mine Rd
Suite 214
Nevada City, CA 95959
P: 530.265.8454
F: 530.265.8176
E: info@sierrafund.org
www.sierrafund.org

March 30, 2022

Matt Kelley, Senior Planner
Nevada County Planning Department
Via Email: Idaho.MMEIR@co.nevada.ca.us

The Sierra Fund Comments on the Idaho-Maryland Mine Project Draft Environmental Impact Report SCH No. 2020070378

Dear Nevada County Planning Commissioners and Staff,

The Sierra Fund (Fund) appreciates the opportunity to offer comments on the Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine Project (Project). We first summarize our concerns and recommended actions briefly, and then offer extensive comments about each item in the body of the letter.

Summary and Recommended Action

Grp 26-1

Our review has found that the scientific and site assessment work conducted as part of the DEIR is deeply flawed, providing a totally inadequate base on which the environmental review and mitigation measures were based. The DEIR fails to describe basic aspects of the project including how the existing hazards on the site will be remediated. The DEIR lacks crucial information needed in order to adequately define the potential geochemistry impacts of the 80-year operation, much less the impacts on surface and groundwater quantity in the area. The DEIR is inadequate to serve its proper role in permitting.

We believe that addressing these concerns calls for a significant re-write of the DEIR, which should then be re-circulated for public comment prior to certifying the final EIR.

Our Qualifications

Grp 26-2

The Sierra Fund is a 501(c)(3) non-profit corporation dedicated to improving the environmental health of the Sierra Nevada and the health of those people who make the Sierra their home. The Fund worked closely with Governor Brown and the legislature on the substantial revisions to the Surface Mining and Reclamation Act that became law in 2017. The Fund has led the development of research and projects on abandoned mine lands throughout the region and has published numerous reports of best available methods and technologies for assessing and remediating these compromised lands. We are working collaboratively with a number of local, state and federal agencies to support abandoned mine land reclamation.

Our program is led by Dr. Carrie Monohan who holds a Ph.D. in Hydrology from the University of Washington and is also an adjunct professor at the California State University in Chico. The Fund is advised by hydrologists, geologists, mining engineers, lawyers, medical doctors, geochemists and environmental health specialists.

Scope of Our Comments

The Sierra Fund has signed on to the group community comment letter that raises issues from transportation to green-house gas impacts. In this letter we will not comment on every issue that might be appropriate to raise in a review of this DEIR, such as land use issues raised by the Project proposal to place a major working mine in the middle of a city that depends to a great extent on tourism for its revenue base. However, we echo the comment by our colleague David Chambers with the Center for Public Participation "This mine development proposal lacks the economic and environmental data necessary to evaluate a full mine development proposal. "

Grp 26-3

This letter focuses on two topics in which we are deeply qualified to comment: hydrology and water quality. Our comments mostly follow the same order in which the various issues are reviewed in the DEIR. The Fund makes its comments based on the California Environmental Quality Act (CEQA) and the regulations (Guidelines) adopted to implement CEQA. Court decisions interpreting CEQA and the Guidelines are not referenced in the interest of not detracting from the factual points the Fund wishes to present. However, we believe each of our major contentions concerning the DEIR is grounded in the requirements of CEQA and the Guidelines and supported by court decisions interpreting them.

Overall Comment #1:
Site Assessment Methods Used & Proposed Monitoring Need Improvement

One deep flaw running through this DEIR is an assumption first articulated in the public notice, which states flatly that the project sites are not on a list of hazardous materials complied pursuant to Government Code Section 65962.5. This finding and phrase seems to allow the entire DEIR to ignore the obvious presence of legacy hazardous mining waste on and around the proposed development sites. We believe this is because the current site assessment methods are inadequate to properly evaluate the properties slated for mining.

We do not believe that the assessment methods used to assess the area have found the problems on the site. We do not believe that proper assessment has been done of the ore that will become waste rock; the water that will leach from the site during rain events; or the amount of particles such as asbestos fibers, that will be released as a result of the massive amount of rock and water that are being moved around.

Grp 26-4

The Idaho-Maryland mine drilling cores is not sufficient to provide the necessary information on the geochemistry of the waste rock and tailings and there is no surface water-quality modeling. These are elements that are critical in evaluating the potential impacts of a proposed mine. As a result, it is not known whether the mine waste could leach contaminants into ground and/or surface waters. Rise Gold lack of an adequate number of drill samples results in the lack of data required to adequately characterize the geochemistry of the waste rock and tailings that will be produced, or to supply test data on the leachate from this waste that would allow modeling of potential impacts to surface water.

Rise completed 19 drill exploration drill core holes, totaling 67,500 linear feet, from 2017-2019.

From this drill core, Benchmark Resources collected six drill core samples that it used to characterize the geochemistry of the waste rock. These samples are listed in Table 4-6. The geochemical predictions for approximately 96% of the waste rock to be produced comes from one 10-foot interval of drill core (Sample MA-2 from 3959.7 ' to 3969.7'), and one 1-foot sample (MA-3 from 3265' to 3266').

Another way to describe this is that the geochemical characterization of the 2 million tons of waste rock produced during the first 11-years of mining, and nominally the waste rock production from the entire 80- life of the proposed permit, is represented by these two samples, which come from a total of 11 feet of drill core.

If this site is to be mined for 80 years the environmental monitoring needs to be improved now – and needs to create mechanisms to incorporate additional methods of assessment as they are developed.

THE DEIR needs to be halted until the methods used to assess this site are improved and implemented. Water sampling must be done during storm events and EPA certified laboratories able to do trace metal detection must be used. Soil testing must use judgmental and targeted sampling of areas with mine features identified by the cultural site evaluation that details the site history and uses.

Overall Comment #2: The Centennial disposal site is part of the mining project, and must be addressed as such in this DEIR.

Grp 26-5

The DEIR goes to great lengths to put distance between the ongoing voluntary clean-up at the Centennial Industrial Site and the proposed mine at the Brunswick Industrial site. It argues that the conditions of the Centennial Industrial site now should not be considered as the project baseline, instead they will be "adjusting the environmental baseline for Centennial Industrial Site to use the above-described post-remediation condition instead of existing conditions at the Centennial Industrial Site" (DEIR Page 1-4).

CEQA is clear that a project must be considered as a whole. Projects are not allowed to be piece meal when doing a DEIR. The fact that the DEIR notes that if the Centennial Industrial site can't be used to accept all of the waste generated by the mine that they will just find another undescribed site to place the material, makes it clear that the projects are joined – or are not joined? There is enough capacity or there isn't? This is not planning. This is guessing.

This decision is a judgement call that is really up to the Nevada County Planning Commission to decide. The Commission needs to decide that these projects are related and bring them back as one unified project

Detailed Comments

Grp 26-6

CHAPTER 4.6: GEOLOGY, SOILS, AND MINERAL RESOURCES

Collapses

The DEIR states (pdf p. 542) that "the underground mine workings focused on removal of quartz vein materials that are generally narrow, so the collapse of a deep (e.g., 100 feet bgs) mine feature is not likely to be expressed at the ground surface." However, as described in the DEIR on pdf pages 574-576, there are several existing collapses at this mine site. The scientific basis for the 100-foot cut-off is not presented. The DEIR states of ECM that "They believe that in all areas where the separation equals or exceeds 100 feet there is no chance that ground water drawdown could affect surface structures." Belief is not an adequate technical basis for such a crucial determination.

Due to previous surface instability in the community from underground mine stope collapses, *the DEIR should be revised to provide a robust scientific basis to support the relevant contentions/beliefs, or be more forthcoming about the possibility of collapses originating from more than 100 feet bgs.*

CHAPTER 4.7: HAZARDS AND HAZARDOUS MATERIALS
Assaying

Grp 26-7

A significant omission in the DEIR is the topic of the environmental impacts of a mining operation's mineral assays, which may have environmental impacts due to emitted lead fumes and disposal of lead-contaminated crucibles and cupels. As noted in the DEIR on pdf page 199 (Table 3-8) and pdf page 733 (Table 4.9-6), the mining operations workforce is proposed to include the task of assaying. Assaying is ongoing as mining progresses through variations in the host rock and its ore grade, in order to determine where or whether in the ore body to continue mining. As described in the currently-posted Investopedia article[1] on mineral assessment, "The fire assay method is the most popular method and consists of grinding samples into a fine powder, mixing the sample with lead oxide and appropriate flux. Subsequently, the sample is heated in a ceramic or metal crucible, which decomposes the sample into a lead button containing gold, silver, etc., and slag. The lead button is placed into a shallow cup (cupel) and *the lead is boiled off in a fire assay furnace [emphasis added].* A bead of precious metals is left in the cupel after the lead is boiled off. The bead is weighed and analyzed for precious metals and these data are used to determine ore grade (richness)." A metallurgy website[2] goes on to describe the disposition of the lead contaminated "cupels" left over after the instrumental analysis, as follows, "The disposable *[sic]* of the used, lead-contaminated cupels should done by certified environmental company with accordance of the environmental laws set out by the regulations of the governing body." In California, these lead-contaminated wastes may be determined to be hazardous and therefore pose an additional environmental impact not analyzed in the DEIR.

[1] https://www.investopedia.com/terms/a/assay.asp, accessed on February 4, 2020
[2] https://www.911metallurgist.com/blog/fire-assay , accessed on February 4, 2020

According to the DEIR, assaying will be done five days a week (pdf page 199, Table 3-8) but the DEIR does not describe how many used, lead-contaminated crucibles and cupels Rise plans to dispose of per day and how will be they be handled in an environmentally safe manner. In addition, the DEIR does not address the potential release of lead fumes on a daily basis from the fire assaying process, as described above.

The DEIR should be revised to address the potential daily and long-term release of hazardous wastes both from crucible and cupel disposal as well as potentially from lead fumes.

CHAPTER 4.8: HYDROLOGY AND WATER QUALITY

The threat to water quality posed by the mine waste to be discharged to land will be regulated by the Central Valley Regional Water Quality Control Board under the Land Disposal Program. The DEIR (pdf page 652) correctly states that Water Board regulations governing discharge of mining waste to land are located in Title 27 of the California Code of Regulations, Section 22470 et seq. The DEIR (pdf page 652) also correctly states that "The project will discharge mining waste, which is appropriately regulated under the Title 27 Mining Waste Management Regulations." Mining wastes are defined and classified as follows in Title 27:

Grp 26-8

Mining Waste Management Regulations, apply to all discharges of mining wastes and to owners/operators of a waste management unit for the treatment, storage, or disposal of mining waste. The Mining Waste Management Regulations define "mining waste" as "waste from the mining and processing of ores and mineral commodities. Mining waste includes: (1) overburden; (2) natural geologic material which have been removed or relocated but have not been processed (waste rock); and (3) the solid residues, sludges, and liquids from the processing of ores and mineral commodities" (CCR, Title 27, § 22480(a)).

- Group A: mining waste of Group A are wastes that must be managed as hazardous waste pursuant to Chapter 11 of Division 4.5, of Title 22 of the CCR, provided the RWQCB[3] finds that such mining wastes pose a significant threat to water quality.

- Group B: mining waste of Group B are either: (A) mining wastes that consist of or contain hazardous wastes, that qualify for a variance under Chapter 11 of Division 4.5, of Title 22 of the CCR, provided that the RWQCB finds that such mining wastes pose a low risk to water quality; or (B) mining wastes that consist of or contain nonhazardous soluble pollutants of concentrations which exceed water quality objectives for, or could cause, degradation of waters of the state.

- Group C: mining wastes from Group C are wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity.

[3] RWQCB is defined as the Regional Water Quality Control Board. In the case of the IMM, this would be the Central Valley Regional Water Quality Control Board.

The DEIR does not contain any data that would serve as a basis for classifying waste rock. Waste rock from mines has the potential to generate poor quality effluent that threatens water quality unless adequate containment is provided. As a result, waste rock's potential to produce poor quality effluent should be thoroughly characterized using appropriate tests to the satisfaction of the Water Board (e.g., ASTM D 5744) over a sufficient period, also to the satisfaction of the Water Board (e.g., 40 weeks). Moreover, if the mine began operating, testing would need to continue because the mineral makeup of the waste is likely to be heterogeneous. The same can be said for the mill tailings that are proposed to be either incorporated into cement paste backfill or discharged along with waste rock into the two proposed waste rock piles.

A previous submittal by Rise did include some acid base accounting test data (Desktop Study of Cemented Past Backfill, Itasca Inc. Feb. 24, 2020), from a 47-kilogram (103 pound) composite sample of "ore". Based on the data from the single test, Rise concludes that the tailings will not generate acid. Rise's conclusion, however, fails to recognize that acid base accounting does not provide any data regarding effluent quality data are used to classify mining waste under Title 27 discharge of waste to land regulations. The mill tailings should be thoroughly characterized using appropriate tests (e.g., ASTM D 5744).

Grp 26-9

According to the DEIR, the proposed mine will produce 350,000 tons of ore per year, meaning a very large total of 28 million tons if the mine operates for the planned 80 years. Itasca's desktop study does recommend follow up sampling and analyses during mining to catch changes in ore mineralogy that might affect effluent quality.

The DEIR should be revised to clarify that follow-up ore sampling and analyses can be expected to continue indefinitely during mining. Furthermore, if the analyses indicate that the nature of expected effluent quality has changed for the worse, further actions may be required by the Water Board in the future to protect water quality.

Grp 26-10

Terminology

The term "Engineered Fill" introduced in the DEIR on pdf page 32 is undefined and is used throughout the DEIR. Mined rock that does not have enough gold to warrant processing is more correctly referred to as waste rock. Such rock may be useful in constructing an engineered fill provided that it has been classified as a waste that does not pose a threat to water quality by the appropriate Regional Water Board that has authority over the location of discharge. The DEIR (pdf page 653) acknowledges that "the engineered fill...is a mining waste."

Therefore, for clarity and conformance with regulations, the DEIR should discontinue use of the misleading term "Engineered Fill" and globally replace it with "waste rock".

The term "Barren Rock" is introduced on pdf page 181 but does not fall under the definition of mining waste in CCR, Title 27, § 22480(a). For clarity and conformance with regulations, "Barren Rock" should be globally replaced with "waste rock."

Grp 26-11

The DEIR indicates on pdf page 33 that Rise plans to sell waste rock on the open market if it is still being produced after the two proposed waste rock piles reach capacity. This is an unrealistic proposal unless the appropriate Regional Water Board (with jurisdiction over the location where the waste rock is to be discharged to land) determines that the waste rock does not pose a threat to water quality. It should be noted that dispersing waste rock and other mine waste over large areas without containment often results in contamination (e.g., Calcine mercury mine tailings used for road construction in San Luis Obispo County).

The DEIR must specify where the waste rock will go after the waste rock piles reach capacity, or if the Centennial site cannot be used to accept all of the rock generated by the project.

Grp 26-12

Waste Characterization

The DEIR, on pdf page 33 as well as later in the document, describes DTSC's characterization work at the Centennial site (the discharge site of historic Idaho Maryland Mine waste). The Centennial site cleanup potentially provides insight into how the waste rock and tailings from the proposed mine might behave under surface conditions over the long term. According to the description in the DEIR (pdf page 534), it appears that the historic mining wastes from this very mine have been undergoing a form of long term (over 60 years), uncontrolled Kinetic test. The DEIR states (pdf page 534), "Extensive site investigation, overseen by DTSC, has identified mill tailings, waste rock and affected soil at the site that contain lead, arsenic, mercury and other metals at concentrations exceeding background soil metals concentrations and regulatory benchmark concentrations." The information suggests that there is a serious risk that the proposed new waste rock piles would produce effluent that would pose a significant risk to water quality unless the Water Board requires adequate containment.

The DEIR should acknowledge that data from DTSC's characterization work at the Centennial site undercuts the notion that mining waste from a new operation would not pose an environmental threat.

Grp 26-13

Waste Rock Piles

The two proposed waste rock piles (30 acres at the Brunswick site, 44 acres at the Centennial) border Wolf Creek and its South Fork. There should be a real concern that effluent from these waste rock piles could severely degrade not only the South Fork of Wolf Creek and Wolf Creek, but groundwater as well, if the waste rock piles are permitted under Title 27 as unlined and uncapped mine waste management units.

The DEIR should characterize the risk of effluent from these waste rock piles getting into surface and groundwater and design an appropriate mitigation measure.

Grp 26-14

Financial Assurances

The DEIR fails to mention that regulations require that the discharger (mine operator) provide, in advance, financial assurances to cover closure and post-closure mining activities to the satisfaction of the Regional Water Board. The applicable regulations [27CCR 22510(h)] state that the post-closure period ends only when the Regional Water Board "determines that water

quality aspects of reclamation are complete and waste no longer poses a threat to water quality." Robust and ongoing financial assurances are vital to preventing long-term environmental effects from the waste piles, since they will presumably remain in place indefinitely into the future.

The Reclamation Plan and associated DEIR must describe potential mitigation measures – including those that might be needed to treat water discharge – in one project. Water quality treatment can be expensive and have its own potential environmental impacts. These issues should be included in the DEIR and considered in the Financial Cost Estimate and Financial Assurance Mechanisms created when the project is approved.

Cement Paste Backfill

Grp 26-15

Cement Paste Backfill (CPB) is made from mill tailings, cement, and water and is used to fill underground workings. Aggregate (e.g., crushed waste rock) is added when unstable underground workings need support. Rise has proposed to backfill portions of the mine with CPB. Backfilling with CPB may present problems under the Title 27 regulations because tailings (mine waste) would be deposited underground and would likely be submerged by groundwater after mining (and thus pumping) ceases, and the water in the mine ("mine pool") returns to its pre-mining elevation. It is unclear how the Water Board 's requirements would address this scenario in order to protect water quality into the future.

The DEIR must be amended to address these long term water quality impacts and potential mitigation measures.

Permitting Period

Grp 26-16

The DEIR repeatedly refers to a proposed permit period of 80 years. For example, the DEIR states on pdf page 32 that "The proposed project would reinitiate underground mining and gold mineralization processing for the Idaho-Maryland Mine over an 80-year permit period..." This time period characterization is incorrect for water quality permitting. The proposal would entail obtaining several different types of Water Board permits, none of which would have anything approaching an 80-year time frame. The waste discharge requirements issued for waste rock piles and other discharges of mining waste to land all must be reviewed periodically and made available for public comment during each review; they are subject to changes in specific requirements. In addition, NPDES permits for discharges to surface water expire, unless renewed, every five years per the federal Clean Water Act. The NPDES permit re-issuance process is also subject to public comment.

The DEIR should be revised so that it does not misleadingly imply that there is an 80-year permit period for any water quality permits.

Summary

Grp 26-17

What the DEIR describes is a proposed mining operation that if initiated, would be quite similar to historical mining operations in Grass Valley, only larger. The DEIR does not propose any significant innovative techniques to improve management of mine wastes or process ore. The

DEIR indicates that the mine would rely on surface disposal of waste rock and tailings, just as the historical mines in Grass Valley once did.

Nevada County has more than its share of legacy waste rock and tailings sites, mine water discharges, and mine collapses left over from historical mining operations. Today's Grass Valley residents have to live with and sometimes pay for cleaning up mine wastes from historical mines.

The DEIR claims that the two waste rock piles produced as part of the mining process will be suitable for development, however that claim is pure speculation at this time. No data are presented to support that claim, but plenty of data are available about the water quality and air quality impacts of legacy gold mines working in the same ore body.

Grp 26-18

What isn't pure speculation is that the two waste rock piles that would result from operating the mine would be eyesores at best and more likely, attractive nuisances and environmental liabilities that current and future residents of Nevada County would have to live with in perpetuity. As stated in the DEIR (pdf page 1052), the No Project Alternative is environmentally superior.

Please feel free to contact me if you have any questions about our comments. Thank you again for this opportunity to participate in this public process.

For the Sierra,



Carrie Monohan, Ph.D.
Program Director
The Sierra Fund

Adjunct Professor
Department of Geological and Environmental Sciences
California State University, Chico

GROUP LETTER 26: CARRIE MONOHAN, THE SIERRA FUND

Response to Comment Grp 26-1
This comment is introductory in nature. The commenter asserts that the DEIR is inadequate and should be revised and recirculated. The commenter's specific comments are addressed in the following responses to comments below.

Response to Comment Grp 26-2
This comment details the commenter's background. Comment noted.

Response to Comment Grp 26-3
This comment is introductory in nature and expresses general concerns regarding the project. Please see Master Response 1.

Response to Comment Grp 26-4
The commenter asserts that the DEIR ignores the history of hazardous mine waste at the project site, and that the site assessment methods used to characterize the rock at the project site for waste rock leachates and asbestos are inadequate. The commenter also asserts that the samples taken from drilling cores are inadequate to provide information on the geochemistry of the rock and that there is no surface water quality modelling provided. Please see Master Response 8 - Mine Waste Characterization, Master Response 9 - Historic Mine Waste at Centennial Site, and Master Response 10 - Explosives, Reagents, and Brunswick Fill. Please also see Responses to Comments Grp 7-158 and 7-162. The proposed project would likely produce mine waste with lower sulfide and metal content than those produced historically, and the historic mine waste has been determined to be Group C mining waste from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity (See Master Response 9 - Historical Mine Waste at Centennial Site). Section 4.4 of Appendix K.2 of the DEIR provides geochemical testwork conducted on tailings and barren rock samples from the project. Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)).

Response to Comment Grp 26-5
The commenter asserts that the Centennial cleanup project should be analyzed as part of the DEIR. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA. Please also see Section 1.3 of the DEIR regarding the adjusted baseline used for the Centennial Site.

Response to Comment Grp 26-6
The commenter asserts that the DEIR does not include sufficient analysis for its statement that collapse of deep workings that are 100 feet or more below ground surface would not be expressed on the surface. Please see Master Response 29 – Near Surface Workings.

Response to Comment Grp 26-7
The commenter asserts that environmental impacts from lead used in the assaying process was not properly analyzed in the DEIR. Fume hoods and a scrubber system, capable of removing fine lead dusts, are required to be used for assay labs in order to meet health and safety regulations. Therefore, no significant emissions of lead to the environment from fire assaying would occur.

Dust from the scrubber is collected in sealed containers and disposed of in an appropriate offsite facility. The engineering of the mechanical systems will be completed before submittal of building permits to the County. Cupels from assaying would also by disposed of in an appropriate manner. The mass of these materials is trivial, and the transport of solid waste (205 tons per year) is accounted for in the air quality assessment. Mitigation Measure 4.7-1(d) requires the approval of a Hazardous Materials Business Plan which would incorporate the storage and transport of dust or materials that qualify as hazardous waste.

Response to Comment Grp 26-8

The commenter asserts that insufficient testing was done to characterize mine waste for the project and that further testing should be done. The comment also asserts that the DEIR does not contain any data that would serve as a basis for classifying waste rock. Regarding tests performed on rock from the project site as a basis for waste rock characterization, please see Master Response 8 – Mine Waste Characterization. As requested by the commenter, further testing will be required of the mine waste as a prerequisite to submitting a Report of Waste Discharge and obtaining Waste Discharge Requirements for the project, as required by the DEIR. Section 4.4 of Appendix K.2 of the DEIR provides geochemical testwork conducted on tailings and barren rock samples from the project. Testwork included Acid Based Accounting (ABA), Total Metals, and California Waste Extraction Testing (WET). Per California regulations, the Waste Extraction Test (WET), which was used for the DEIR's analysis, should be used to determine the amount of extractable substance in waste rock (CCR Title 22 Division 4.5, Chapter 11, Article 5, Appendix II).

The DEIR has already concluded that the project may have a potentially significant impact on water quality and has identified mitigation measures to address these potential impacts. Mitigation measures require the applicant to submit a Report of Waste Discharge (RoWD) and receive an approved Waste Discharge Requirement (WDR) from the Central Valley Regional Water Control Board (CVRQCB) prior to the placement of cemented paste backfill (Mitigation Measure 4.8-1(d) and engineered fill (barren rock and sand tailings) (Mitigation Measure 4.8-1(e)). Please note that Mitigation Measure 4.8-1(e) has been revised in the Final EIR (cf. Response to Comment Agcy 5-4) in response to the Central Valley Water Board's clarifications on the requirements for ongoing waste characterization in the approved WDR.

Response to Comment Grp 26-9

In accordance with CCR Title 27 Section 21710(a)(4) the CVRQCB must be notified of any material change in the types, quantities, or concentration of mining wastes discharged within a reasonable time before those changes are made effective. Therefore, as exploration and mine planning continue throughout the life of the mining operation, any significant change in mine waste chemistry would be provided to the CVRWQCB and if necessary, incorporated into the WDRs. Additionally, as part of WDRs for mining waste units, the RWQCB will require monitoring of any effluent from the engineered fill piles. Please see Master Response 8 – Mine Waste Characterization, and Response to Comment Agcy 5-4.

Response to Comment Grp 26-10

The commenter asserts that the term "engineered fill" should not be used in the DEIR, and instead use the term waste rock. However, the term "engineered fill" is specifically used to refer to the mix of barren rock and sand tailings that will be combined to create the engineered fill pads on both the Centennial and Brunswick sites. As described in the DEIR, barren rock and sand tailings are to be compacted in lifts to engineering standards in order to provide a useful surface appropriate for construction of potential future buildings on the sites. (See DEIR, p. 3-26; 3-32 through 3-33.) This is contrasted to a more conventional mining operation where tailings may be placed by slurry

in a tailings pond facility and waste rock simply dumped uncompacted into piles. The commenter does not identify any impacts that were not addressed in the DEIR due to the use of this terminology.

Response to Comment Grp 26-11

Please see Master Response 11 – Engineered Fill Utilized in Local and Regional Construction Markets.

The commenter states that the DEIR must identify all locations where the construction aggregate produced by the mining operation will go after the engineered fill piles are full. The mine operator cannot accurately estimate every construction project that may purchase construction aggregate from the project, so the commenter's requested analysis would be speculation. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As this comment amounts to speculation, the requested analysis is not necessary. Regarding the commenter's concern with mercury, the rock samples taken from drilling cores have not been shown to contain elevated mercury. As shown in Table 4.7 of Appendix K.2, mercury ranges from 11.4 to 71.3 nanograms/gram, which is less than the average crustal abundance for mercury of 86 nanogram/gram (see Table 3 of Itasca Desktop Study of Cemented Paste Backfill attached to the Final EIR as Appendix Q).

In addition, as shown in Response to Comment Agcy 5-5, Mitigation Measure 4-8-1(e) has been modified to clarify the requirement that the applicant shall not sell or utilize waste rock and tailings from the project for construction aggregate or fill purposes offsite (i.e., sites other than the applicant's Brunswick and Centennial sites) unless such material has been tested and confirmed to qualify as Group C mining waste under California Code of Regulations Section 22480 and the approved WDR which will establish the specific methods, volumes and frequency of characterization. See revised language of Mitigation Measure 4.8-1(e) in Response to Comment Agcy 5-4.

Response to Comment Grp 26-12

The commenter states that the mine waste present on the Centennial Site is evidence that the waste rock from the project would create an environmental threat. Please see Master Response 9 - Historical Mine Waste at Centennial Site, and Master Response 8 - Mine Waste Characterization. The proposed project is expected to produce mine waste with lower sulfide and metal content than those produced historically due to modern processes, and the historic mine waste has been determined to be Group C mining waste from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity (See Master Response 9 - Historical Mine Waste at Centennial Site). Based on testing on samples taken from the project site, and the binding mitigation measures addressing water quality, the DEIR concluded that impacts to water quality would be less than significant after mitigation. The commenter states that the Water Board should require containment of mine waste. As required by Mitigation Measure 4.8-1(e), prior to placement of engineered fill, the mine operator is required to submit a report of waste discharge including additional mine waste characterization testing, and the CVRWQB will require such containment measures as are appropriate under California Code of Regulations, Title 27, for mining waste units. Mining waste containment measures deemed necessary by the CVRWQB would be incorporated into the waste discharge requirements for the project. Please see Response to Comment Grp 26-11 above.

Response to Comment Grp 26-13

The commenter states that water quality impacts could result from placement of engineered fill. This impact was already addressed in Chapter 4.8 of the DEIR, found to be potentially significant, but less than significant after implementation of Mitigation Measure 4.8-1(e). Please see Responses to Comments Grp 26-4, 26-8 and 26-12, and Master Response 8 - Mine Waste Characterization.

Response to Comment Grp 26-14

The commenter asserts that the DEIR needs to discuss bonding requirements and that the reclamation plan needs to address mitigation measures to treat water discharge. Bonding requirements under the Surface Mining and Reclamation Act are discussed on page 2-3 of the DEIR. As the commenter implies, the CVRWQCB will require specific financial assurances for closure and post-closure maintenance of mining waste units as required by Title 27 section 22510. This may include the need for long-term water treatment of mine-related discharges. This issue will be addressed in the approval of the WDR required by Mitigation Measure 4.8-1(d) and 4.8-1(e)). The specifics of that bonding requirement cannot be determined until after a RoWD is submitted to the CVRWQCB, which would occur after approval of the project. The reclamation plan required under SMARA relates to reclamation of surface mining features; as such, the treatment of water relating to underground mining, and any required bonding, is more properly addressed through the waste discharge requirements for the project.

Response to Comment Grp 26-15

The DEIR has already analyzed water quality impacts from use of cement paste backfill and pursuant to Mitigation Measure 4.8-1(e), a report of waste discharge must be submitted to the CVRWQCB and waste discharge requirements must be issued by the CVRWQCB prior to placement of cement paste backfill. Please see Responses to Comments Grp 26-4 and 26-8.

As discussed on page 4.8-47 of the DEIR, use of cemented paste backfill for the project is an environmentally favorable method for tailings disposal because it can significantly reduce potential release of metals from the tailings. As stated on page 4.8-50 of the DEIR, once mining is completed and underground workings are allowed to flood, the same reducing conditions that occur under existing conditions would develop again, preventing oxidation of sulphide minerals.

Response to Comment Grp 26-16

The commenter asserts that the DEIR should be revised to clarify that the water board permits will not have 80-year terms. The DEIR does not state that any water board permit would be issued for an 80-year term, but rather proposes a project with an 80-year term for the conditional use permit. (DEIR, p. 1-3.) Ancillary permits required for the project, such as waste discharge requirements from the CVRWQCB, will have separate permit lengths and may need renewal during the life of the project. This is typical for any long-term industrial project in California. The commenter does not identify any environmental impact that was not analyzed in the DEIR.

Response to Comment Grp 26-17

This comment is a summary of the previous comments. Please see Responses to Comments 26-1 through 26-16. Unlike historical mining, the proposed Idaho-Maryland Mine Project would not produce large quantities of mineralized waste rock and would remove most sulfide minerals from the sand tailings before the sand tailings are placed as engineered fill. Given that the proposed future mine waste will by nature and by process design be less mineralized than the historical mine waste, the future mine waste will likely also be classified as Group C waste. Regardless of the future waste classification, the future placement of mine waste as engineered fill will be subject to regulation under the California Code of Regulations (CCR) Title 27, which sets forth

requirements pertaining to the discharge of mine waste to land and requires the development of Waste Discharge Requirements (WDRs) by the CVRWQCB. Please see Master Response 9 - Historical Mine Waste at Centennial Site.

Response to Comment Grp 26-18

The commenter asserts that the engineered fill piles would be eyesores, attractive nuisances, and environmental liabilities, and recommends the No Project Alternative. The commenter does not provide any specific commentary on the adequacy of the DEIR in this comment. Note that the DEIR, Chapter 4.1, concludes that the proposed engineered fill piles would contribute toward the project's significant and unavoidable aesthetic impacts.

Group Letter 27

Matt Kelley, Senior Planner

Nevada County Planning Department

950 Maidu Avenue, Suite 170

Nevada City, CA 95959

Matt.Kelley@co.nevada.ca.us



April 4, 2022

Subject: Comments on the Idaho-Maryland Mine project Draft Environmental Impact Report - Well owners in the vicinity of the Idaho-Maryland Mine request adequate safeguards.

Dear Mr. Kelley:

The undersigned members of the Wells Coalition respectfully request adequate safeguards for well owners in a recirculated Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine.

The Wells Coalition is a group of property/well owners in the vicinity of the Idaho-Maryland mine that have formed for the purpose of protecting our only source of water, our wells.

The DEIR Well Mitigation Plan cites "expert opinion" and states being in compliance with The County Policy 17.12 [1], which designates protections for wells from potential mining impacts. However, our review of the report leads us to conclude otherwise.

The Nevada County General Plan 17.12 (complete policy)

Grp 27-1

In approving mining projects which according to expert opinion may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses:

1) The County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water.

2) Where water quantity and quality problems occur, an immediate water supply shall be provided by the operator until the source of the problem is determined.

3) The burden of proof shall be on the operator to show that the mining operation did not create the water problem.

4) If it is determined that the operator is at fault, impacted owners shall be compensated by the operator.

The applicants DEIR Well Mitigation Plan states:

"Expert opinion has determined that there is no threat to water quality to domestic water wells from the Idaho-Maryland Mine Project." [2] and " All potentially impacted wells are located in the E. Bennett Road area. Domestic water wells outside this area will not be impacted." [2], [3]

The following statements from the DEIR and additional expert opinion contradict the certainty of the applicant's Well Mitigation Plan statements, citing repeatedly, uncertainties in hydrologic and hydrogeologic predictions and impacts to wells due to groundwater response from dewatering of the Idaho-Maryland Mine:

"In our opinion and based on the data and analysis presented in the Itasca Report and EMKO Report, it is possible that mining activities, including blasting, backfilling with CPB, and sealing of drains or areas of the underground workings, could activate leaching and groundwater flow in new subsurface areas, potentially resulting in impacts to neighboring wells, and discharges to surface water of groundwater with water quality exceeding applicable standards.
These impacts could potentially occur during the mining

or post-mining periods. Because of the uncertainty inherent in the bedrock fracture flow system, monitoring will be needed, as mining activities progress, to assess potential impacts, design appropriate solutions and attain necessary permits to mitigate these potential impacts. These efforts should be addressed in the monitoring and mitigation requirements for the mining and post-mining phases of the Proposed Project." [4]

"The EMKO Report describes a three-step procedure used to assess potential drawdown effects in perimeter areas. A major assumption underlying the procedure is that flow contributions from the workings are distributed uniformly across the mining areas after correcting for depth. However, the subsurface distribution and orientation of bedrock fractures is not uniform and is subject to uncertainty. Discussion of this uncertainty and the overall uncertainty of the analytical and numerical model predictions with respect to groundwater level impacts on individual wells should be provided. expanded to include an assessment of the uncertainty in the conclusions developed by Todd Engineers."[4]

"Although the analysis is considered conservative in methodology, several complexities in the groundwater system could potentially result in a larger or smaller radius of influence. Although larger impacts seem unlikely, it is difficult to prove that aberrations in the system do not exist." [5]

"Uncertainties in the analysis indicate that monitoring should occur over a slightly larger area than where impacts are predicted. In addition, the monitoring program should consider adjustments specifically for geologic faulting." [5]

"Monitoring locations should also include areas outside of the predicted impact zone to account for uncertainties in the analysis," [5]

"Due to the uncertainties regarding the complex geology, groundwater flow, flow dynamics in the mine, and the presence of faults, dewatering impacts to domestic water supply wells cannot be accurately predicted. However property owners within the

estimated area of influence around the proposed project must be ensured a continuous source of water is available to their property."[6]

"The geologic formation in which the mine is located is fractured bedrock whose hydrogeology is difficult to predict. Therefore, reliance on Domestic Well Level Monitoring Program data will be required to assess impacts and discern appropriate mitigation measures for each domestic well owner." [7]

"Even a well calibrated model has a large uncertainty to it, in its predictions. It turns out that this model is not well calibrated, so the uncertainties are almost certainly larger. It's not well calibrated because it tries to make predictions of what will happen in the shallow aquifer without historic shallow well water levels to calibrate to." [8]

"The fracture systems existing in buried bedrock beneath Grass Valley are not map-able within the resolution needed to predict specific dewatering effects. Technology and state-of-the-art hydrogeology have not developed to a level that fracture mapping is possible. Due to this limitation, hydrogeologic modeling is attempted by making an assumption on fracture connectivity." [9]

"The groundwater in this particular area is contained in and flows through fractures in near surface bedrock and because of this fracture flow regime, the groundwater flow in quantity varies considerably with location and cannot be predicted with certainty. Furthermore, complete hydraulic separation between the deeper groundwater within the underground mine workings and the shallow groundwater within fractures and supplying the domestic wells cannot be assumed." [11]

"Based upon the significance criteria established on page 4.3-4, the risk to all wells within the study area, regardless of risk category, represent a potentially significant impact." [12]

"It is expected that the actual mining areas will change from the modeled mining areas due to vein geometry and discoveries, which will only be known after extensive underground exploration is completed in the future."[13]

"The study area has not been monitored by an approved groundwater monitoring system designed to observe the dynamics associated with subsurface hydrology. Therefore, many of the initial unknown hydrogeologic and geologic parameters located within the earth between well and mine elevations still exist."

"With fractured rock there will always be uncertainty and during my career there won't be any 100% confidence in predictions."[14]

The overwhelming consensus of the experts listed above is that the project "... may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses" per County Policy 17.12 [1], and therefore the applicant is not in compliance with that policy. In light of the uncertainty present in the hydrogeology predictions, the DEIR Well Mitigation Plan is inadequate.

The mitigation plan is inadequate because it does not satisfy the condition of the County Policy, and it has no means of even determining whether those conditions will be met.

The DEIR has not adequately defined an area of potential impacts.

The DEIR acknowledges that more groundwater level data is needed to assess the potential impacts on groundwater levels [15]

The DEIR's analysis of groundwater impacts is so fundamentally deficient that those of us who rely on groundwater wells for our drinking supply do not have the fundamental information necessary to evaluate the Project's effects on our wells. The DEIR's analysis must be comprehensively revised to fully account for the severity and extent, including the geographic magnitude, of the Project's impacts. Until the EIR accurately discloses the Project's groundwater impacts, it is not possible to determine whether the mitigation the DEIR relies on would even be close to sufficient to protect our wells.

The Wells Coalition intends to weigh in again on the EIR's approach to well mitigation once the EIR's groundwater impact analysis is thoroughly revised and recirculated for public review.

Thank you for your time and consideration.

Sincerely,

Collier Road, Grass Valley 95945

GROUP LETTER 27: THE WELLS COALITION

Response to Comment Grp 27-1

This letter is a duplicate copy of Group Letter 28. Please see comments and responses in Group Letter 28.

Group Letter 28

WELLS COALITION

The Wells Coalition
wells@cea-nc.org

Matt Kelley, Senior Planner
Nevada County Planning Department
950 Maidu Avenue, Suite 170
Nevada City, CA 95959
Matt.Kelley@co.nevada.ca.us
Idaho.MMEIR@co.nevada.ca.us

April 4, 2022

Subject: Comments on the Idaho-Maryland Mine project Draft Environmental Impact Report - Well owners in the vicinity of the Idaho-Maryland Mine request adequate safeguards.

Dear Mr. Kelley:

The undersigned members of the Wells Coalition respectfully request adequate safeguards for well owners in a recirculated Draft Environmental Impact Report (DEIR) for the Idaho-Maryland Mine.

The Wells Coalition is a group of property/well owners and a few renters in the vicinity of the Idaho-Maryland mine that have formed for the purpose of protecting our only source of water, our wells.

Grp 28-1

The DEIR Well Mitigation Plan cites "expert opinion" and states being in compliance with The County Policy 17.12 [1], which designates protections for wells from potential mining impacts. However, our review of the report leads us to conclude otherwise.

> *The Nevada County General Plan 17.12 (complete policy)*
>
> *In approving mining projects which **according to expert opinion** may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses:*
> *1) The County shall require the operator to guarantee a comparable supply of water to such homes or businesses through accessible forms of security or alternate sources of water.*
> *2) Where water quantity and quality problems occur, an immediate water supply shall be provided by the operator until the source of the problem is determined.*

3) The burden of proof shall be on the operator to show that the mining operation did not create the water problem.
4) If it is determined that the operator is at fault, impacted owners shall be compensated by the operator.

The applicants DEIR *Well Mitigation Plan* states:

"Expert opinion has determined that there is no threat to water quality to domestic water wells from the Idaho-Maryland Mine Project." [2] and *" All potentially impacted wells are located in the E. Bennett Road area. Domestic water wells outside this area will not be impacted."* [2], [3]

The following statements from the DEIR and additional expert opinion contradict the certainty of the applicant's *Well Mitigation Plan* statements, citing repeatedly, uncertainties in hydrologic and hydrogeologic predictions and impacts to wells due to groundwater response from dewatering of the Idaho-Maryland Mine:

Grp 28-2

"In our opinion and based on the data and analysis presented in the Itasca Report and EMKO Report, it is possible that mining activities, including blasting, backfilling with CPB, and sealing of drains or areas of the underground workings, could activate leaching and groundwater flow in new subsurface areas, potentially resulting in impacts to neighboring wells, and discharges to surface water of groundwater with water quality exceeding applicable standards. These impacts could potentially occur during the mining or post-mining periods. Because of the ***uncertainty inherent in the bedrock fracture flow system****, monitoring will be needed, as mining activities progress, to assess potential impacts, design appropriate solutions and attain necessary permits to mitigate these potential impacts. These efforts should be addressed in the monitoring and mitigation requirements for the mining and post-mining phases of the Proposed Project."* [4]

"The EMKO Report describes a three-step procedure used to assess potential drawdown effects in perimeter areas. A major assumption underlying the procedure is that flow contributions from the workings are distributed uniformly across the mining areas after correcting for depth. ***However, the subsurface distribution and orientation of bedrock fractures is not uniform and is subject to uncertainty. Discussion of this uncertainty and the overall uncertainty of the analytical and numerical model predictions with respect to groundwater level impacts on individual wells should be provided. expanded to include an assessment of the uncertainty in the conclusions developed by Todd Engineers."***[4]

Grp 28-3

"Although the analysis is considered conservative in methodology, ***several complexities in the groundwater system could potentially result in a larger or smaller radius of influence. Although larger impacts seem unlikely, it is difficult to prove that aberrations in the system do not exist."*** [5]

"Uncertainties in the analysis indicate that monitoring should occur over a slightly larger area than where impacts are predicted. In addition, the monitoring program should consider adjustments specifically for geologic faulting." [5]

"Monitoring locations should also include areas outside of the predicted impact zone to account for uncertainties in the analysis," [5]

Grp 28-4

"Due to the uncertainties regarding the complex geology, groundwater flow, flow dynamics in the mine, and the presence of faults, dewatering impacts to domestic water supply wells cannot be accurately predicted. *However property owners within the estimated area of influence around the proposed project must be ensured a continuous source of water is available to their property."*[6]

"The geologic formation in which the mine is located is fractured bedrock whose hydrogeology is difficult to predict. *Therefore, reliance on Domestic Well Level Monitoring Program data will be required to assess impacts and discern appropriate mitigation measures for each domestic well owner."* [7]

Grp 28-5

"Even a well calibrated model has a large uncertainty to it, in its predictions. It turns out that this model is not well calibrated, so the uncertainties are almost certainly larger. *It's not well calibrated because it tries to make predictions of what will happen in the shallow aquifer without historic shallow well water levels to calibrate to."* [8]

"The fracture systems existing in buried bedrock beneath Grass Valley are not map-able within the resolution needed to predict specific dewatering effects. Technology and state-of-the-art hydrogeology have not developed to a level that fracture mapping is possible. Due to this limitation, hydrogeologic modeling is attempted by making an assumption on fracture connectivity." [9]

"The groundwater in this particular area is contained in and flows through fractures in near surface bedrock and because of this fracture flow regime, the groundwater flow in quantity varies considerably with location and ***cannot be predicted with certainty. Furthermore, complete hydraulic separation between the deeper groundwater within the underground mine workings and the shallow groundwater within fractures and supplying the domestic wells cannot be assumed."*** [11]

"Based upon the significance criteria established on page 4.3-4, ***the risk to all wells within the study area, regardless of risk category, represent a potentially significant impact."*** [12]

Grp 28-6

"It is expected that the ***actual mining areas will change from the modeled mining areas*** *due to vein geometry and discoveries, which will only be known after extensive underground exploration is completed in the future."*[13]

Grp 28-7

"The study area has not been monitored by an approved groundwater monitoring system designed to observe the dynamics associated with subsurface hydrology. Therefore, ***many of the initial unknown hydrogeologic and geologic parameters located within the earth between well and mine elevations still exist."***

"With fractured rock there will always be uncertainty and during my career there won't be any 100% confidence in predictions."[14]

The overwhelming consensus of the experts listed above is that the project "... may threaten the existing quality or quantity of surface or subsurface water which supply adjacent homes and businesses" per County Policy 17.12 [1], and therefore the applicant is not in compliance with that policy. In light of the uncertainty present in the hydrogeology predictions, the DEIR Well Mitigation Plan is inadequate.

The mitigation plan is inadequate because it ***does not satisfy the condition of the County Policy, and it has no means of even determining whether those conditions will be met.***

The DEIR has not adequately defined an area of potential impacts.

Grp 28-8

The DEIR acknowledges that more groundwater level data is needed to assess the potential impacts on groundwater levels [15]

The DEIR's analysis of groundwater impacts is so fundamentally deficient that those of us who rely on groundwater wells for our drinking supply do not have the fundamental information necessary to evaluate the Project's effects on our wells. The DEIR's analysis must be comprehensively revised to fully account for the severity and extent, including the geographic magnitude, of the Project's impacts. Until the EIR accurately discloses the Project's groundwater impacts, it is not possible to determine whether the mitigation the DEIR relies on would even be close to sufficient to protect our wells.

The Wells Coalition intends to weigh in again on the EIR's approach to well mitigation once the EIR's groundwater impact analysis is thoroughly revised and recirculated for public review.

Thank you for your time and consideration.

Sincerely,

The Wells Coalition

Our membership represents almost 100 properties and is still growing. A number of our members wanted to have their signatures added to this letter. Their consent was gathered electronically and the names are shown below. Contact details are available by request to the Nevada County Planning Commission only.

Gary Pierazzi
Emerald Court, Grass Valley

Bob and Christy Hubbard
Mink Court, Grass Valley

Tony Lauria
Greenhorn Rd., Grass Valley

Greg and Robin Van Ess
Anchor Lane, Grass Valley

Matt and Laino Levy
Anchor Lane, Grass Valley

Robin Milam, Tom Milam
Axle Ct, Grass Valley

Jill Shoemaker and Stuart Beach
Barker Lane, Grass Valley

Judy Swartzendruber
Beaver Dr. Grass Valley

Tod and Donna Bowman
Beaver Dr., Grass Valley

James R. Hall
Beaver Drive, Grass Valley

Eric Gibbons, Diane Gibbons
Beaver Drive, Grass Valley

Jennifer Durrett, Dale Durrett
Beaver Drive, Grass Valley

Aaron and Kari Bailey
Beaver Drive, Grass Valley

Kathy Foley, Susan Steen, Julie Jenssen
Beaver Drive, Grass Valley

Gary Bowman and Amy Bowman
Bennett Road, Grass Valley

Daniel & Linda Ketcham
Brunswick Pines Road, Grass Valley

Sandra Hewston
Casa Loma Dr., Grass Valley

Linda Lanzoni
Christopher Robin Way, Grass Valley

Lanny Netz
Collier Rd., Grass Valley

Douglas Cornish
Cordell Ct., Grass Valley

Jim and Renate Otto
Diamond Court, Grass Valley

Laura and Don Gagliasso
Diamond Ct., Grass Valley

Kim Davison, Bonnie Jones, Tyler Jones
E. Bennett Rd., Grass Valley

Dennis & Linda Voss
E. Bennett Road, Grass Valley

Robert and Victoria Jewel
East Bennett Road, Grass Valley

George and Cynthia Geros
Elk Lane, Grass Valley

Linda Cosick
Foster Rd., Grass Valley

Laura Solano
Glenn Pines Rd, Grass Valley

Howard, Cynthia, & Florence Kuhlmann, Corinne Beall
Greenhorn Dr., Grass Valley

Robert Lewis
Greenhorn Rd, Grass Valley

Erin Thomas-Rose, Stanley Thomas-Rose
Greenhorn Rd, Grass Valley

Sandra Young
Greenhorn Road, Grass Valley

Mondae Holt and Chris House
Greenhorn Rd, Grass Valley

Mary Ann Coleman
Greenhorn Road, Grass Valley

Lauren Lewis
Greenhorn Road, Grass Valley

Caela Wynd
Howald Lane, Grass Valley

Gwen Moore
Hubbard Rd., Grass Valley

Karyn Gladstone
Jones Ridge Rd, Grass Valley

Patricia Bennett
Lava Rock Ave., Grass Valley

John Cosenza - Owner
Leaf Lane, Grass Valley (two properties)

Peter Fromm
Liquidambar Lane, Grass Valley

Louise and Carter Taylor
Loma Rica Dr., Grass Valley

Jennifer Burt
Loma Rica Drive, Grass Valley

Janet Steinmann, Jim Steinmann
Loma Rica Drive, Grass Valley

David Wills
Lower Anchor Lane, Grass Valley

John Vaughan, Gail Johnson Vaughan
Lower Colfax Road, Grass Valley

Elise Stupi, Ken Stupi
Madrona Leaf Court, Grass Valley

Larry Rieger, Patsy Rieger
Madrona Leaf Ct., Grass Valley

Michael, Carla, Tiffani, & Feather Fanucchi
Madrona Leaf Ct., Grass Valley

Edson & Lynell Holmes
Mink Court, Grass Valley

Lauren and Mary Anderson
Mink Court, Grass Valley

Hugh Shelbourn, Maggi Shelbourn
N. Meadow View Drive, Grass Valley

Nicolette and Alex Renoir
Old Mine Rd., Grass Valley

Dorothy Goodnow
Old Mine Rd., Grass Valley

Richard Melim, Dolly Melim
Old Mine Road, Grass Valley

Penelope Curtis
Tiger Lily Lane, Grass Valley

Bob and Barbara White
Wood Rose Way, Grass Valley

Richard Blair
Wood Rose Way, Grass Valley

Sal Giacinto
Wood Rose Way, Grass Valley

Azriel LaMarca, Michael LaMarca
Icon Way, Nevada City

Louisa Suto
N. Bloomfield Rd, Nevada City

Sara Bottrell
Side Hill Circle, Nevada City

*** footnotes***

[1] The Nevada County General Plan 17.12 (complete policy).
[2] Appendix K.9 Idaho Maryland Well Mitigation Plan, p1, p3, Idaho-Maryland Mine Draft DEIR (December 2021).
[3] EMKO Environmental, Inc. (2020). Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine Project, Nevada County, California. [4] Appendix K.7 West/Yost Peer Review (August 27, 2020), p8-9, p18, Idaho-Maryland Mine Draft DEIR (December 2021).
[5] Todd Engineers (2007), Final Report Hydrogeologic Assessment Idaho-Maryland Mine, prepared for Idaho-Maryland Mining Corporation, August t.p22, p25, p26.
[6] Idaho-Maryland Mine Project Draft EIR (2008) p4.7-34.
[7] Idaho-Maryland Mine Project, Revised Project Description (May 2011) Appendix N-T-3.
[8] June Oberdorfer, PhD., Certified Hydrogeologist, Review of the March 2020 EMKO Groundwater Hydrology Report, Minewatch Virtual Community Meeting Video Presentation (October 2021).
[9] Steve Baker, Certified Hydrogeologist, Response Comment Letter to 2008 Idaho Maryland Mine DEIR.
[11] Idaho-Maryland Mine Project Draft EIR (October 2008) 4.8 Hydrology and Water Quality, p 4.7.29.
[12] Draft Environment Impact Report for The Idaho-Maryland Mine (May 1995) p4.3-5.
[13] Appendix K.3, Itasca Denver Inc., "Groundwater Model Report", November 2020, p31.
[14] Houmau Liu, hydrogeologist for Itasca, February 9, 2022 NID board of directors meeting.
[15] Idaho-Maryland Mine Project DEIR Report, December 2021, 4.8 Hydrology & Water Quality, p67.

GROUP LETTER 28: THE WELLS COALITION

Response to Comment Grp 28-1

The commenter implies that the project is not in compliance with Nevada County General Plan Policy 17.12, but does not provide details on why the commenter believes the project is inconsistent in this comment. The commenter's specific comments are addressed below in Response to Comments Grp 28-2 through Grp 28-8.

Response to Comment Grp 28-2

The commenter implies that the project is not consistent with County General Plan Policy 17.12 based on statements from the County's independent groundwater expert, West Yost, made upon reviewing the draft groundwater analysis. However, the peer-review comments by West Yost that are referenced by the commenter were previously addressed by revisions to Technical Reports during the preparation of the DEIR; thus, the statements quoted by the commenter relate to a preliminary draft of the groundwater analysis and do not represent the final analysis presented in the DEIR. Moreover, consistent with County General Plan Policy 17.12, Mitigation Measure 4.8-2(b) already requires replacement water for any well impacted by the project; thus, the project is consistent with County General Plan Policy 17.12.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Please also see Master Response 15 – Adequacy of Groundwater Monitoring Wells, for an updated description of the proposed monitoring approach, which now also includes a proposal by the applicant to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

As stated in Section 5.2 of Appendix K.2 of the DEIR, the following discussion addressed West Yost's peer-review comments:

> During mining, there will be a net inflow of groundwater into the underground workings due to the on-going dewatering. Any residual constituents associated with blasting would be contained within the water pumped from the mine workings and would not affect the quality of the groundwater outside of the mine workings. The treatment plant is designed to treat ammonia and other blasting residuals that might occur due to incomplete detonation. The net inflow of groundwater into the underground workings would also ensure that mining activities such as blasting, backfilling with CPB, or sealing of drains would not have the potential to affect domestic supply wells during the active mining and dewatering period.

The proposed mining areas will primarily be at equivalent or deeper depths than the existing underground mine workings, while the potential future expansion areas all involve mining at greater depths, typically more than 1,000 feet below the surface and deeper (see Figures 5-1 and 5-10 of Itasca, 2020b). At those greater depths, the hydraulic conductivity is several orders of magnitude lower than it is at the depths of the domestic supply wells, as shown on Figures 3-9 and 3-10, due primarily to the lack of open fractures as a result of the large pressures exerted by the overlying rock mass (i.e., the lithostatic pressure). Since the new mining activity would occur at equivalent or greater depths than the proposed mining, there is little or no potential for the proposed mining and mining in the future expansion areas to affect the quality of the groundwater

in the domestic supply wells that are completed at much shallower depths. Please also see Master Response 7 – Location of Future Mining Areas.

There is currently no evidence to indicate that the historic underground mine workings have caused any water quality impacts at any domestic well. During mining, there will be a net inflow of groundwater into the mine workings, such that any mining activities would not affect water quality within the fractured bedrock. After mining ceases, conditions would return to those that currently exist. The proposed new mining activities would all occur at depths that are comparable to or much deeper than the historic mine workings. Due to the substantial reduction in hydraulic conductivity at those depths, compared to the depths of the domestic supply wells, it is highly unlikely that the proposed project would affect water quality in those wells.

Further, as stated in Section 6.0 of Appendix K.3 of the DEIR, the following discussion addressed West Yost's additional peer-review comments referenced by the commenter:

> The model is constructed based on the available data. Because of the fractured nature of the intermediate and deeper geologic units, one may argue that unknown fractures may impact the results of the modeling. Fractures or geologic discontinuities decrease with depth due to the weight of overlying geologic materials. The mining will occur in the deeper geologic units where the fractures, if present, are closed or have smaller apertures, which will not transmit significant quantities of water. The scenarios addressed in the modeling cover a wide range of probable situations that may be encountered and the potential impacts to groundwater levels and surface-water baseflows. …Itasca recommends a rigorous groundwater monitoring program to assess how the hydrogeologic system responds to mining, whether the measured results are within those modeled under the various scenarios.

As such, contrary to the commenter's assertion, West Yost's peer-review comments were addressed, the County's independent expert does not have the "expert opinion" that the project will impact more wells than disclosed in the DEIR's analysis. Moreover, Mitigation Measure 4.8-2(b) already requires replacement water for any well impacted by the project; thus, the project is consistent with County General Plan Policy 17.12.

Response to Comment Grp 28-3

The commenter cites statements from a Todd Groundwater analysis prepared in 2007 for a previously proposed mining project. While the commenter uses the cited language to imply that the prior groundwater study reached different results, in actuality, previous assessments including the Todd Groundwater report have come to similar conclusion as the current analysis despite the use of simplistic analytic solutions. Please see Master Response 13 – Historic Hydrogeologic Assessments.

As was requested for the previously proposed project by Todd Groundwater, for the current project, groundwater monitoring is required for a larger area than just the expected impact zone. (see Mitigation Measure 4.8-2(a) and Appendix K.8 of the DEIR).

Please also see Master Response 7 - Location of Future Mining Areas, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 28-4

The commenter cites to language from materials prepared for a previous Emgold project at the same site in 2008 and 2011. The 2008 Emgold DEIR came to similar conclusion as the current

analysis despite the use of simplistic analytic solutions. Please see Master Response 13 – Historic Hydrogeologic Assessments.

As was requested for the previously proposed project in the cited language, groundwater monitoring is required for the current project (see Mitigation Measure 4.8-2(a)). Mitigation Measure 4.8-2(b) also requires the mine operator to guarantee continuous water supply for properties surrounding the project in the event of drawdown impacts. (See Mitigation measures 4.9-2 (b) and 4.8-2(c).)

Please also see Master Response 7 - Location of future mining areas, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells. As noted in Master Response 15, the applicant has provided a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Grp 28-5

The commenter cites to a video presentation by June Oberdorfer in October 2021 (footnote 8). A specific comment was submitted on the DEIR by June Oberdorfer regarding calibration of the groundwater model. Please see the response to referenced Oberdorfer comment - Response to Comment Grp 8-128.

The commenter also refers to language from a comment letter submitted by Steve Baker on a previous DEIR in 2008 (footnote 9). Steven Baker submitted a comment on the current DEIR, asserting that fractured bedrock cannot be modelled for groundwater impact purposes. Please see Responses to Comment Letter Ind 29 (Steven Baker Letter). Contrary to the assertions in the submitted Steven Baker letter, the groundwater model was compared against water levels measured in wells in the mine area, and was found to be accurately calibrated as compared to the measured water levels. (Section 4.5 page 22). This correlation contradicts the assertions made in the quoted language that the model cannot predict groundwater levels in a fractured bedrock system.

The commentor refers to the 2008 Idaho-Maryland Mine Project DEIR page 4.7.29 (footnote 11). The hydrogeologic studies used for the 2008 DEIR came to similar conclusions as the current DEIR despite the use of simplistic analytical solutions. Please see Master Response 13 - Historic Hydrogeologic Assessments. Like the current DEIR, the previous 2008 DEIR found the impact to groundwater wells was potentially significant and proposed mitigation measures to reduce the impact to a less than significant level. See Impact 4.8-2 of the DEIR.

The commentor refers to the 1995 Idaho-Maryland Mine DEIR page 4.3.5 (footnote 12). Like the current DEIR, the previous 1995 DEIR found the impact to groundwater wells was potentially significant and proposed mitigation measures to reduce the impact to a less than significant level. See Impact 4.8-2 of the DEIR.

Please also see Master Response 7 - Location of future mining areas, Master Response 13 - Historic Hydrogeologic Assessments, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Response to Comment Grp 28-6

The commenter provides language from the Itasca groundwater study that provides background on how Itasca modelled possible expansion of mining for Sensitivity Scenario 6. Please see Response to Comment Grp 7-82 in CEA Letter #1.

Itasca analyzed the impacts of new underground mining excavations based upon information provided by the applicant, as shown on Figure 5-1 of Appendix K.3 and Sheet 15 of Appendix K.2. As shown in these figures, assumed mining areas are based on the projected down-dip extensions to mineralized veins historically mined. Sensitivity Scenario 6 considered the significant expansion of mining in areas with potential for mineralization, as shown in Figure 5.10 of Appendix K.3. As shown in Figure 5-12, the major mining expansion studies in Scenario 6 did not result in a significant expansion in the simulated 5-foot drawdown contour versus the base case.

As stated on page 31 of Appendix K.3, while the targeted mining areas analyzed in the groundwater model are accurate and representative of where mining will occur in the near and mid-term, it is expected that over time the actual mining areas will change from the modeled mining areas due to vein geometry and discoveries, which will only be known after extensive underground exploration is completed in the future. Itasca recommends that the groundwater flow model be updated periodically after dewatering commences. Updated modeling would incorporate changes to the long-term mining plan, data from monitoring wells, and measured pumping rates. The DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining, is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess drawdowns in the water-bearing zones. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Mitigation Measure 4.8-2(a) requires that a projected water-level impact assessment for individual domestic wells shall be performed once dewatering of the underground mine workings commences, based on responses of the measured groundwater levels of the project monitoring wells. The projected groundwater drawdown shall be estimated for each domestic well in the project area. This impact assessment shall be performed by tabulating the variation of the measured water levels from the project monitoring wells over the monitoring period and during the dewatering of the underground mine workings and mining operations. For each domestic well, a projected and seasonally averaged water level shall be estimated based on the domestic well location and the background potentiometric conditions, which will serve as a baseline groundwater level and shall be developed prior to the initiation of dewatering of the underground mine workings. If the water level impact assessment showed a potential impact to wells outside of the E. Bennett area, assuming the 100% safety factor, the applicant would be required to mitigate this impact before it occurs in accordance with Mitigation Measure 4.8-2(b). The mitigation would be for properties which may be potentially impacted as determined in the projected water-level impact assessment. As

discussed in the Well Mitigation Plan, if a dewatering impact to an area outside of the E. Bennett area were projected during operations, pre-emptive action would be taken as necessary to ensure immediate water supply and compensation. The 10% drawdown threshold of significance is extremely conservative and, in most cases, would not lower the water level below the casing of the domestic well. Therefore, well mitigation may not be required after inspection. If reduction of the water column was great enough to reduce the well's yield, a simple adjustment to the pumping system may only be required. For example, by pumping at a lessor rate over a longer duration and if necessary, installing or increasing the size of a pressure or holding tank. In the unlikely case where these measures were not sufficient, appropriate mitigation could be the deepening of a single well, drilling of a new well, or the provision of potable water service to a group of wells. The Well Mitigation Plan has been modified to clarify the actions that would be taken as described above. Please see Appendix D to this Final EIR for the Revised Well Mitigation Plan.

Nonetheless, as discussed in Master Response 7 – Location of Future Mining Areas, to address public concerns regarding the scope of future mining within the mineral rights area, the applicant has agreed to an enforceable condition of approval that will limit the area of permitted underground mining to a smaller area within the mineral rights area.

In addition, as noted in Master Response 15, the applicant has provided a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Response to Comment Grp 28-7

The commenter cites verbal statements from a hydrogeologist at Itasca who was speaking at a Nevada Irrigation District (NID) meeting relating to the water supply assessment under consideration by NID at that hearing. The Itasca hydrogeologist noted that monitoring wells had not yet been installed, and that there is never 100% certainty in groundwater level predictions. The commenter cites this language to imply that the lack of 100% certainty, and the DEIR's requirement to obtain data as part of the groundwater monitoring plan after project approval, is a violation of CEQA. However, CEQA does not require 100% certainty, as this could never be achieved. Rather, as stated by California Courts, "[t]he need for thorough discussion and analysis is not to be construed unreasonably… to serve as an easy way of defeating projects. Absolute perfection is not required." (*Laurel Heights Improvement Assn., supra,* 47 Cal.3d at p. 406.)

The analysis provided in Impact 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. No significant impacts to domestic water wells are predicted in the Greenhorn, Woodrose, Beaver or other areas. The predictions include the use of a 100% safety factor, multiple sensitivity scenarios, and have been peer reviewed by the County's independent expert consultant. This sensitivity analysis addresses the uncertainties in the data used as inputs to the model. The sensitivity analysis showed that variations in the input parameters (such as hydraulic conductivity) did not change the predicted drawdowns significantly, primarily due to the low permeabilities of the deep rock in which mining will occur.

Page 25 of Appendix K.3 acknowledges that there are uncertainties in groundwater modelling and states that the predicted contours are based upon the numerical groundwater flow model and the assumptions inherent in the model. Actual, in-field measured water levels may be different from the predicted water levels due to heterogeneities in the hydrogeologic system. The DEIR acknowledges that without the implementation of a groundwater monitoring program and well

mitigation plan, the project could result in a significant impact to groundwater supplies. Despite the lack of 100% certainty (which is impossible and not required for CEQA analysis) the DEIR provides very conservative analysis of groundwater impacts, and also provides mitigation to the expected impact area and guaranteed water replacement for other areas in case there are future unexpected impacts.

Response to Comment Grp 28-8

The commenter asserts that the overwhelming consensus of the experts is that the project will threaten the water quality and quantity of adjacent businesses and homes and is therefore inconsistent with County Policy 17.12. However, the commenter's selective quotes from various studies and documents mischaracterizes the relevant information. Moreover, County Policy 17.12 requires where such threats exist, that the mine operator guarantee a replacement supply of water, which is already incorporated into the DEIR's mitigation requirements; thus, the project is consistent with County Policy 17.12. Finally, the County has discretion to determine which expert opinion to adopt. CEQA case law has been clear for decades that a disagreement among experts does not make an EIR inadequate. (See, e.g., *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1396; CEQA Guidelines § 15151.)

The analysis in the DEIR has defined the potential impacts to groundwater levels. Additional groundwater level data is not required for analysis of the DEIR and would not change the conclusions of the EIR.

Groundwater monitoring is required for the project (see Mitigation Measure 4.8-2(a)). Well mitigation is required to guarantee continued water supply for properties surrounding the project (see Mitigation measures 4.9-2 (b) and 4.8-2(c). Therefore, the project complies with Nevada County General Plan Policy 17.12.

The analysis provided in Impact 4.8-2 of the DEIR concludes that the proposed mining operations could result in adverse effects to seven domestic water supply wells in the East Bennett area during the life of the mining operation. Pursuant to Nevada County General Plan Policy 17.12, the project would address this by installing a potable water supply line in East Bennett Road and providing individual well owners with a connection to the potable water line. No significant impacts to domestic water wells are predicted in the Greenhorn, Woodrose, Beaver or other areas. The predictions include the use of a 100% safety factor, multiple sensitively scenarios, and have been peer reviewed by the County's independent expert consultant. However, the DEIR acknowledges that without the implementation of a groundwater monitoring program and well mitigation plan, the project could result in a significant impact to groundwater supplies.

A Groundwater Monitoring Plan (GMP) is required for the project under Mitigation Measure 4.8-2(a). As described on page 4.8-66 of the DEIR, the measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented.

Mitigation Measure 4.8-2(a) (1) requires water-level monitoring data for a minimum of 12 months before commencement of dewatering of the mine. This data will be used to establish the baseline for each well before commencement of mine dewatering.

The collection of groundwater level data through the proposed monitoring wells (required by Mitigation Measure 4.8-2(a)) would not by themselves provide information needed to assess the potential impacts of the project to groundwater levels in the EIR. As stated in Section 3.0 of the GMP, the dewatering of the existing mine workings, prior to the commencement of actual mining,

is analogous to a largescale pumping test that is a common tool in the field of hydrogeology to assess how drawdowns in the water-bearing zones, for example, the fractured bedrock at the project site, propagate with time as a result of pumping. Monitoring wells in closer proximity to the mine will generally experience drawdowns before wells farther away. The measurements of water levels in the monitoring wells can be used to verify the groundwater drawdowns as dewatering progresses to provide sufficient time to predict adverse impacts to domestic wells before they occur so that appropriate mitigation measures can be implemented. Obviously, the dewatering of the mine workings cannot take place until the appropriate permits are in place and the CEQA process is complete.

Nonetheless, as noted in Master Response 15, the applicant has provided a Domestic Well Monitoring Plan to monitor domestic water wells within or nearby the predicted 1-ft drawdown isopleth of the project. These 378 properties are listed in Table 1 and shown in Figure 1 of Master Response 15. To provide property owners additional assurance, a condition of approval will be imposed on the project requiring this domestic well monitoring.

Group Letter 29

From: Jonathan Keehn
To: Idaho MMEIR; Matt Kelley
Cc: gary and christine griffith and nys
Subject: Preliminary Comments from WCCA on IMM DEIR
Date: Thursday, February 3, 2022 5:54:18 PM

CAUTION: This email originated from outside of County of Nevada email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To: Matt Kelley
Senior Planner, Nevada County Planning Department
950 Maidu Avenue Suite 170
Nevada City, CA 95959-7902
email Idaho.MMEIR@co.nevada.ca.us

From: Wolf Creek Community Alliance
P.O.Box 477
Grass Valley, CA 95945

Re: Comments on DEIR for proposed re-opening of Idaho-Maryland Mine

February 3, 2022

Dear Matt Kelley,

As a local watershed organization working to promote environmental health for the benefit of our community we welcome the opportunity to be involved in offering comments on the draft environmental impact report (DEIR) for the proposed Idaho Maryland Mine. Previously, we submitted scoping comments following the Notice of Preparation (NOP). As we work to carefully consider the DEIR, however, we have been met with a number of obstacles that suggest an extension for the DEIR comment deadline is in the public interest.

Grp 29-1

First, the lives and routines of most members of our community have been severely disrupted by the impacts of the late December storm that caused much damage and extended outages. Some of us have lost power for two weeks and internet for four weeks. This disruption occurred just as the DEIR was submitted on January 4th. Thus, many community organizations and individuals have had significantly less time to start reviewing the DEIR.

Secondly, the DEIR is immensely complex, very lengthy and very technical. The potential impacts to our community are also very large and long-lasting. Sufficient time to

process the details of the DEIR is essential for full public participation.

Third, the DEIR, although it organizes comments received on the NOP in section 1.8 of the introduction and includes all comments in an appendix, nonetheless makes it very difficult to see that the 25 areas of concern we submitted in our comment to the NOP are actually addressed in the DEIR. Nowhere are our concerns specifically noted or footnoted in the text. Section 1.8 simply indicates in which chapter various concerns are addressed. We are left, then, to 'sift' through many pages of text hoping to find sections or appendixes that address our concerns.

As it is, upon reading section 1.8 we do not see listed any concern items mentioning "monitoring plan for South Fork Wolf Creek," "monitoring for benthic macroinvertebrates," inaccuracies to "perennial stream" designations, "enforcement of permits," "surveys of trout," "alternatives to dewatering" via South Fork Wolf Creek, "Centennial Drive and Spring Hill Drive realignment," "property values," low viability of "transplanting" Pine Hill flannelbush, inclusion of "climate change modeling" including "higher intensity storms," "waste rock" causing increased TDS in Wolf Creek, "oversight," "enforcement," "fines," and "bonding," all specific concerns included in our comment letter to the NOP. Section 2.1 of the DEIR does seem to refer to a few of these unlisted issues, but others seem to be absent and ignored.

A better system should have been devised whereby concerns were cross-referenced to the actual comment letters so that the public could easily see how and whether their concerns were addressed. Surely, Raney, in their due diligence carefully checked that each individual concern raised following the NOP was considered. Some mechanism showing that should have been included. As it is, the DEIR is far less accessible to public participation than it should be to satisfy CEQA requirements.

For these reasons, all in the public interest, we have two requests:
1) That the DEIR comment period be extended by at least 30 days.
2) That the County circulate an index that will allow the public to easily verify that our concerns submitted during the NOP scoping process are addressed in the DEIR.

Thank you for your consideration of these requests, and for all you do to preserve, promote, and protect the well-being of our County.

Please acknowledge receipt of these preliminary comments.

Sincerely,

Jonathan Keehn
Gary Griffith

Board of Directors
Wolf Creek Community Alliance
530.913.2347 mobile
web: *WolfCreekAlliance.org*

Many thanks for your support, donations, or volunteer effort!
"Do unto those downstream as you would have those upstream do unto you." Wendell Berry

GROUP LETTER 29: JONATHAN KEEHN, WOLF CREEK COMMUNITY ALLIANCE

Response to Comment Grp 29-1

The commenter requests an extension of the DEIR public review period. CEQA requires a minimum 45-day public review period for DEIRs submitted to the State Clearinghouse (PRC 21091). In response to public comment, the County elected to provide an extended DEIR review period of 91 days from January 4, 2022, to April 4, 2022.

The commenter requests an index that will allow the public to easily verify that their concerns submitted during the Notice of Preparation are addressed in the DEIR. No such index is required under CEQA. The commenter also provides a list of general concerns which are brought up in their subsequent comment letters on the DEIR. Please see Responses to Group Letters 30 and 31.

Group Letter 30

From: Wolf Creek Community Alliance
P.O.Box 477
Grass Valley, CA 95945

To: Members of the Nevada County Planning Commission,
Nevada County Board of Supervisors,
and Nevada County Planning Department Staff

Attn: Matt Kelley, Senior Planner
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
matt.kelley@co.nevada.ca.us

3/30/2022

Comments on the Idaho-Maryland Mine DEIR
Follow-up on WCCA NOP Comment submittals of August 16, 2020 and December 22, 2019.
Copies of both submittals are copied below for your convenience.

To All Concerned:

Most of the issues we raised in the letters referenced above were not properly addressed in the current Draft Environmental Impact Report (DEIR) for the IMM project. The purpose of the Notice of Preparation is to ask interested parties, such as ourselves, to point out substantive issues that should be addressed in the CEQA process and specifically in the DEIR. Because the DEIR did not adequately address these issues, we request that the DEIR be revised and recirculated to the public and agencies.

Grp 30-1

Following is a breakdown of the 25 issues raised in the 8/16/2020 letter, and the additional issue raised in the letter of 12/22/2019. It is possible that some of these issues were in fact addressed somewhere in the DEIR, but we were unable to locate them. If that is the case please direct us to the correct pages.

Grp 30-2

1 & 2) Surface water monitoring program. We are suggesting a robust surface water quality monitoring program, at least in South Fork Wolf Creek, beginning before the start of the project to provide several years of baseline data. The program should extend through the working life of the proposed project, and several years after decommissioning. These issues were partially addressed in Chapters 4.4 and 4.8, but the monitoring plan was not discussed, and many of our questions were not answered.

Grp 30-3

3 & 4) 48" culvert, pond, SFWC headwaters. We did find some discussion of this issue in the DEIR, but it was insufficient. We stand by the statements in the letters: that SFWC is a perennial "water of the US" upstream to and beyond Brunswick Road. The same is

true for the pond (PD-1). The DEIR must propose a Project Alternative that would include day-lighting of the creek and protecting these important riparian resources.

Grp 30-4 **9) Hydrology.** There is some discussion of Hydrology in Chapter 4.8, but the analysis was based on insufficient data. The specific questions we asked were not answered in the DEIR.

Grp 30-5 **16) Interpretation of LUDC L-II 4.3.17.** On these large properties, avoidance of impacts is possible, therefore no exceptions to the development code should be allowed.

Grp 30-6 **17, 18, & 23) Flannelbush, frogs, and other listed species.** This issue is addressed in Chapter 4.4, but the mitigations suggested are not sufficient to protect these species, and the comments and questions we submitted were not resolved in the DEIR.

Grp 30-7 Below are the remaining items from our NOP comment letter. They were either not addressed in the DEIR, or our specific questions were not answered.

5) Timber Harvest Plans

Grp 30-8 **6) Ongoing Enforcement of Permits**

Grp 30-9 **7) Protection and Monitoring of Rainbow Trout**

Grp 30-10 **8) Alternatives for Mine Water Discharge**

Grp 30-11 **10) Surface and groundwater.**

Grp 30-12 **11) Realignment of Centennial and Springhill Drives.**

Grp 30-13 **12 & 13) Public trails.**

Grp 30-14 **14) Wells.**

Grp 30-15 **15) Loss of tax revenue.**

Grp 30-16 **19) Flooding.** The contradictory findings were not addressed in the DEIR.

Grp 30-17 **20) Climate Change.**

Grp 30-18 **21) Nitrification/ammonia nitrate.**

Grp 30-19 **22) Centennial surface waters.**

Grp 30-20 **24) 100' and 50' buffer zones.**

Grp 30-21 **25) Adequate bonding.**

Grp 30-22 In summary, we reiterate our concern that many issues raised in our NOP comments to you, in 2019 and 2020, were not addressed, and/or specific questions were not answered in this DEIR. We believe this violates the intent of the environmental review process as required by CEQA. These deficiencies, and others, should be corrected, and the Draft EIR should be recirculated to the public and agencies.

Thank you.

Jonathan Keehn
Gary Griffith
Wolf Creek Community Alliance

August 16, 2020
Matt Kelley, Senior Planner
Nevada County Planning Department, 950 Maidu Ave., Suite 170
Nevada City, CA 95959
Re: Rise NOP Comments
Dear Mr. Kelley,
Thank you for the opportunity to comment on this project.

Grp 30-23 As you know, we have found it extremely difficult to fully understand the scope of the documents provided because of the very short time period allotted to research it. The video slide show distributed by the Planning Department in late July left only 20 days for most folks to locate, review, read, try to understand some very complicated data, and then collect our thoughts into a coherent letter before submitting them to you. And that is only for people with good internet; others have almost no way to find the documents, much less respond in a meaningful way.

Nonetheless a volunteer crew of concerned citizens have managed to put together this preliminary list of comments. We hope you will extend the comment period to fully comply with CEQA's goal of allowing the general public adequate time to comment.

Grp 30-24 1. The EIR must describe a comprehensive monitoring plan for South Fork Wolf Creek (SFWC) and its watershed. Here is a sample of questions that must be answered in the EIR regarding this monitoring plan: What kind of pre-project monitoring of South Fork Wolf Creek (SFWC) will be done to establish baseline data for water quality? What type of ongoing monitoring will be in place during the dewatering process, to ensure there is no deleterious effect on water quality? What is the proposed monitoring program for water quality in SFWC during the 80-year life of the project? Who will oversee this monitoring, and what structure will be in place to enforce compliance? Who will pay for this? The parameters monitored should include, but are not limited to: pH, water temperature, dissolved oxygen levels, dissolved solids, turbidity, nitrogen, phosphorus, heavy metals, manganese, iron, other mining residue. Please provide a scientific design of the proposed monitoring program, including suitable goals, exceedance levels, etc.

Grp 30-25 2. Please describe similar monitoring plans for other important riparian parameters, including but not limited to: benthic macroinvertebrates (BMIs), physical habitat, canopy coverage, and sediment loading.

Grp 30-26 3. Contrary to the report in the applicant's submitted documents, SFWC is a perennial stream, fed by two streams above Brunswick, flowing through the entire Brunswick site, not just the downstream half. As per definitions in Nevada County LUDC Sec. L-II 4.3.17 B:

*3. **Watercourses, Perennial** - Natural or once natural flowing bodies of water, including*

natural waterways that have been channelized, which flow continuously through a bed or channel having banks. All streams, creeks, lakes, ponds and reservoirs shown on the 7.5 minute USGS maps as perennial are included in this definition unless professional evaluation determines the watercourse to be intermittent or seasonal.
SFWC is a blue line on 7.5 minute USGS maps all the way through the Brunswick property.
WCCA has been collecting data from our monitoring site upstream of Brunswick Road on Woodrose for 10+ years, and we dispute the finding in the submitted Management Plan that the upstream portion of the stream on this property is not perennial. The fact that a previous property owner "channelized" a portion into a 48" culvert is not sufficient evidence to determine whether this stream is perennial or intermittent. The EIR must describe how the entire length of the creek on the property will be protected with minimum 100' setbacks during the life of the project, and how the creek will be restored to a fully functioning healthy creek during and after the project. Please see our letter to Matt Kelly regarding this matter dated 12/22/2019, attached hereto.

4. Whether the steam is determined to be perennial or intermittent, the setbacks required by the county LUDC must be maintained throughout. Any work performed, including the proposed removal and replacement of the culvert, will require special permits for streambed alteration etc. from (including but not limited to) California Fish and Wildlife, USACE, Cal SWRCB, etc. The EIR must describe the status of these permit applications, and the scope of work proposed. Please note that the applicant violated the County's minimum setback requirements (twice) in 2018, and was required to submit a second Management Plan because the first one was insufficient. See The Union Other Voices, 6/24/2020: https://www.theunion.com/opinion/columns/jonathan-keehn-reopening-idaho-maryland-mine-still-a-bad-idea/

Grp 30-27

5. Please describe the status of CalFire Timber Harvest permits, or other forest harvesting permits that may be required for the life of this project. Please note that the applicant was cited for violations in this regard on March 29, 2018, attached hereto.

Grp 30-28

6. The EIR must delineate how the on-going enforcement of these permits (and any others required) will be achieved over the 80-year life of the project, and the reclamation/maintenance phase post-project. e.g: Who will be enforcing them and collecting fines if any aspect of the project is found to be in violation of the spirit and intent of a permit, whether or not the original enforcement agency is still in existence?

Grp 30-29

7. SFWC has populations of native rainbow trout that are highly sensitive to warm water and other changes in their habitat, as are many of the macroinvertebrate species that they

Grp 30-30

feed on. The EIR must describe how these fish and their habitat will be protected. This program would include, but not be limited to twice-yearly surveys of trout and BMIs downstream from the project, to monitor the effect of the project on trout.

Grp 30-31

8. The applicant has determined that SFWC is the proper conduit for discharge of all dewatering. However, the previous property owner (Emgold) went to great lengths to determine that a better solution would be to pipe the discharge to the main stem of Wolf Creek. The EIR must describe these former studies, assumptions, and findings, and describe why the current project applicant disagrees with the previous discharge analysis in favor of the current proposal. Alternative methods of disposal of the water must also be analyzed by the EIR, e.g. trucking off-site.

Grp 30-32

9. The EIR must address the following questions regarding the hydrological impact of dewatering: What is the level of confidence of the accuracy of the hydrological studies regarding dewatering? Describe the impacts of dewatering on ground water, surface water, riparian habitat, wetlands, and wells in the Wolf Creek watershed and beyond. What structure will be in place to measure negative impacts? What action thresholds have been set that will trigger remediation and fines if any negative impacts to the water resources of Nevada County and the Wolf Creek watershed occur? Who will enforce the rules, and who will pay for remediation? Please describe the public notification process, including real-time updates of all monitoring programs, in an easily-searchable data-base.

Grp 30-33

10. The project plan includes extensive exploratory drilling operations under neighboring properties and watersheds. The EIR must address the impacts on water resources (including but not limited to ground water, surface water, riparian zones, wetlands, and wells) of both the exploratory operations and the mining operations. How will negative impacts discovered by the monitoring program be remediated? What is the plan to halt operations, when significant changes in the water table are discovered, and how will alternative plans be made to stem the tide of destruction and depletion? In addition to SFWC, we are concerned about the main stem of Wolf Creek, the wetlands on the Centennial site that drains into Wolf Creek, all ephemeral and intermittent streams in the watershed, and the wet meadow on East Bennett Road that is on Empire Mine State property. How will these be monitored, and how will the general public and concerned citizens know if these wetlands and riparian areas are becoming degraded due to changes in the hydrology? And what will be done when negative impacts are discovered?

Grp 30-34

11. At the Centennial Site, the maps show that Centennial Drive and Spring Hill Drive are to remain in their current locations. However, the city of Grass Valley intends to realign this intersection, which would impact Wolf Creek proper, and its riparian zone. How will this

project be designed to accommodate the realignment? How will the realignment be constructed in a way to enhance the creek and riparian area? The EIR must address these issues collectively as part of this project, because of their anticipated cumulative effects, and not separately or piecemeal.

Grp 30-35

12. How will the project enable and enhance the city's plan to create a public trail along the Wolf Creek/Idaho Maryland Road corridor? This project is currently in the design and engineering phase. The EIR must address these issues collectively as part of this project because of their anticipated cumulative effects, and not separately or piecemeal. The EIR must describe any and all easements that will be granted to the city or the County, and the impacts they will have in the riparian corridors.

Grp 30-36

13. The EIR must address how the project will encourage trails and bike path accessibility, both on the Centennial site, the Brunswick site, and East Bennett and Idaho Maryland Roads.

Grp 30-37

14. Please describe how all the wells that might be affected will be monitored before, during, and after the project, including exploration and during the reclamation phase. Describe all the parameters that will be monitored - e.g. well production, water level, clarity, taste, potability, iron, manganese, arsenic, etc. Describe the underground hydrological features that may be affected by dewatering abandoned mine for 80 years, and how these features and activity will affect residential wells.

Grp 30-38

15. Please describe the projected loss to county tax revenues due to depressed property values over the next 80 years.

Grp 30-39

16. Regarding the "Aquatic Resources Management Plan" (Matuzak 2/2020): this report incorrectly interprets Nevada County Land Use and Development Code. LUDC L-II 4.3.17 – which states that any disturbance of wetlands, streams, etc. is to be allowed ONLY if there are no alternatives to a project going forward. *"**Sec. L-II 4.3.1 Purpose** The primary purpose of site development resource standards is to avoid the impact of development projects on sensitive environmental resources and natural site constraints. Where avoidance is not possible....."*
The EIR must describe alternative designs for the project that will avoid the impacts mentioned.

Grp 30-40

17. *Fremontedendron decumbens* (Pine Hill flannelbush) is a federally listed: Endangered and CA listed: Rare, and is known from only 12 populations in Yuba,

Nevada and El Dorado Counties. There is a population of 62 plants on the Centennial site and the project, as currently designed will lead to a loss of 18 plants and impact to another 4 plants. Over one third the population could be lost. This is an unacceptable take for a federally listed plant. A population of this size is very vulnerable and may not survive this level of impact. We would like the Draft EIR to demonstrate that the proposed mitigation described in Mauzak 2/2020 **Centennial Industrial Site *Habitat Management Plan for the Pine Hill Flannelbush (Fremontodendron decumbens)***, will not result in a loss of viability for the population and the meta population. We do not believe that transplanting is at all an option for this species. This genus is almost impossible to transplant when young, much less mature. The EIR must address how this plant will be protected and the population made to thrive on this site. Provide details of how this will be achieved, and include specific, proven methods of successful transplantation, if transplantation remains part of the plan. Provide a "performance based" monitoring plan to assure success of the project at 6 months, at least annually thereafter, for the life of the project and reclamation phase.

Grp 30-41

18. Regarding the **Technical Memorandum for the Idaho-Maryland Mine Project – South Fork Wolf Creek Discharge Biological Resources Assessment** (Matuzak 2019). After this report was completed, the foothill yellow-legged frog was listed by the State of California as Threatened. Because of this recent listing, additional protocol-level surveys of the creek below the Brunswick site, including on the Empire Mine SHP property, must be made, and the reports included in the EIR. The previous study was surprising given how few benthic macroinvertebrates were found. Our organization has several years of data on the BMIs of this location and it scored high for species richness and abundance, making this a prime habitat for trout, yellow-legged frogs, and Western Pond Turtles. The substrate is more than adequate as well for the frogs to lay eggs. New protocol-level surveys must be done by an aquatic biologist with frog experience, and the reports included in the EIR.

Grp 30-42

19. Serious and destructive flooding occurs during large storm events, along the main stem of Wolf Creek behind Mill Street, which is mostly residential. Homes are very close to this channelized portion of the creek and there has been considerable property damage during high water events. The EIR must describe the plan that will be in place to ensure that the water pumped into SFWC will not cause additional flooding along Mill St. and other parts of Grass Valley during high volume precipitation events. Please describe the plan to prevent the spill of toxic waste into the creek during high intensity storms, including remediation and funding sources. The Nevada City Engineering, Inc. (2019) Preliminary Drainage Analysis states that post project storm-water discharge from the Brunswick Site, including the treated mine water discharge of 5.6 cfs, will be *equal to or less than the estimated pre- project storm-water discharge levels*. However, as stated in the report,

the project will be adding an additional 5.6 cfs in perpetuity. The report also states that the construction of the storm-water detention ponds and the project will have *no impact or increase of flows in creeks during storm events* (NCE, 2019). The EIR must address these contradictory findings and describe a remediation plan.

Grp 30-43

20. Please describe the plans to mitigate the effects of climate change over the duration of the project. In the foothills, our main issues are flooding, fire, air pollution, CO2 emissions, carbon-based energy use, and drought. Please address all of these issues. With climate change, we have already, and will continue to experience higher intensity storms. The EIR must describe how these storms will affect the water quality and volume of the dewatering of the mine shafts, the levels of toxic water in your settling ponds, and the amounts of water pumped into the creek. Please describe the measures that will be implemented to reduce the proposed high use of carbon-based energy and your (very high) CO2 emissions. Describe the impact of these proposed emissions on the stated goals for reduced emissions by the City of Grass Valley, the County of Nevada, and the State of California. Please address the measures that will be taken to make your properties fire-safe, in a fire regime that will be increasing in danger over the 80-year life of the project. Please describe the modeling used to anticipate the effects of climate change on all parameters over the life of the project and into the reclamation phase.

Grp 30-44

21. Please describe the plans to reduce nitrification of the creek and environs from the use of ammonium nitrate. Please describe the effects of ammonium nitrate on riparian systems, including but not limited to the range/distance of the effect of ammonium nitrate in general and specifically in the systems that may be impacted by this project.

Grp 30-45

22. The Centennial site has wetlands, ephemeral, and intermittent streams throughout the project area. The EIR must address the impact of the piles of waste rock and whether there will be an increase the total dissolved solids and/or lowering of the pH of the water in these wetland areas, further degrading the water quality before emptying into Wolf Creek. In light of climate change, the EIR must reassess the 100 year floodplain in keeping with the increased likelihood of higher intensity storms on a more frequent basis.

Grp 30-46

23. The EIR must include protocol-level surveys to be done by experts for all Federal and State listed species at both Brunswick and Centennial sites, and also at the precious meadow and riparian sections of the SFWC watershed owned by Empire Mine State Park, just downstream of the Brunswick site.

Grp 30-47

24. The **Centennial Industrial Site Idaho-Maryland Mine Project** ***Watercourse / Wetlands / Riparian Areas Management Plan***, states that, "temporary disturbance or

encroachment may occur within the 100-foot non-disturbance buffer to Wolf Creek due to construction activities though such disturbance is not currently being proposed." This statement is vague and unenforceable. The EIR must make it clear that the project will maintain 100' setbacks to perennial streams, and 50' setbacks from all other water resources throughout the project, and describe the steps that will be implemented to achieve this goal during construction and for the life of the project and reclamation phase. The EIR must describe any sedimentation that may occur as a result of the dust and disturbance caused by the project activities at Centennial on all water resources. Also describe the oversight and enforcement of these rules: how the impacts will be monitored, to whom they will be reported, the fine schedule for violations, and the bond amount that will be posted to ensure compliance.

Grp 30-48

25. The EIR must determine an adequate bonding amount to ensure compliance and remediation of all facets of this project. It must include a financial structure sufficient to protect the County and its citizens from financial harm during every year of the proposed project, including through final reclamation.

Grp 30-49

Thank you again for the opportunity to submit these comments.
Please acknowledge receipt.
Sincerely,

Jonathan Keehn President Josie Crawford Executive Director

Wolf Creek Community Alliance
P.O.Box 477, Grass Valley, CA 95945 Phone: 530.272.2347
Email: wolfcreekalliance@gmail.com
Web: http://www.wolfcreekalliance.org/

"Do unto those downstream as you would have those upstream do unto you." Wendell Berry

Grp 30-50

December 22, 2019
Matt Kelley, Senior Planner 950 Maidu Ave., Suite 170 Nevada City, CA 95959
RE: Rise Grass Valley application for Conditional Use Permit and Reclamation Plan for the Idaho Maryland Mine project – mischaracterization of headwaters of South Fork Wolf Creek (SFWC)
Dear Mr. Kelley
Please review the following wording in the applicant's document, which can be found at page 17 (labeled pg 13) at:
https://www.mynevadacounty.com/DocumentCenter/View/31023/Applicants-Project-Description
"A buried 48-inch culvert crosses the Brunswick Industrial Site. The culvert transports off-site surface drainage from Brunswick Road. South Fork Wolf Creek originates from the outlet of this 48-inch culvert. As shown on Sheets 1 and 2, this culvert will be upgraded and replaced to avoid proposed facilities and development. The new 48-inch culvert will discharge at the same location as the existing 48-inch culvert."
This is not an accurate description. The 48" culvert does much more than simply "transport off-site surface drainage from Brunswick Road". In fact it conveys all of the upstream reaches of the headwaters of South Fork Wolf Creek. There are springs and streams on the east side of Brunswick Road that flow through a culvert under the road, and there is a significant stretch of SFWC on the west side of Brunswick Road before it enters into the grated 48" culvert. There is important riparian habitat along all of these reaches, including on the subject property, that must be protected.
As you may know, Wolf Creek Community Alliance manages a robust water-quality monitoring program all over the Wolf Creek Watershed that has been operating continuously since 2003. We currently monitor 25 sites, one of which (Site 6.1) is on SFWC on the upstream (east) end of the Brunswick Road culvert. We call this site the SFWC Headwaters Site, but in fact the headwaters are farther to the east, up Wood Rose Road.
Any project that may come before you on the property currently owned by Rise GV should include daylighting this important stretch of SFWC that is currently in a 48" culvert. This stretch should be restored to a healthy open creek with a functioning riparian zone with habitat for a viable fish population.
Many thanks for the opportunity to comment.
Jonathan Keehn
Wolf Creek Community Alliance
P.O.Box 477, Grass Valley, CA 95945
Phone: 530.272.2347
Email: wolfcreekalliance@gmail.com
Web: http://www.wolfcreekalliance.org/

GROUP LETTER 30: JONATHAN KEEHN, WOLF CREEK COMMUNITY ALLIANCE

Response to Comment Grp 30-1

Comment noted. This is an introductory comment and does not provide a comment on an environmental issue associated with the project.

Response to Comment Grp 30-2

The commenter suggests a surface water monitoring program, at least in South Fork Wolf Creek, during the project, and which would extend after the end of the project, and refers to Comments #1 and 2 of their August 16, 2020 NOP comment letter. However, the commenter does not identify any significant impacts that would be avoided or reduced by this suggestion. As discussed in DEIR Section 4.8.2, extensive monitoring of South Fork Wolf Creek was conducted to prepare the technical studies that support the hydrology and biology impact analyses. As discussed in Impact 4.8-1, monitoring will be required by the project's Regional Water Quality Control Board Limited Threat Discharge Permit, Report of Waste Discharge, and Industrial General Permit demonstrating compliance with standards that prevent degradation of water quality throughout the life of the project. Monitoring will be paid for by the applicant and enforced by the County and the RWQCB. As such, surface water monitoring will already be required as part of mitigation imposed on the mine operator, and the RWQCB will have enforcement authority based on that monitoring data.

Please also see Response to Comment Grp 30-25.

Response to Comment Grp 30-3

The commenter asserts the upstream and offsite portion South Fork Wolf Creek is a perennial water of the United States. The DEIR, including Appendix F.7, identifies the onsite portion of South Fork Wolf Creek as perennial. The upstream portion of South Fork Wolf Creek is offsite and would not be impacted by the project. The existence of the culvert is the baseline condition for the project and the restoration to an open creek as suggested by the commenter is not required by CEQA.

The commenter also asserts the onsite pond is a perennial water of the United States. The DEIR, and Appendix F.7, identifies the onsite pond as a historic man-made clay-lined pond that was associated with historic saw milling operations. The pond is not a jurisdictional "water of the United States" as it is an industrial pond built and maintained for industrial purposes. (DEIR, p. 4.4-15.) Water is typically found in the pond year-around.

Section 6 of the DEIR considered project alternatives. As summarized in DEIR section 6.2, and provided in CEQA Guidelines section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. (See CEQA Guidelines, Section 15126.6(a).) The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis given that they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail. (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the

public and decisionmakers. The commenter's suggested alternative would not avoid any significant impacts of the project, but would include a creek restoration component that has no nexus to the project's impacts. As such, this alternative is rejected from further consideration.

Response to Comment Grp 30-4

The commenter states generally that the hydrology analysis in the DEIR was based on insufficient data, but does not provide any specific comments on the DEIR's analysis or data. The commenter references several related questions the organization raised in its August 16, 2020 NOP comment letter and states that many of the questions were not answered in the DEIR. The commenter specifically references Comment #9 of the NOP comment letter. Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependent Vegetation, and Master Response 35 -Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. In addition, please see Response 30-29 regarding enforcement of conditions of approval, mitigation measures, and agency permits.

Response to Comment Grp 30-5

The commenter cites the portion of the County Land Use and Development Code (L-II 4.3.17) regarding "watercourses, wetlands, and riparian areas" and asserts no exceptions to the development code should be allowed on large properties where avoidance is possible. This portion of the County Code includes in its purpose an objective to "minimize the disruption of watersheds and watercourse"; however, avoidance is not required. DEIR Chapter 4.9 analyzed the project's consistency with the General Plan and applicable development code requirements. The project was determined to be consistent with the General Plan and development code, and therefore this impact was considered less than significant. Please see Response to Comment 31-58 regarding infeasibility of wetland avoidance.

Response to Comment Grp 30-6

The commenter asserts that mitigation measures for flannelbush, frogs and other listed species were insufficient and refers to Comments #17, 18, and 23 of their August 16, 2020 NOP Comment Letter.

Regarding Comment #17, the commenter generally questions the effectiveness of transplantation for Pine Hill flannelbush. As explained in Appendix F.4, a maintenance and monitoring program is identified for transplanted Pine Hill flannellbush. Monitoring will occur every six months for the first two years. If transplantation does not meet success criteria, monitoring and maintenance will continue until those success criteria are achieved (see Appendix F.4, section 6.3.2). Irrigation is not prohibited and could be utilized if determined necessary to ensure the success of transplantation. The monitoring and maintenance will continue until success criteria are achieved. If those success criteria cannot be achieved, the Mitigation Measure 4.4-1(a)(5) and the draft management plan provides alternative maintenance transplantation measure to help achieve success criteria.

Regarding Comment #18, please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog. Contrary to commenter's assertion, protocol level surveys are not required for CEQA.

Regarding Comment #23, where impacts were identified, mitigation measures have been provided requiring additional agency permitting and surveys. These surveys will be conducted in

the appropriate areas based on the potential for surface disturbance and by qualified professionals. Protocol level surveys are not required for the purposes of CEQA.

Response to Comment Grp 30-7

The commenter asserts that timber harvest plans were not addressed in the DEIR; however, timber harvest plans were discussed in DEIR Section 4.2.3 and Impacts 4.2-3 and 4.2-4.

Response to Comment Grp 30-8

The commenter asserts that ongoing enforcement of permits was not addressed in the DEIR; however, on page 2-4 of the DEIR, the County stated that the mitigation measures would be incorporated into a mitigation monitoring and reporting program that will be enforced by the County.

Response to Comment Grp 30-9

The commenter states that protection and monitoring of rainbow trout was not addressed in the DEIR. Please see DEIR Section 4.4.4 and Master Response 34 - Resident Fish.

Response to Comment Grp 30-10

The commenter states that alternatives for mine water discharge were not addressed in the DEIR, and refers to Comment #8 of their August 16, 2020 NOP Comment Letter. Please see Response to Comment 30-31. In addition, Section 6 of the DEIR considered project alternatives. As summarized in DEIR section 6.2, and provided in CEQA Guidelines section 15126.6, an EIR shall provide a reasonable range of alternatives that achieves the project objectives but avoids or reduces significant project impacts. The alternatives analysis is not required to consider every project alternative but is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." The alternative analysis in the DEIR considered nine different alternatives. Five alternatives were considered but rejected from detailed analysis given that they did not meet most project objectives, were infeasible, and/or did not avoid significant project impacts. Four alternatives were analyzed in detail. (see DEIR section 6.3.) The County believes this provides a reasoned choice of alternatives for consideration by the public and decisionmakers.

Response to Comment Grp 30-11

The commenter asserts that surface and groundwater were not addressed in the DEIR, and refers to Comment #10 of their August 16, 2020 NOP Comment Letter. However, DEIR Chapter 4.8 includes comprehensive analysis of surface and groundwater baseline conditions, project impacts and mitigation measures. Please see Response to Comment 30-33.

Response to Comment Grp 30-12

The commenter asserts that the DEIR did not properly address the realignment of Centennial and Springhill Drives. However, the project does not propose realignment of Centennial and Springhill Drive and no potentially significant traffic impacts were identified where mitigation requiring realignment would reduce any impact to a less than significant level. Please also see DEIR Chapter 4.12.

Response to Comment Grp 30-13

The commenter asserts that the DEIR did not address public trails, and refers to Comments #12 and 13 of their August 16, 2020, NOP Comment Letter. Please see Responses to Comments Grp 30-35 and Grp 30-36.

Response to Comment Grp 30-14

The commenter generally asserts that "wells" were not addressed by the DEIR, and refers to Comment #14 of their August 16, 2020, NOP Comment Letter. However, DEIR Chapter 4.8 provided a comprehensive discussion of groundwater wells and the potential for the project to lower the water levels of surrounding wells. In addition, please see Master Response 7 - Location of Future Mining, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring.

Response to Comment Grp 30-15

Comment noted. Please see Master Response 1 - Non-EIR/Administrative, and Master Response 2 - Social and Economic Impacts.

Response to Comment Grp 30-16

The comment generally states that flooding and the contradictory findings were not addressed in the DEIR, but does not identify what specific impacts or contradictory findings were not addressed. Please see Response to Comment 30-42.

Response to Comment Grp 30-17

The commenter asserts that climate change was not addressed in the DEIR; however, DEIR Chapter 4.3 analyzes the project's impact on greenhouse gas emissions and associated climate change impacts. Please also refer to Master Response 16 – Drought and Climate Change. Emissions of greenhouse gas impacts were considered less than significant after mitigation.

Response to Comment Grp 30-18

The commenter generally asserts that the DEIR did not address nitrification/ammonia nitrate, and refers to Comment #21 of their August 16, 2020 NOP Comment Letter. Please see Response to Comment 30-44.

Response to Comment Grp 30-19

The commenter asserts that the DEIR did not address the project's impacts on Centennial Site surface waters, and refers to Comment #22 of their August 16, 2020 NOP Comment Letter. Please see Response to Comment 30-45.

Response to Comment Grp 30-20

The commenter asserts that the DEIR did not address the project's impacts on 100' and 50' buffer zones, and refers to Comment #24 of their August 16, 2020 NOP Comment Letter. Please see Response to Comment 30-47.

Response to Comment Grp 30-21

The commenter asserts that the DEIR did not address adequate bonding for the project. However, the DEIR discusses bonding on pages 2-4, 3-47, 4.6-24 and 4.9-20. Please see Master Response 1 - Non-EIR/ Administrative.

Response to Comment Grp 30-22

The commenter asserts that concerns and issues raised in the commenters NOP comment were not addressed in the DEIR. However, as set forth in Responses to Comments Grp 30-1 through Grp 30-21, the DEIR does address the identified issues. Comment noted.

Response to Comment Grp 30-23

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Comment noted. This is an introductory comment and does not provide a comment on an environmental issue associated with the project.

Response to Comment Grp 30-24

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Response to Comment Grp 30-2 above.

Response to Comment Grp 30-25

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. DEIR Impact 4.4-3 analyzed the project's potential impact to riparian habitat and concluded this impact was potentially significant but could be reduced to a less than significant level with mitigation. Four mitigation measures were identified including preparation of a management plan for work conducted adjacent to riparian areas and waters on both the Centennial and Brunswick Industrial sites. (See DEIR Impact 4.4-3.) A draft management plan was included as Appendix F.5 and F.8. Other related impacts related to Wolf Creek and South Wolf Creek were considered less than significant and mitigation was not proposed.

Please see Response to Comment Grp 30-2 regarding monitoring of water quality.

Response to Comment Grp 30-26

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Response to Comment Grp 30-3 regarding South Fork Wolf Creek being a perennial stream. As discussed in the comment above, DEIR Impact 4.4-3 requires the preparation of aquatic resources management plans that will mandate setbacks and other requirements to minimize impacts to Wolf Creek, South Fork Wolf Creek, and surrounding habitat. Draft management plans were included as Appendices F.5 and F.8. As discussed in DEIR section 3, the existing culvert transporting offsite flows under the Brunswick Industrial Site would be replaced and upgraded. The culvert would daylight at its existing location. The existence of the culvert is the baseline condition for the project and the restoration to an open creek as suggested by the commenter is not required.

Response to Comment Grp 30-27

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Responses to Comments Grp 30-25 and Grp 30-26 above. Regarding future agency permitting, DEIR Chapter 4.4 requires the applicant to received Corps section 404 permit and CDFW 1600 agreement prior to surface disturbance that would impact jurisdictional waters. Please see Master Response 3 – Operator Responsibility.

Response to Comment Grp 30-28

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. At this time, the applicant has not applied for CalFire timber harvest permits, but is required to do so prior to



harvesting of timber. As stated on page 4.2-20 of the DEIR, "With respect to harvesting the timber on the Centennial and Brunswick Industrial Sites, pursuant to Article 7 of the FPR, the Project Applicant will be required to prepare a THP and TCP application for submittal to CAL FIRE. A THP is similar to a CEQA document in that a THP includes an analysis of environmental impacts related to timber harvesting."

Response to Comment Grp 30-29

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. The County will enforce conditions of approval and mitigation measures. Please see Master Response 3 – Operator Responsibility. To the extent the applicant receives permits from other state and federal agencies, those agencies will be responsible for their enforcement.

Response to Comment Grp 30-30

Please see Master Response 34 - Resident Fish. Please see Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 36 - Flows in South Fork Wolf Creek, and Master Response 32 - Temperature of Mine Water Discharge.

Response to Comment Grp 30-31

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. The commenter states that previous applicant Emgold determined a better solution was to pipe water discharge to Wolf Creek rather than discharge to South Fork Wolf Creek. However, the 2008 DEIR for the Emgold project specifically examined the currently proposed discharge point at South Fork Wolf Creek (see Figure 4.7-4 of ESA 2008) and determined that the potential impact of this discharge with respect to inducing substantial erosion and downstream sedimentation and/or resulting in a violation of existing water quality standards is considered less than significant (see page 4.7-42 of ESA 2008). A pipeline and discharge to Wolf Creek was not proposed or analyzed in the 2008 DEIR.

Please see Response to Comment Grp 30-3 regarding analysis of alternatives.

References

ESA (Environmental Science Associates). (2008). *Draft Idaho-Maryland Mine Project Environmental Impact Report* San Francisco, California.

Response to Comment Grp 30-32

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependent Vegetation, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. In addition, please see Response to Comment Grp 30-29 regarding enforcement of conditions of approval, mitigation measures, and agency permits.

Response to Comment Grp 30-33

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Underground exploration drilling creates small diameter holes which are irrelevant in comparison to the mining excavations which have been analyzed in the groundwater model for the DEIR. As stated on page 13 of Appendix M, the vibration or effects of drilling cannot be detected only feet away from the drill and no impact to the community would exist from these drilling activities.

Regarding groundwater impacts that may result from project dewatering, please see Chapter 4.8 of the DEIR, and Master Response 7 - Location of Future Mining, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring.

Please see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Grp 30-34

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. DEIR Chapter 4.12, and the supporting traffic study (see Appendix O), analyzed twenty-four intersections and six roadway segments. As described and analyzed in DEIR Section 4.12.4, based on consultation with Nevada County and the City of Grass Valley, seven different scenarios were analyzed. The project does not propose to realign Centennial Drive and Spring Hill Drive and project-related traffic impacts were not identified that would require realignment of these roadways. However, the project would not preclude the realignment of the referenced roadways, if that was proposed at a later date.

Response to Comment Grp 30-35

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. No trail has been formally proposed by the City of Grass Valley or the County. The project site is private property and the property owner (the applicant) does not propose construction of a publicly accessible trail as part of the project. As a result, construction and use of a public trail was not analyzed in the DEIR.

Response to Comment Grp 30-36

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. DEIR Chapter 4.12 provided a description of existing bicycle facilities near the project site, cited or summarized existing County policies and plans regarding bicycle facilities, and analyzed the project's potential impact to these facilities. The impact analysis concluded the proposed project would not conflict with a program, plan, ordinance or policy addressing transit, bicycle, and pedestrian facilities, and impacts would be less than significant (see DEIR Impact 4.12-4).

Response to Comment Grp 30-37

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see DEIR Impact 4.8-2 and Master Response 15 - Adequacy of Groundwater Monitoring.

Response to Comment Grp 30-38

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Master Response 1 - Non-EIR/Administrative, and Master Response 2 - Social and Economic Impacts.

Response to Comment Grp 30-39

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Response to Comment Grp 30-5 regarding LUDC L-II 4.3.17 and Response to Comment Grp 30-3 regarding alternatives.

Response to Comment Grp 30-40

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. The commenter generally questions the effectiveness of transplantation for Pine Hill flannelbush. As explained in Appendix F.4, a maintenance and monitoring program is identified for transplanted Pine Hill flannellbush. Monitoring will occur every six months for the first two years. If transplantation does not meet success criteria, monitoring and maintenance will continue until those success criteria are achieved (see Appendix F.4, section 6.3.2). Irrigation is not prohibited and could be utilized if determined necessary to ensure the success of transplantation. The monitoring and maintenance will continue until success criteria are achieved. If those success criteria cannot be achieved, the Mitigation Measure 4.4-1(a)(5) and the draft management plan provides alternative maintenance transplantation measure to help achieve success criteria.

Response to Comment Grp 30-41

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog. Contrary to commenter's assertion, protocol level surveys are not required for CEQA.

Response to Comment Grp 30-42

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. The commenter states that more precautionary measures are required in the event of storm events and extreme flood events to prevent overflow of untreated mine water to South Fork Wolf Creek. A Preliminary Drainage Analysis (PDA) (Nevada City Engineering, 2019) was prepared and included as DEIR Appendix K.5. As described in DEIR Section 4.8.4, the PDA was peer reviewed by the County and potential impacts were analyzed in Impact 4.8-3. As stated in the conclusion to Impact 4.8-3:

> "The drainage analyses discussed above conclude that the project would not significantly alter the drainage patterns of the sites in a manner which would result in substantial erosion or siltation on- or off-site, nor substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, nor create or contribute to runoff water which would exceed the capacity of existing stormwater drainage systems, nor impede or redirect flood flows. West Yost's independent peer review concurs with this conclusion." (DEIR page 4.8-75)

As stated in Appendix K.5 of the DEIR, the drainage calculations and detention basins are specifically designed to respond to the drainage requirements of the County of Nevada. The Nevada County drainage requirements indicate that new storm drain systems and channels shall

be designed to convey the 10- and 100-year, 24-hour storm event. Section 4.5 of Appendix K.5 discusses the 6.4-acre catchment area where precipitation would inflow into the water treatment pond and confirms that the designed freeboard volume is more than adequate to retain the runoff from a 100-year storm event.

Please also see Appendix K.5 detailing Brunswick Industrial Site drainage and stormwater facility sizing, as well as Master Response 36 - Flows in South Fork Wolf Creek, and Response to Comment Agency 1-38.

Response to Comment Grp 30-43

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. The project's greenhouse gas emissions and associated impacts and mitigation were analyzed in Chapter 4.3 of the DEIR. The commenter provides a list of various potential environmental changes that could occur at some future date because of climate change. As identified in CEQA Guidelines section 15125, the environmental analysis presented in the DEIR should compare physical environmental conditions as they exist at the time of the Notice of Preparation. The DEIR analyzed the projects potential impacts consistent with requirement in addition to reviewing potentially significant cumulative impacts based on known or planned development in the region. Hypothesizing on potential future impacts that may occur in the future because of climate change is speculative and not required by CEQA. Please also see Master Response 16 – Drought and Climate Change.

Response to Comment Grp 30-44

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see DEIR sections 4.3 and 4.8 analyzing the project's ammonium nitrate fuel oil use and impacts on air quality and hydrology. As discussed on page 4.8-48 of the DEIR, "The primary residual components of the ammonium nitrate-fuel oil (ANFO) used for blasting, ammonia and nitrate, are very soluble and mobile in water. This means that any blasting residuals would be continually removed from the mine over time through the dewatering system. The proposed water treatment plant is designed to treat ammonia and other blasting residuals that might occur due to incomplete detonation." The soluble nature of any blasting residuals will result in these constituents being removed from the mine by the dewatering system, such that they would not accumulate on the tailings or barren rock.

Please see Master Response 35 - Discharge to South Wolf Creek, explaining the water treatment process and elimination of potential contaminants in groundwater prior to discharge.

Response to Comment Grp 30-45

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

DEIR Impact 4.4-3 analyzed the projects potential to impact state or federally protected waters and wetlands and determined this impact was potentially significant. Surface disturbance on the Centennial Industrial Site has the potential to impact approximately 0.033-acre of ephemeral streams. Mitigation measures 4.4-3(a-d) were identified that reduce this impact to a less than significant level. Mitigation Measure 4.4-3(b) specifically requires the applicant prepare a watercourse/wetlands/riparian area management plan, a draft of which was included as Appendix



F.5 to the DEIR. The management plan includes best management practices and erosion control to prevent discharge to Wolf Creek. In addition, the project will be required to have a construction SWPPP that will outline similar measures to reduce erosion and sedimentation from project construction.

The DEIR has already analyzed the impact of waste rock piles to the environment and water quality, including pH and dissolved solids. Please see Chapter 4.8 of the DEIR and Master Response 8 - Mine Waste Characterization.

Please see Response to Comment Grp 30-43 regarding assessing of impacts resulting from climate change.

Response to Comment Grp 30-46

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Where impacts were identified, mitigation measures have been provided requiring additional agency permitting and surveys. These surveys will be conducted in the appropriate areas based on the potential for surface disturbance and by qualified professionals. Protocol level surveys are not required for the purposes of CEQA.

Response to Comment Grp 30-47

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. As stated in DEIR Impact 4.4-3, temporary or permanent impacts would not occur to Wolf Creek from the proposed project, but this potential temporary impact was included in the event that temporary encroachment within the Wolf Creek 100-foot non-disturbance buffer would be required as part of construction.

Response to Comment Grp 30-48

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. Please see Chapter 4.3 of the DEIR relating to fugitive dust emissions and related mitigation requirements. Please also see Response to Comment Grp 30-8 regarding monitoring and enforcement of conditions of approval, mitigation measures, and agency permits.

Please see Response to Comment Grp 30-45 regarding prevention of sedimentation from construction activities. In addition, the project would be required to implement a dust mitigation plan to reduce dust resulting from project construction activities. (See Mitigation Measure 4.3-2, and APM-AQ-2 Surface Dust Controls.)

Response to Comment Grp 30-49

This comment is a copy of an NOP comment letter previously sent by the commenter in 2020, and was considered by the County in connection with the preparation of the DEIR. The DEIR discusses bonding on pages 2-4, 3-47, 4.6-24 and 4.9-20. A final assurance cost estimate will be required annually pursuant to SMARA and the County Code that will estimate the cost of reclamation based on existing surface disturbance. Once concurrence with this estimate is received from the County and Department of Conservation, Division of Mine Reclamation, the application will be required to post a financial assurance mechanism (FAM) in the estimated amount.

Group Letter 31

From: Wolf Creek Community Alliance
P.O. Box 477
Grass Valley, CA 95945

To: Members of the Nevada County Planning Commission,
Nevada County Board of Supervisors,
and Nevada County Planning Department Staff

Attn: Matt Kelley, Senior Planner
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
matt.kelley@co.nevada.ca.us

3/30/2022

Comments on the Idaho-Maryland Mine DEIR
Chapter 4.4 Biological Resources

Wolf Creek Community Alliance (WCCA) is pleased to submit comments on impacts to biological resources presented in the *Idaho-Maryland Mine draft Environmental Impact Report*.

Qualifications

Grp 31-1

Since 2004, WCCA has collected extensive stream and biological data in the Wolf Creek Watershed, including water quality, stream flow, benthic macroinvertebrate collection and analysis, and surveys of biological diversity. In collaboration with the City of Grass Valley and Nevada County, we regularly monitor and comment on development projects with regard to their impact on the Wolf Creek Watershed. Our team of scientists and protocol-trained citizen volunteers collaborates with our fellow stream monitoring organizations, Sierra Streams Institute and South Yuba River Citizens League, to calibrate instruments, share data, and refine best practices. We follow protocols that adhere to CA State Water Quality Control Board standards and comply with the Quality Assurance Project Plan (QAPP) version 1.5 of the Yuba Bear Monitoring Committee, of which we are a member. The Committee reports annually to the State Water Quality Control Board.

Grp 31-2

Background & Summary

1. Accurate **characterization of the environmental setting** (DEIR, chapter 4.4, section 4.4.2) and its biological resources is essential for predicting potential impacts to those resources. The DEIR omits, mistakes, mischaracterizes, and generally fails to fully consider the biological resources that would be impacted by this project. A lack of sufficient data is apparent regarding a number of potential impacts as well as a presentation of conclusions that cannot be justified, given the lack of that data. Without accurate characterization of both the environmental setting and its biological resources, significant or even unavoidable impacts may be missed. Specifically, the DEIR…

Grp 31-3
   a. Improperly separates and therefore does not consider the current baseline environmental setting of the Centennial site, including its wetlands, riparian habitats, and associated species.

Grp 31-4
   b. Gives an inaccurate hydrological assessment of the Brunswick site, ignoring the connectivity of the South Fork Wolf Creek (SFWC) upstream and downstream of the culvert on the Brunswick property, along with the movement of trout and other species upstream and downstream.

Grp 31-5
   c. Without sufficient examination or evidence considers the pond on the Brunswick site NOT to be an aquatic resource, disregarding impacts to its biological resources

Grp 31-6
   d. Through omission, lack of data, and lack of sufficient analysis, fails to adequately address potential impacts to the South Fork of Wolf Creek (SFWC) and the main stem of Wolf Creek due to mine water discharge, including
      i. The lack of hydrological or biological data in whole reaches of the SFWC
      ii. The lack of sufficient observation over time to create clear stream hydrographs
      iii. Inadequate study and characterization of the hydrological impacts of mine water discharge, including sedimentation, flow velocity, loss of seasonality, and loss of streambed or bank habitat
      iv. Omission of any qualitative observations and data regarding benthic macro-invertebrates (BMI)
      v. Inadequate consideration of chronic and cumulative impacts to BMI, trout and other aquatic species, including special concern amphibians, rather than simple tests of acute impacts.

Grp 31-7
   e. Includes mistaken and incomplete identifications of species
   f. Does not include or downplays the potential presence of special status species potentially impacted by the project

Grp 31-8
2. When **significant impacts** are identified (DEIR 4.4.4), their impacts need to be **mitigated** to the extent possible and the success and permanency of those mitigations need to be fully presented in order for the lead agency, the county, and its citizens, to be able to accurately and confidently assess the individual and overall impacts on the community. Further, the mitigations must be shown to sufficiently protect biological resources from significant harm. The mitigations presented in the DEIR omit important species of concern and sufficient mitigation for impacts to wetland and aquatic species.

The mitigation plans that are presented are in part inaccurate, vague, and generally to be detailed and approved AFTER approval of the project. Further, they are without sufficient oversight, mechanisms for stoppage, and penalty. They do not assure protection of biological resources in a manner that is measurable, monitorable, and adequate. Specifically, the DEIR mitigations…

Grp 31-9
a. Present a Pine Hill Flannelbush Management Plan without data indicating short and long-term success methods, particularly including the viability of transplanting, sufficient setbacks and management for biologically necessary propagation due to wildfire. (4.4-1)

Grp 31-10
b. Ignore and do not consider mitigation plans for species of special concern — Monarch Butterfly & Showy Milkweed (known to be present at the Centennial site), California Spotted Owl (reported as present in Empire Mine State Historical Park, which is adjacent to the Brunswick site), Yellow-breasted Chat and Willow Flycatcher (known to be present in the meadow/grassland reach of the SFWC downstream of the Brunswick site). (4.4-1) (4.4-2)

Grp 31-11
c. Do not consider potential impacts to biological resources of the Brunswick site pond (PD1). (4.4-2) (4.4-3) (4.4-4)

Grp 31-12
d. Do not consider adequate mitigation for potentially impacted aquatic species, including BMI and trout. Nor does it include analysis and mitigation for the movement of trout and other aquatic species both upstream and downstream of the industrialized portion of the Brunswick site. (4.2-2) (4.4-4)

Grp 31-13
e. Consider that habitat loss is an acceptable option if the species has not yet been observed, even if the likelihood of the species being present is high, including the destruction of nesting habitat for birds after the nesting bird has departed. (4.4-2)

Grp 31-14
f. Unreasonably suggest that a one-to-one replacement of wetland or monetary compensation is a preferred option for mitigating loss of wetland (4.4-3)

Grp 31-15
g. Allow disturbance within 100 foot setbacks from the SFWC, mischaracterizing the extent and degree of disturbance (4.4-3)

Grp 31-16
3. **Cumulative impacts** (DEIR chapter 4.4, section 4.4.4 Impacts and Mitigation Measures, Impact 4.4-6, pages 4-4-93 and following) that compound and accumulate both in terms of the interactions of discrete impacts, their impacts in the context of wider environmental settings and impacts over the length of the project are crucial in weighing the potential impacts of a project. This proposed project spreads out over a wide area, potentially impacting two watershed drainages, adjacent state park land, the full range of biological communities at this elevation in the foothills, and multiple neighborhoods of the wildland-urban interface that harbor significant habitat for biological resources. The matrix of these resources is not addressed in the DEIR, including the overall impacts on forest habitat, on species both aquatic and terrestrial, and on the headwaters of the Wolf Creek Watershed. Nor does the DEIR address changing impacts to these resources over the long 80 year period of the project, given the accelerating nature of climate change, with its various impacts that include drought, megafires, increased numbers of invasive species, and increased stress on species due to factors such as beetle infestation and fungal disease. Overall, in spite of its specificity, the DEIR does not

adequately address the cumulative potential impacts of this project, over space and time, to biological resources. Specifically, the DEIR…

Grp 31-17
a. Does not address the loss of forest land and associated stresses on forests as an essential factor of environmental health for the community (4.2-3)

Grp 31-18
b. Does not address potential cumulative impacts of impaired air quality on forests, nearby meadows, wetlands, and their associated species (4.3-1) (4.3-2)

Grp 31-19
c. Does not consider the loss of habitat an impact to special-status species, present or potentially present (4.4-1) (4.4-2) (4.4-6)

Grp 31-20
d. Considers the net loss of wetland within the Wolf Creek Headwaters area in which the project is proposed an acceptable mitigation, significantly reducing and unduly impacting the environmental resiliency of the associated local ecosystems. (4.4-3)

Grp 31-21
e. Does not adequately consider the cumulative impact of mine water discharge or failure of water treatment or water retention at the Brunswick site. (4.6-2) (4.8-3) (4.8-7)

Grp 31-22
f. Does not address environmental impacts of decreased groundwater in the the meadow/grassland reach of SFWC or other projected impact areas of the watershed. (4.8-2)

Grp 31-23
g. Does not consider the need to monitor existing mine seeps on the main stem of Wolf Creek in the event that mine dewatering impacts these seeps in ways that are not predicted.

Grp 31-24
h. Does not address the impact to overall development impacts for the community of changing the land use zoning designation from light industrial to heavy industrial/mining. (4.9-4)

Grp 31-25
i. Does not adequately address impacts of increased noise on species, habitats, and ecosystems. (4.10-1) (4.10-2) (4.10-3)

Grp 31-26
j. Does not fully address potential increases in risk of wildfire in an 80 year period that will see increasingly large and uncontrollable fire. (4.13-2) (4.13-5)

Grp 31-27
In Conclusion: Each of the issues listed above (and detailed below) must be addressed in this Draft Environmental Impact Report. If there were only 2 or 3 concerns, they could perhaps be addressed in a FEIR, but because of the sheer volume of omissions and insufficiencies in this chapter alone, a new DEIR must be prepared and recirculated for public and agency review.

Grp 31-28
Comments and Questions

4.4.2 Existing Environmental Setting

WCCA - DEIR Comments - 4.4 Biological Resources 4

Issue 1.a - Improperly separates and therefore does not consider the current baseline environmental setting of the Centennial site, including its wetlands, riparian habitats, and associated species.

At its outset, the DEIR unreasonably separates impacts to the baseline conditions of the Centennial site from the rest of the DEIR, and this continues in the chapter on Biological Impacts:

> *As discussed in Section 1.3, "Approach To Centennial Industrial Site Baseline," of this EIR, for the purposes of this biological resources analysis, the environmental baseline for the Centennial Industrial Site has been adjusted to be consistent with anticipated site conditions at the completion of the separate Centennial Industrial Site Clean-up Project. 4.4-2*

This avoidance in describing the current baseline of the Centennial site obstructs any agency or individual from considering the actual impacts of this proposed project. The "anticipated site conditions" are speculative, not established, particularly as at the date of these comments no approved RAP has been issued by the DTSC. Further, any separation of consideration of impacts into a voluntary RAP for a site that RiseGold clearly intends to use for the proposed project only obscures any question of cumulative impacts. We cannot evaluate biological impacts of this project when a significant part of those impacts are detailed in a document (the DTSC Centennial Site RAP) that is not even included in the DEIR or its appendices?

> *"...a limited amount of aquatic resources, the primary feature of which is Wolf Creek." 4.4-2*

The "limited amount of aquatic resources" omits the considerable amount of riparian and wetland resources currently existing at the Centennial site. Impacts to Wolf Creek here cannot adequately be assessed without considering the whole of the current hydrology of the site.

Similarly, at 4.4-3, the DEIR avoids consideration of vegetation communities for the Centennial site saying,

> *"The acreage of each vegetation community type at the Centennial Site is a good-faith estimate because it cannot be precisely established for the baseline condition given that the baseline has been adjusted…"*

How can the reader make assessments of completeness based on "good-faith" when trying to ascertain the true extent of vegetation communitie? This parceling out of biological resources and potential impacts on them in regard to the Centennial site occurs again and again throughout the DEIR and each time it obscures the true nature of both existing conditions regarding biological resources and the potential impacts upon them. The DEIR must include the considerations put forth in the RAP so that we can see in an integrated way all baseline

conditions and all potential impacts together. The same is true for cumulative impacts (as in Mitigation 4.4-6).

For example, again at 4.4-3 the DEIR identifies parts of the Centennial Site as "Graded/Remediation Areas," without describing the actual situation where contaminated soils in the current alternative proposed in the RAP would be capped with clean soil from the wetland and riparian areas of the site, areas not contaminated and not needing to be capped or removed. The DEIR goes on to say:

> *The areas identified for remediation within the RAP comprise approximately 28.25 acres, or roughly half of the Centennial Industrial Site. The excavation areas would be backfilled and regraded with clean fill…*

Reading this, the reader would not be aware that the "clean fill" to be used potentially could be taken from wetland and riparian areas on site, an action that might have clear alternatives. Yet, in this DEIR we are not allowed to consider the impacts or the alternatives. In fact, based on reading the DEIR alone, we would not even know about it. Again, how can this DEIR be considered accurate and complete when it purposely omits significant biological resources and impacts to them?

Finally, the DEIR excludes mention of most biological resources of the Centennial site while also briefly characterizing them, in a dismissive way that, without clear evidence, minimizes their biological value without giving the reader an opportunity to assess for themselves, on the basis of careful research and observation, the real import of these biological resources:

Grp 31-29

> *The wet meadows in the Centennial Industrial Site are typically created where extreme disturbance has occurred in the past or the presence of placer diggings. These wet meadows are characterized by bentgrass (Agrostis) and various rush (Juncus) species 4.4-6*

In this view the origins of the wet meadows in the Centennial site are summarized with unsubstantiated speculation, and the plant diversity is obscured by the mention of only two genera, while in fact these areas contain a much greater diversity of species, including two species of special concern - White Brodeaia and Showy Milkweed. Why does the DEIR include such incomplete, one-sided descriptions? The DEIR must be more thorough and balanced in these regards.

Grp 31-30

Issue 1.b - Gives an inaccurate hydrological assessment of the Brunswick site, ignoring the connectivity of the South Fork Wolf Creek (SFWC) upstream and downstream of the culvert on the Brunswick property, along with the movement of trout and other species upstream and downstream.

South Fork Wolf Creek (SFWC), a headwaters tributary of Wolf Creek has been studied, mapped, and assessed by Wolf Creek Community alliance since 2004. The Brunswick site that the DEIR undertakes to describe sits within the SFWC watershed, with the stream beginning above the Brunswick site and continuing below it. As the DEIR states:

> *The Brunswick Area is located in an area containing South Fork Wolf Creek, a perennial stream. Several intermittent and ephemeral streams connect directly to South Fork Wolf Creek within the Brunswick Industrial Site. South Fork Wolf Creek also flows to the south of the East Bennett Road ROW within the Brunswick Area. South Fork Wolf Creek contains associated riparian woodland and scrub and large tracts of wet meadow wetlands dominant in the northwestern section of the Brunswick Industrial Site.*

Yet the DEIR ignores the headwaters and continuity of the stream by stating the following:

> *South Fork Wolf Creek begins at a 48-inch culvert fed by surface drainage and road runoff from both the east and west sides of Brunswick Road, which crosses Brunswick Road through the culvert within the Brunswick Industrial Site. The culvert is located south of a large manmade clay-lined pond and flows northwest across the Brunswick Area. The 48-inch diameter culvert is approximately 1,600 feet long (Regional Water Quality Control Board [RWQCB] Order No. 88-185, December 18th, 1990). Additionally, perennial surface drainage from the west side of Brunswick Road drains north to the 48-inch culvert inlet. 4.4-2 & 3*

The South Fork of Wolf Creek (SFWC) is a drainage that has been documented from the earliest days of the city of Grass Valley. Nisenan established a village, Yolosyan, along its banks,[1] and the city of Grass Valley itself was named after the meadow/grassland that still exists and is part of Reach D of the SFWC (as identified in Appendix K.1).[2] USGS maps from the 1870s onward show a perennial stream beginning at least as far as Brunswick Road which forms its southern tributary source, and from the Loma Rica Ridge, which forms its northern tributary source. Wolf Creek Community Alliance, in its monitoring of the SFWC has made observations and collected data at a number of publicly-accessible sites on the stream, including a monitoring site upstream of the "48-inch culvert," on the east side of Brunswick Road (WCCA, site 6.1), and another downstream on a section of the South Fork the DEIR characterizes as Reach C (WCCA, site 6).[3] The South Fork Wolf Creek begins not below the culvert, but above it and, indeed, on the other side of Brunswick Road, upstream of WCCA site 6.1 at Wood Rose Way. At that location, which has been monitored for a number of years, we observe a perennial flow of water.[4] The DEIR itself observes perennial flow both above the

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[1] WCCA, City of Grass Valley kiosk project, Nisenan geography contributions by Shelly Covert, 2014.
[2] Appendix K.1,
[3] DEIR 4.8-24 and following; WCCA, Wolf Creek Watershed Map showing monitoring sites, https://www.arcgis.com/apps/Embed/index.html?webmap=aee3c0af93a245efb1a8c503182d66b5&extent=-121.2014,39.0785,-120.8721,39.2916
[4] WCCA, Wolf Creek Water-Quality Monitoring Data Analysis, 2013, page 70, https://www.wolfcreekalliance.org/documents/MonitoringDataSummaryFinal.pdf; WCCA, Wolf Creek

culvert near Brunswick Road, entering the culvert and exiting it below. As there is continuous, perennial flow from a point near Brunswick Road to the point where water exits from the culvert into what the DEIR calls South Fork Wolf Creek, it is accurate to consider the perennial flow of water one, continuous creek. The DEIR, however, mischaracterizes the origins and extent of the South Fork by stating that "South Fork Wolf Creek begins at a 48-inch culvert" and that it is "fed by surface drainage and road runoff from both the east and west sides of Brunswick Road, which crosses Brunswick Road through the culvert within the Brunswick Industrial Site." In fact, the "drainage" going through "the culvert within the Brunswick Industrial Site" is the South Fork of Wolf Creek. Just as downstream of the proposed project the creek flows into the box culvert at Ophir Street in Grass Valley and disappears underground only to reappear downstream of the Safeway Parking lot in Grass Valley, having joined with the main stem of Wolf Creek to be a continuous part of one hydrologically active and perennial stream and not some disjointed, human-created "drainage", so too we must treat the flow going through the "industrial culvert" on the Brunswick site as part of the South Fork. To do otherwise is to unreasonably disconnect the free-flowing connected aquatic habitat and to mis-characterize potential biological impacts by excluding that portion of the creek from consideration as part of the environmental setting. The DEIR must not exclude a portion of the SFWC from consideration as a biological feature when it is connected to perennial flow both upstream and down. How can this section of creek be disregarded and not analyzed for impacts when aquatic species including trout have been observed both above and below the culvert? At least one map in the DEIR shows SFWC as continuous:



DEIR, Appendix K.1, page 10

The Brunswick site shows a 100 ft building setback and an NID spill easement on an open creek, South Fork Wolf Creek. The map is dated 1987. Apparently this perennial stream was buried in a culvert after 1987, based upon the map's date. Was the burial of SFWC done under an authorized permit? What is the status of the NID spill easement? Have the 100 ft setback and NID spill easement been waived or reconveyed to the land owner? Any existing easements or setbacks which may be encroached by the Project must be waived or modified by the consent of the entitled party.

Watershed Disturbance Inventory and Assessment of Conditions, part 1, 2017; https://www.wolfcreekalliance.org/documents/WolfCreekDisturbanceInventory4.13.18.pdf

In other maps, however, and in text, SFWC is not considered as a continuous stream for its whole length. This is a serious inaccuracy that needs to be rectified in the DEIR.

Further, it must be noted that the DEIR, particularly in Appendix K.1 mischaracterizes the furthest upstream portions of SFWC, which are its headwaters, instead to be NID "spillway channels."[5] Though it is true that NID ditches are situated on the ridges above both tributaries and that there is some seepage, overflow, and occasional release events on the part of NID into those tributaries, neither drainage was created by NID for spillage. The watershed topography clearly shows stream channels and folds in the typography that were created by the natural stream flow in these tributaries over thousands of years. The 'Loma Rica' tributary, shown as a perennial stream in many early USGS maps, indeed could use further study as it may not flow perennially in drought periods or for other reasons. Nonetheless, WCCA has observed free flow on the tributary ABOVE and below the point where it crosses the NID ditch. It is not simply a spillway for NID. The case against the other tributary that parallels Wood Rose Lane on the east side of Brunswick Road being a non-biological "spillway" is also strong. It flows perennially from two sources (parallel to Wood Rose and roughly parallel to Brunswick Road). The natural topography confirms that it has been part of the headwaters of the South Fork for thousands of years. Small ponds created on residential properties have doubtless impacted stream flow and some seepage from an NID ditch has been observed at the top of the Wood Rose drainage, but neither it or the 'Brunswick' stream flow WCCA has monitored at the corner of Brunswick and Wood Rose can be explained solely by excess NID ditch water. In any case, for the DEIR to summarily mischaracterize the headwaters of the SFWC as "spillway", and its continuation through the Brunswick site as culvert separate from any stream stands in the face of evidence to the contrary and is supported only by generalized, summary observation and no clear data. How can the DEIR consider the SFWC to begin below the culvert when there is perennial flow all the way from the other side of Brunswick Road? The DEIR must make a more careful study of the sources of the SFWC, its perennial flow and connectivity above and below the culvert. A full assessment of the impacts to biological resources cannot be made when portions of streams with perennial flow are excluded from consideration.

Issue 1.c - Without sufficient examination or evidence considers the pond on the Brunswick site (PD1) NOT to be an aquatic resource, disregarding impacts to its biological resources

Grp 31-31

The large pond on the Brunswick site should be considered as an aquatic resource. Not to do so is to ignore potential impacts on its biological resources. Yet the DEIR claims:

> *A man-made clay lined pond (PD-1) associated with previous saw milling operations does not have a direct outlet or connection to the South Fork Wolf Creek. PD-1 receives its water mainly from surface runoff and precipitation. PD-1 was used previously as a recycling pond for site runoff containment and log watering during mill operations. PD-1*

[5] DEIR, Appendix K.1, 10

> *is non-jurisdictional pursuant to federal Clean Water Act (CWA) regulations given it receives water from sheet flow within the Brunswick Industrial Site and does not connect directly or indirectly with South Fork Wolf Creek or any other "waters of the U.S."* [5] *4.4-15*

The use of the word "mainly" in the above citation is an admission by the DEIR that at least some of the pond water is received from other sources, likely springs, other underground seepages, and even SFWC itself. Reviewing the Brunswick Industrial Site and E. Bennett Road ROW Aquatic Resources Delineation, Appendix F.7, the background to this questionable delineation is also given, again without qualitative data or sufficient observation. As background, it includes a regulatory overview that states:

> *"Waters of the U.S." include wetlands and lakes, rivers, streams, and their tributaries. Wetlands are defined for regulatory purposes as areas "...inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated solid conditions..."*[6]

The report goes on to state that recent court cases rule out certain "isolated" wetlands, but

> *does not prevent CWA jurisdiction if a "significant nexus" such as a hydrologic connection exists, whether it be man-made (e.g., roadside ditch) or natural tributary to navigable waters, or direct seepage from the wetland to the navigable water, a surface or underground hydraulic connection, an ecological connection (e.g., the same bird, mammal, and fish populations are supported by both the wetland and the navigable water)...*

So why does the DEIR choose to exclude the Brunswick Pond? Because it is an "isolated" pond and only "contains water in direct response to rainfall (e.g.) ephemeral features."[7] As Appendix F.7 claims, the pond

> *receives its water mainly from surface runoff and precipitation. PD-1 is a man-made pond used historically as a recycling pond for site runoff containment and log watering during mill operations.*
>
> *PD-1 is non-jurisdictional per federal CWA regulations given it receives water from sheet flow within the Brunswick Industrial Site and does not connect directly or indirectly with South Fork Wolf Creek or any other "waters of the U.S." and therefore, it does not receive water from or connect to a "waters of the U.S."*
>
> *However, upon regulatory agency review, PD-1 may be determined to be regulated as a "Waters of the State of California."*[8]

[5] DEIR, Appendix F.7, page 2.1
[6] DEIR, Appendix F.7, 2.2
[7] DEIR, Appendix F.7, 4.3

On this basis the main text of the DEIR also excludes the pond for consideration both in terms of being an aquatic resource and in regard to its biological resources.

This is so in spite of the fact that it potentially should be regulated as a "Waters of the State of California." This consideration must also be included in the conclusions of the DEIR.

Beyond this, the lack of solid qualitative evidence in the DEIR and the existence in the DEIR of several suggestions that there ARE connections between the pond and the SFWC and that a "significant nexus" does exist, together indicate that the DEIR's analysis and conclusions are incomplete.

First of all, field observations are vague and do not in any way quantify water, either runoff into the pond or seepage/groundwater flow from the pond. As the Brunswick ARD itself states:

> *field surveys in December 2018, July 2019, and August 2019 followed very little seasonal rain events and therefore, direct observation of hydrology in some areas of the Brunswick Area was not possible.*[9]

Why weren't field studies done during periods during or after seasonal rains? Conclusions about the hydrology of the pond are invalid without "direct observation" and real data.

Second, though observation and data is incomplete, the DEIR nonetheless makes definitive judgements not warranted by the analysis. If pond recharge is "mainly," but not wholly from runoff and if the pond "may" be determined as "waters of the State of California" why hasn't that been considered and included in the conclusions of the DEIR?

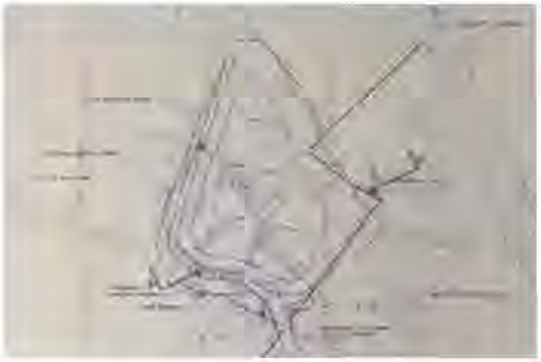
Third, there are actually suggestions in Appendix H.1 and studies appended to it, that there is a "significant nexus" between the pond and "waters of the US" including South Fork Wolf Creek and wetlands immediately downstream.

The Geotechnical Engineering Project for the Brunswick Industrial Site, Appendix H.1, referring to the report from Vector Engineering states that:

> *Groundwater monitoring revealed that groundwater movement appeared to be in a west to southwesterly direction, flowing towards the South Fork of Wolf Creek drainage. Findings included that "any seepage that may occur through the clay liner could potentially flow through the previous coarse mine tailings (and sawdust) located beneath the west (and southwest) side of the pond."*[10]

[9] DEIR, Appendix F.7, 3.5
[10] DEIR, Appendix H.1, page 10

The study goes on to state that "the cross-section from the same study indicates that the groundwater flow observed was over bedrock,"[11] and that "the existing culvert which diverts the South Fork of Wolf Creek crosses underneath the pond...[12] Another suggestion of water connectivity is its map of the pond showing an "emergency overflow spillway" into SFWC.[13]



Finally, it concludes, much as the Brunswick ARC does

> *that seasonal variations in the groundwater levels may occur across the site.*[14]

The other report appended to H.1 by Holdrege & Kull also gives suggestions of a potentially significant nexus:

> *Vegetation around the dam consisted of alders, willows, and riparian grasses and shrubs...We observed riparian plants and trees in the meadow downstream of the earthen dam. We observed erosion in a relatively dry stream bed near the downstream side of the southern section of the dam. More significant erosion was evident downstream of the corrugated metal pipe (CMP) culvert under the dam.*

As shown in the accompanying map.[15]

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[11] DEIR, Appendix H.1, page 106
[12] DEIR, Appendix H.1, page 94
[13] A detail of the map is attached. The full map is available at DEIR, Appendix H.1, page 112.
[14] DEIR, Appendix H.1, page 96
[15] DEIR, Appendix H.1, pages 139 & 146.



Fourth, the topography and geomorphological history of the Brunswick site itself suggests a significant hydrological connection with South Fork Wolf Creek. Given that the pond is located directly in the bottom of the drainage topography of the valley created by South Fork Wolf Creek, that the pond is immediately next to the perennial flow of South Fork Wolf Creek, and that it is immediately upstream of identified wetlands, the DEIR should carefully determine whether the pond is connected to other aquatic features. Why hasn't the DEIR done this? In this regard it is wholly negligent, both in terms of insufficient data collected and unwarranted conclusions made. The omission is significant. As the report from Holdrege & Kull indicates, the pond is a significant biological resource, with abundant riparian species surrounding it, including alder, willow, and riparian grasses. Aerial and field photos show this clearly.[16]

Grp 31-32

The pond itself is known to be a significant habitat for waterfowl and migratory birds, including breeding Wood ducks[17] It may also be a significant habitat for BMI, amphibians, including Western Pond Turtle, a species of special concern, and fish. This needs to be studied instead of ignored if the DEIR is to complete an adequate analysis of impacts to biological resources. Why has the field work to ascertain biological resources of the pond not been completed? In summary, the environmental setting regarding the pond is inaccurate and must be rewritten. Because of the evidence cited above, it is clear that the pond IS jurisdictional, and must be afforded all the environmental protections afforded to waters of the US. It is a vibrant, vital, interconnected part of the headwaters of South Fork Wolf Creek.

[16] DEIR, Appendix F.7,
[17] Personal communication, Steve & Diane Rose, Sierra Foothills Audubon, 2021

Issue 1.d - Through omission, lack of data, and lack of sufficient analysis, fails to adequately address potential impacts to the South Fork of Wolf Creek (SFWC) and the main stem of Wolf Creek due to mine water discharge

Notably, chapter 4.4 of the DEIR does not analyze or mention biological resources downstream of the Brunswick site. This is negligent, given the potential impacts of initial and maintenance mine dewatering which would cause significant mine water discharge into South Fork Wolf Creek. The analysis and conclusions for this omission are provided in chapter 4.8 Hydrology and Water Quality, one of its appendices, K.1 Geomorphic Assessment of South Fork Wolf Creek. A final appendix to the Biological Resources chapter of the DEIR, F.10 SF Wolf Creek Technical Memo. Appendix F.10, attempts to rectify the absence of biological resource assessment due to downstream mine water discharges. It fails to be comprehensive and complete, however. Also, its conclusions are based on the faulty assumptions and conclusions of the two hydrological reports - 4.8 and K.1. Following is a summary of the issues highlighting the inadequacy of the DEIR in this regard.

I. The lack of hydrological or biological data in whole reaches of the SFWC

Grp 31-33

The DEIR identifies 6 reaches (A through F) of the South Fork Wolf Creek, the first two of which are within the Brunswick site.

Figure 4.8-9
South Fork Wolf Creek Reaches in Project Vicinity



DEIR, 4.8, page 4.8-25

However, Reach C, where WCCA has established a monitoring location since 2004 is only summarily analyzed for its hydrology, without a single collection of qualitative data provided. There is no stream flow data, no erosion testing, no stream velocity profiles provided. This is a crucial omission as data from WCCA and Sierra Streams Institute shows that the center of this reach, within the State Park section shown with dotted lines on the map, consistently exhibits the highest diversity and richness of benthic macroinvertebrates (BMI) in the whole Wolf Creek

Watershed.[18] Why wasn't this stream reach surveyed with a collection of qualitative data? How can we accurately assess impacts to aquatic ecosystems downstream of the proposed project if we are lacking key data about this reach of the stream?

Grp 31-34

Similarly, Reach D, also part of the State Park, and identified as a key biological and ecological resource for the park and the county, is completely neglected in the Technical Memo (Appendix F.10) which attempts to summarize biological resources for the South Fork Wolf Creek as a whole. There are no photos, no observations of stream features, vegetation communities or individual species. Yet, the State Park has expended significant resources into documenting the biological richness of this meadow/grassland reach of SFWC, including a 5-year study documenting wetland resources and ongoing restoration. Included are observations of the rare Sidalcea gigantea(CNPS Inventory of Rare and Endangered Plants, 4.3) in the riparian area of SFWC.[19] Why isn't this species included in the survey of biological resources? The richness and diversity of species present along Reach D is also made clear through the work of Gold Country Avian Studies, which has been conducting weekly bird banding at the meadow and along the creek for more than 4 years.[20] So we must ask again, why wasn't this stream reach surveyed for biological resources? How can biological resource assessment be considered adequate and complete without qualitative data from this stream reach? The DEIR must be considered inadequate until these issues are fully addressed.

II. The lack of sufficient observation over time to create clear stream hydrographs

Grp 31-35

The qualitative stream data that is included is limited and questionable in terms of resolving key questions about increased streamflow impacting biological resources. EMKO measured flow only on two occasions- in April and August of 2019 - along points of the Loma Rica headwaters tributary of South Fork Wolf Creek (simply labeled variously as a 'natural creek' or an 'NID spillway'). Data from NID meant to corroborate conclusions about flow in this tributary is gathered only from 2018.[21] How can an adequate characterization of the hydrology of this important headwaters be ascertained from two data points during one water year, along with three data points during a period of only two months from a different water year?

Grp 31-36

Similarly, the data collected by Balance Hydrologics on the main stem of South Fork Wolf Creek is also limited and insufficient. Only two locations are considered, one just downstream of the Loma Rica Ridge headwaters tributary ("the natural creek"), which is proposed to be the mine water discharge site, the other downstream at Ophir Street, just as the South Fork enters the box culvert.[22] In between these two sites are significant reaches of the South Fork that would

[18] WCCA, Wolf Creek Watershed Disturbance Inventory and Assessment Of Conditions, part II, 2021, page 27, https://www.wolfcreekalliance.org/documents/Wolf_Creek_Watershed_Disturbance_Inventory.pdf
[19] Dan Lubin, CA State Parks, Fifth Annual Magenta Drain Mitigation and Monitoring Report, EMSHP, 2019, page 5
[20] Gold Country Avian Studies, www.facebook.com/goldcountrybirds/
[21] DEIR, 4.8-4
[22] DEIR, 4.8-4

need to be assessed, given the diverse character of the stream along these reaches and the important biological resources present in different abundance along the creek.[23]

Equally lacking is sufficient study over time, Balance collected data only in September of 2019 and in January of 2020. The more continuous measurements from 2020 to 2021, again, are only from one location, and in itself cannot be used to create an accurate hydrograph for the whole creek.[24]

III. Inadequate study and characterization of the hydrological impacts of mine water discharge, including stream flow, sedimentation, stream velocity profiles, loss of seasonality, and loss of streambed or bank habitat

Finally, the data collected fails to adequately assess potential for sediment load and fails to create stream velocity profiles. Potential loss of seasonality of flow is not considered, nor is stream bank habitat loss due to increased stream depth. Analysis of sediment loading in the stream is crucial. The observations presented by Balance, again, are based only on a single test in a single portion of the South Fork. That the DEIR uses this single data point as the basis of significant claims about the lack of potential for sedimentation caused by mine water discharge is a problem. The conclusions presented in the DEIR simply cannot be justified by this single data point. Apart from stream flow, other analysis should have been undertaken in order to assess impacts on the South Fork. It is a living stream, with a vibrant aquatic ecosystem along much of its length. Stream velocity profiles, crucial for measuring impacts on benthic macroinvertebrates and fish, should have been completed. Calculations showing potential changes in the seasonal hydrograph of the stream should have been produced. Measurements and conclusions regarding increased stream depth along with reduced stream bank or cobble habitat at various points along the stream should have been made. These studies must be included in the DEIR.

Grp 31-37

Stream flow in the Sierra Nevada foothills is increasingly variable, from month to month and from year to year. Small-volume streams such as the South Fork Wolf Creek undergo significant change that varies over time, according to the occurrence of drought or above-average precipitation, and varies greatly in different reaches. Aquatic and terrestrial ecosystems are greatly dependent on this mosaic of changes, over time and space. The data presented in the DEIR is not sufficient to adequately characterize this variability. Without that data, we cannot adequately measure potential impacts to the stream.[25]

IV. Inadequate study of biological resources

Grp 31-38

[23] DEIR, Appendix K.1, page 21 and following, Appendix F.10
[24] DEIR, Appendix K.1, page 26 and following
[25] Dave Herbst, Life of the Bottom-Feeders in the Shallow and Deeps of Streams, Sierra Stream Institute, Science Presentation, 3/1/2022, https://sierrastreamsinstitute.org/2022/02/21/virtual-science-speaker-series-talk/

If impacts of this project are to be adequately assessed, a careful and complete survey of biological resources of SFWC, the body of water potentially impacted by mine water discharge, needs to be included. This is simply not the case. The technical memo is clearly not a full assessment of biological resources for the creek. It completely excludes any consideration of a significant stream reach (D), currently projected as part of the state park. It is primarily a one-time survey for Yellow-legged Frog and only summarily considers other biological resources within that context. For example, it notes "fish"..."most probably small rainbow trout" in the stream without further investigation. In this instance and many others, it does not include qualitative observations sufficient to fully analyze the existence of biological resources and their habitats.[26] This lack of precision and paucity of observation occurs in other biological surveys included as part of the DEIR as well, for example, where in the Brunswick BRA it is stated that "surveys did not record any observations of deer."[27] They were not observed because no adequate study was made to verify their presence, for example through placement and monitoring of a trail camera.[28] In general, biological assessments in the DEIR attempt the minimum and doing so fail to assess the full extent of biological resources potentially impacted. Without such a detailed survey of biological resources, how can this DEIR be considered complete?

V. Omission of any qualitative observations and data regarding benthic macro-invertebrates (BMI)

Grp 31-39

A crux of the matter is that the DEIR as a whole, in the chapter on Biological Resources (4.4) or in the various appendices do not offer any data regarding benthic macroinvertebrates (BMI). BMI indexing is a standard protocol for assessing stream ecology health and It is impossible to judge impacts to stream health without adequate baseline data and repeated collection of data. BMI populations exist as a crucial foundation for the whole ecological food pyramid that includes fish, crustaceans, amphibians, fish, and birds.[29]As the stream ecologist David Herbst recently observed, through mine water discharge BMI can be subjected to habitat alteration, increased sediment load, toxins in the water, and chronic stress due to continuous increases in stream flow.[30] Without a baseline measurement of BMI communities in various reaches of the South Fork Wolf Creek, over time and to the genus or species level, we cannot consider any future impacts to those aquatic communities. Why does the DEIR not include BMI observations and measurements? The DEIR cannot be considered complete without data on BMI.

[26] DEIR, Appendix F.10-6
[27] DEIR, Appendix F.5-13
[28] See the trail camera recordings of Mike Shea that document not only deer, but skunk, fox, bobcat, raccoon, black bear, and mountain lion, all species that are not discussed in the DEIR when it considers biological resources. Mike Shea, Native Wildlife on the Brunswick Mine Site, www.minewatchnc.org/post/mike-shea-too-good-to-be-true
[29] J B Wallace, J R Webster, The role of macroinvertebrates in stream ecosystem function, 1996, https://pubmed.ncbi.nlm.nih.gov/15012327/
[30] Dave Herbst, Life of the Bottom-Feeders in the Shallow and Deeps of Streams, Sierra Stream Institute, Science Presentation, 3/1/2022, https://sierrastreamsinstitute.org/2022/02/21/virtual-science-speaker-series-talk/

VI. Inadequate consideration of chronic and cumulative impacts to BMI, trout and other aquatic species, including special concern amphibians, rather than simple tests of acute impacts.

Related to the lack of BMI data is a basic misunderstanding of stream health regarding aquatic organisms. The DEIR, in its appendix K.2 Groundwater Hydrology and Water Quality Analysis Report for the Idaho-Maryland Mine, when considering water quality for the project, tests water quality from the New Brunswick Mine Shaft by using an acute toxicity test for rainbow trout. On this basis the DEIR gives no further consideration to the impacts of mine water discharge into SFWC.[31] Yet, there is not enough data to confirm that the limited test using water from one source location in the mine is representative of the chemical composition of water that would be discharged from the mine. Nor is such an acute toxicity test useful in assessing the overall impacts to trout and other aquatic organisms, as higher levels of heavy metals or high levels of Specific Conductance (EC), which tested above healthy levels for benthic macroinvertebrates, can have significant chronic effects.[32] A much more logical place to collect representative contaminated water from the mine tunnels would be the current outfall locations, currently flowing unimpeded into Wolf Creek near Centennial Drive.

Grp 31-40

Overall, the data provided to construct an adequate and reliable baseline for considering potential impacts to the South Fork Wolf Creek is wholly insufficient. Further data is needed, both to better assess the range in chemical composition of mine water discharge, the remaining impacts to sensitive aquatic organisms even after proposed levels of water treatment, and careful testing for the impacts of potential chronic stress to organisms. Mine dewatering impacts to biological resources downstream is well documented.[33] Why does the DEIR include so little data in this crucial area of potential impact? How can the DEIR purport to identify and mitigate impacts to this project if it does not fully address the complexity of mine discharge impacts downstream?

Issue 1.e - Includes mistaken and incomplete identifications of species

Grp 31-41

In addition to the issues mentioned above, the description of vegetation communities includes mistakes in identification, typographical errors, and incomplete identifications. Some of these mistakes are glaring or could easily be fixed and suggest a lack of precision and care in the description. For example, at 4.4-9 the DEIR suggests that the

> Montane riparian…are characterized by black cottonwood (Populus tremuloides)…

[31] DEIR, Appendix K.2-41
[32] DEIR Appendix K.2, 40-46; Dave Herbst, Sierra Stram Institute, personal communication, February, 2022
[33] Clements, W.H., D.B. Herbst, M.I. Hornberger, C.A. Mebane, and T.M. Short. 2021. Long-term monitoring reveals convergent patterns of recovery from mining contamination across 4 western US watersheds. Freshwater Science 40:407-426

This is a confusion in identification in describing the site apparent even without field-checking the property. Referring to the Jepson Manual,[34] the authoritative source for California plant identification, one finds that the common name, 'black cottonwood,' has the scientific name *Populus trichocarpa* NOT *Populus tremuloides* and that it natively grows in this region only at higher elevations, for example at over 5,500 feet at Cisco Grove along Hwy 80.[35] Or if we consider that perhaps the observation refers to the scientific name, *Populus tremuloides*, we find that this refers to Quaking Aspen, another higher elevation deciduous tree for which no herbarium records exist in the area below 1524m (5,000 feet).[36] In short the identification appears to be confused and dramatically inaccurate.

Other problems relate to incomplete identifications, such as at 4.4-10 where the text refers to

> "California Black Oak, Pine, and Douglas Fir"

Without identifying the specific species of pine.

Finally, some of the generalizations of vegetation communities characterize them as wholly consisting of invasive or non-native plants when a careful review of the botanical survey for the site indicates an actual majority of species as native.[37] This generalization misrepresents the character of the vegetation community and does not allow the reader to accurately comprehend the degree of biological resources that might be impacted.

What is the actual species of tree being referred to at 4.4-9 if it is not 'black cottonwood?' What species of 'pine' is meant at 4.4-10? Why is the abundance of native plants not mentioned at 4.4-...? These questions suggest that a comprehensive review of species identifications and vegetation community descriptions must be undertaken. Otherwise, how can we have confidence that the DEIR in this regard is complete and accurate?

Issue 1.f - Does not include or downplays the potential presence of special status species potentially impacted by the project

Grp 31-42

Finally, in regard to environmental setting, the DEIR should include analysis of the following species of concern that are not included in its text:

The California Spotted Owl (Strix occidentalis occidentalis) is listed as a California Species of Special Concern, a sensitive species by the USFS, and is under review as an endangered species by the US Fish and Wildlife Service.[38] A pair has been observed within Empire Mine

[34] Jepson eFlora, Populus trichocarpa, https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=39463
[35] Trees and Shrubs of Nevada and Placer Counties, Redbud Chapter, California Native Plant Society, 2014, page 392.
[36] Jepson eFlora, Populus tremuloides, https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=39509
[37] Appendix F.6, Centennial Botanical Report, Appendix A
[38] California Fish and Wildlife Service, https://fws.gov/sacramento/es_species/Accounts/Birds/ca_spotted_owl/

State Historical Park, adjacent to the Brunswick site, and in other locations within a 5 mile radius of the proposed sites.[39] Suitable mature forest habitat is present in parts of the Brunswick property, in forest close to proposed Brunswick site mine operations and downstream within the South Fork Wolf Creek watershed. As such the DEIR should complete a protocol-level survey of suitable habitat and include that in the DEIR. Why has this species been omitted from consideration when observations indicate a reasonable probability that the species may be present at or adjacent to the Brunswick site?

Grp 31-43

The Yellow-breasted Chat (Icteria virens) is also listed as a California Species of Special Concern.[40] It has been observed during breeding season along reach D (as identified in the DEIR) of the South Fork Wolf Creek. It also should be assessed for likely habitat on the proposed sites and along Reach D of South Fork Wolf Creek, an area being assessed for biological resources as part of the DEIR.

Grp 31-44

Willow Flycatcher (Empidonax traillii), a species the state considers critically iimperiled (S1/S2) has also been observed along Reach D.[41] Probable habitat should be identified and analysis of potential impacts to that habitat due to mine dewatering, particularly in regard to riparian willow stands, and other impacts due to proximity to mine operations.

Grp 31-45

The US Fish and Wildlife Service has determined that listing of the Monarch Butterfly (Danaus plexippus plexippus) as "endangered or threatened under the Endangered Species Act is warranted" and is now under yearly review as a candidate for inclusion under the Endangered Species Act.[42] This is particularly the case with the Western Monarch Population, which relies on migration and breeding habitat throughout the Sierra Nevada Foothills. In support of this, the California Department of Fish & Wildlife has included the Monarch Butterfly in its Terrestrial and Vernal Pool Invertebrates of Conservation Priority list and identified as a Species of Greatest Conservation Need in California's State Wildlife Action Plan. A Western Monarch Conservation Plan, adopted in 2019, was also created to protect and assist in the recovery of western monarch populations.[43] Essential to recovery efforts, according to the Conservation Plan,[44] is preservation of breeding habitat, primarily species of milkweed (Asclepias). The Centennial site as described in this DEIR has a population of showy milkweed (Asclepias speciosa) existing in riparian and wetland (FAC) habitats.[45] Therefore, special consideration of the existence and

[39] Empire Mine Historic State Park, Site Characterization and Remediation Draft Program EIR, Biological Resources, 2009, 4.3-28; https://www.parks.ca.gov/pages/980/files/4.3%20biological%20resources%20v56.pdf
[40] California Department of Fish and Wildlife, https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=10428&inline
[41] As recorded in the January 2022 CNDDB Special Animals list, nrn.dfg.ca.gov
[42] U.S. Fish & Wildlife Service, https://www.fws.gov/savethemonarch/SSA.html
[43] California Department of Fish and Wildlife, https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly
[44] Western Monarch Conservation Plan, 2019, https://wafwa.org/wpdm-package/western-monarch-butterfly-conservation-plan-2019-2069/?wpdmdl=13048&refresh=621bdc39668f91645993017&ind=1602171186650&filename=WAFWA_Monarch_Conservation_Plan.pdf
[45] DEIR, Appendix F.6, Appendix A, Vascular Plants Occurring in the Centennial Industrial Site, page 1

preservation of these milkweed populations needs to be included in the DEIR. A protocol-level survey of individuals needs to be included as well as seasonally-timed surveys for monarch butterflies, in adult, larval, or pupae stages. How can we be assured that impacts of this proposed project will not include detrimental actions reducing monarch butterfly populations if a complete survey of milkweed and monarch butterfly populations on site is not included in the DEIR?

The DEIR also downplays the potential presence and need to mitigate for the following species of concern:

Stebbins morning glory (CNPS List 1B.1) — surveys were completed outside its blooming period, nor have surveys been done after the recent fire that burned portions of the Centennial site in 2021. Habitat at the Centennial site itself indicates a reasonably high probability of presence.[46]

Chaparral sedge (CNPS List 1B.2) — surveys for this species were also done outside of its blooming period and the habitat again suggests a high probability of presence.[47]

Grp 31-46

Finger rush (Juncus digitatus, CNPS List 1B.1) — though the species is considered to have a low probability of occurrence by the DEIR, the species is known less than one mile from the sites, and surveys for the species were not done during its blooming season.[48]

Sierra brodiaea (Brodiaea sierra, CNPS List 4.3) — As the DEIR states, "thousands of individuals covering almost a quarter of the Centennial Industrial Site"[49] were mapped in surveys. Although the DEIR obscures the potential impact to this species, by referring impacts to DTSC's proposed and not-yet-completed RAP, it is likely that a significant population of this species would be extirpated or seriously impacted.

Grp 31-47

Foothill Yellow-legged Frog (Rana Boylii) and Red-legged Frog (Rana aurora draytonii) — visual surveys were not done during prime breeding conditions, given the absence of recent rain. Nor is there an indication that surveys were done at night, when observation of these frogs is optimal.[50]

Grp 31-48

Western Pond Turtle (Emys marmorata) — though probability of presence is considered high by the DEIR, there is no adequate survey of their presence. Further, the mitigation suggested does not consider or adequately protect for loss of steam bank habitat due to higher stream levels, nor does it adequately protect turtle hatchlings who need connectivity with water.[51]

[46] DEIR, 4.4-23
[47] Shane Hanofee, Redbud Chapter California Native Plant Society, president, personal communication, 2022
[48] DEIR 4.4-27
[49] DEIR 4.4-31
[50] Marion Blair, Biologist, B.S., M.S. Santa Clara Valley Water District, retired - personal communication, 2022
[51] Marion Blair, 2022

Grp 31-49

Hoary bat (Lasiurus cinereus) and Pallid bat (Antrozous pallidus) — the DEIR identifies "riparian and woodlands" for both species, and admit that the "disturbance" of the project could cause impacts.[52] Yet, the DEIR offers no surveys of bats, and does not consider the impacts of loss of woodland or riparian habitat in either the Brunswick or Centennial sites.

Grp 31-50

Raptors and Migrating birds — Numerous observations of Cooper's Hawk (Accipiter cooperii) are recorded for areas adjacent to the Brunswick site and the Bennett Street grassland potentially impacted by mine water discharge along Reach D.[53] Fledglings have also been observed locally during breeding season. Olive-sided Flycatcher (Contopos cooperi), another species of special concern, has also been observed along Reach D, in the Bennett Street grassland and riparian area.[54] Impacts to these species are not adequately considered in the DEIR.

Grp 31-51

Species of special concern, valuable in themselves, are also indicators of overall ecosystem health and resilience. A comprehensive, complete consideration of the presence or probable presence of special concern species, rather than one that is minimal and incomplete, is needed in order for this survey of biological resources to be complete. The DEIR itself admits that Madrone's peer review of the Biological Resources chapter of the DEIR "identified concerns with respect to the timing of the special-status plant surveys conducted for the Centennial and Brunswick botanical reports," and actually suggests that a remedy would be to conduct additional surveys AFTER the project is approved and prior to specific disturbance activities."[55] This defeats the whole purpose of an EIR, which is to clearly identify potential impacts as part of determining WHETHER the project should be approved. To do otherwise is to be negligent and to unknowingly expose biological resources to irreparable harm. Overall, this DIER fails to adequately consider both individual species of concern as well as the interconnected web of biological resources as a whole. Why hasn't the DEIR included or considered more inclusively the species of special concern listed above? How can this DEIR be considered adequate and complete if it does not adequately survey and consider these species of special concern?

4.4.4 Impacts and Mitigation Measures

Grp 31-52

Just as the delineation of environmental setting and the survey of biological resources are deficient in many regards, so also the measurement of impacts to biological resources and the mitigations proposed to reduce those impacts are inadequate in many regards. This is due to inaccurate or incomplete assessment of the environmental setting as detailed above, but also due to questionable assumptions used as the basis for impact analysis and proposed mitigation that do not sufficiently project species.

[52] DEIR, 4.4-39
[53] eBird, Cooper's Hawk, reported sightings, https://ebird.org/map/coohaw?env.minX=-135.084235786934&env.minY=4.04247779787781&env.maxX=-59.6257519208942&env.maxY=59.8487412198116
[54] Allison Nelson, Gold Country Avian Society, GCAS Bennett Street Grasslands bird list - 2020
[55] DEIR, 4.4-56

Issue 2.a - Present an inadequate Pine Hill Flannelbush Management Plan. (4.4-1)

The DEIR is required to consider the population of the decumbant Fremontodendron on the Centennial site as an endangered species until such time as further genetic analysis comparing different decumbant Fremontodendron populations is completed. The DEIR, therefore, given that the proposed project would involve 'taking' or impacting at least 14 Fremontodendron, presents a required management plan. This plan, however, ignores some of the basic considerations pertaining to the species. At III-20, the federal Recovery Plan for Gabbro Plants of the Central Sierra Nevada, on which the management plan is based, states that:

> Fremontodendron californicum ssp. decumbens is a shrub that persists through a fire cycle and requires fire for seed germination... Fire is needed to maintain habitat for this species.

And further that:

> *Preservation of the pollinating fauna (native solitary bees) and dispersal fauna (ants) is also important to the survival and recovery of F. californicum ssp. Decumbens.*[35]

Grp 31-53

Yet, the management plan does not in any way consider the requirement of "fire for seed germination." As the federal recovery plan clearly states, "Fire is needed to maintain habitat for this species." Further, the management plan does not consider pollinators or dispersal species. How can this management plan be considered sufficient without aspects of the plan including the regular introduction and management of fire and attention to pollinator and dispersal species in areas occupied by the decubant Fremontodendron?

Equally troubling is the inattention to a sufficient "buffer" in order to protect the plants and give sufficient space for fire management. As the federal plan states, there is a requirement for

> *"Sufficient unoccupied habitat for fire management and a 150 meter (500-foot) buffer"*[51]

Finally, plans to move and transplant Fremontodendron are unjustified without further study, which the DEIR does not present. The federal plan asks for

> *"Research on seed germination and propagation techniques"*

And sets the criteria for success not at 80% as the DEIR management plan suggests, but at 100% or more:

> *"The establishment of occurrences must continue to be greater than the extirpation of occurrences"*[35]

[35] Recovery Plan for Gabbro Plants of the Central Sierra Nevada, 2002, III-20
[51] Recovery Plan for Gabbro Plants of the Central Sierra Nevada, 2002, III-31
[35] Recovery Plan for Gabbro Plants of the Central Sierra Nevada, 2002, III-31

Transplanting mature Fremondendron is known to be difficult with no certainty of success. Without detailed study of its efficacy how can transplanting be included in this management plan? In sum, the Pine Hill Flannelbush management plan presented in the DEIR cannot be considered adequate and sufficient until it includes fire management, sufficient buffers, attention to pollinator and dispersal species, research showing the efficacy of transplanting individuals, and adherence to a success rate 100% or higher. Why has this management plan been presented without these crucial considerations?

Issue 2.b - Ignore and do not consider mitigation plans for species of special concern — Monarch Butterfly & Showy Milkweed (known to be present at the Centennial site), California Spotted Owl (reported as present in Empire Mine State Historical Park, which is adjacent to the Brunswick site), Yellow-breasted Chat (known to be present during breeding season in the meadow/grassland reach of the SFWC downstream of the Brunswick site) and Willow Flycatcher. (4.4-1) (4.4-2)

Grp 31-54

As discussed above, based on their presence or highly likelihood of presence on one of the two project sites or nearby, the DEIR should include specific, measurable, and actionable mitigation plans to protect the three species of special concern listed above. Mitigation plans for Monarch Butterfly and Showy Milkweed should follow guidelines detailed in the state's Western Monarch Conservation Plan.[59] Mitigation plans for California Spotted Owl and Yellow-breasted Chat should also be prepared and include guidelines based on standard CDFW protocols. As Yellow-breasted Chat (during breeding season) and the critically imperiled Willow Flycatcher have both been observed during breeding season in Reach D of the South Fork Wolf Creek downstream of the proposed mine water discharge site, mechanisms should be in place requiring the stoppage of mine dewatering if surveys by qualified biologists deem that dewatering is impacting Yellow-breasted Chat habitat. Mitigation plans should also include the latest biological and regulatory information, for example as laid out in the USFS's *Guidance on Limited Operating Periods for the California Spotted Owl*.[60] How can this DEIR be considered adequate and complete if it does not include appropriate mitigation plans for sensitive species known to be present in areas potentially impacted by the proposal?

Issue 2.c - Do not consider potential impacts to biological resources of the Brunswick site pond (PD1). (4.4-2) (4.4-3) (4.4-4)

Grp 31-55

The pond at the Brunswick site, identified in maps and text as PD-1,[61] is an important habitat for riparian plants, aquatic species, waterfowl, and migrating birds. Impacts to these biological resources need to be assessed in the context of rebuilding any of the physical features of the pond and subsequently using the pond for water treatment. This is not addressed in the DEIR. Given the existence of biological resources associated with the pond, how can impacts to these resources not be considered?

[59] California Department of Fish and Wildlife, https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly
[60] Guidance on Limited Operating Periods for the California Spotted Owl, 2006, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3812313.pdf
[61] DEIR, 4.4-15

Issue 2.d - Do not consider adequate mitigation for potentially impacted aquatic species, including BMI and trout. Nor does it include analysis and mitigation for the movement of trout and other aquatic species both upstream and downstream of the industrialized portion of the Brunswick site. (4.2-2) (4.4-4)

Grp 31-56

As previously pointed out in our comments on the environmental setting of the Brunswick site, the South Fork Wolf Creek has continuity as a perennial stream from a point above Brunswick Road (WCCA monitoring site 6.1) all the way to its confluence with the main stem of Wolf Creek in Grass Valley. As such, the continuity of the stream as an ecosystem needs to be addressed for potential impacts due to the proposed mine. Specifically, replacement of the 48" culvert that connects the creek's upper headwaters with its downstream reaches needs to be addressed.[52] Impacts to aquatic organisms, including BMI and trout need to be considered. As the DEIR itself states, Appendix G of the CEQA guidelines indicate that a significant impact would occur if the project would,

> *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites*[53]

The ability of these organisms to migrate upstream or downstream needs to be analyzed, with any potential impacts clearly delineated along with any mitigations necessary to protect these biological resources. How can we be assured that impacts to aquatic species, such as trout or BMI, will not be impacted upstream or downstream of the 48" culvert scheduled to be replaced without assessing impacts of that activity? What mitigations should be in place to protect those biological resources? This should include consideration of an alternative mitigation: remove the entire length of the culvert, and restore this stretch of the creek to a more natural setting.

Issue 2.e - Consider that habitat loss is an acceptable option if the species has not yet been observed, even if the likelihood of the species being present is high, including the destruction of nesting habitat for birds after the nesting bird has departed. (4.4-2)

Grp 31-57

Throughout the discussion of mitigations necessary to reduce the impacts on species of special concern the assumption is that only if the species in question is observed to be present immediately prior to or during construction or other disruptive activities is there a need for mitigation procedures. In most cases, the solution presented is to "to move individuals out of the disturbance areas to avoid impacting this species"[54] and then proceed with the activity. How does this protect the habitat of the threatened species? In the instance quoted, the DEIR is referring to Foothill Yellow-legged Frog, but the mitigation is repeatedly suggested, for Western Pond Turtle, Coast Horned Lizard, special status bats, including Townsend's big eared bats, raptors,

[52] As summarized for example at DEIR, 4.8-73
[53] DEIR 4.4-52
[54] DEIR 4.4-76

and migratory birds.[65] Removing individuals from their habitat does not protect the species if the habitat they are removed from is then distrubed or destroyed. How does this mitigation protect the species if its habitat is eliminated or damaged? The mitigation must include consideration of avoiding habitat destruction or assuring that suitable additional habitat is available?

Issue 2.f - Unreasonably suggest that a one-to-one replacement of wetland or monetary compensation is a preferred option for mitigating loss of wetland (4.4-3)

Grp 31-58

In both the Brunswick and Centennial sites considered for this project wetlands and riparian areas are identified as needing to be destroyed. For the Centennial site, the identified acreage unreasonably excludes extensive wetland currently present at the site. As the RAP developed by DTSC is currently not finalized, AND as impacts to that site should legally be included in a consideration of the impacts of this project, the acreage identified is wholly inaccurate.[66] Even if this was correct, we question the approach of the DEIR in mitigating impacts to wetlands. Federal law requires that preservation of wetland be considered as the preferential option when there is potential impact to these habitats. This is also put forth clearly in the Nevada County General Plan. Yet the DEIR does not consider in any way this option for the wetland involved and does not discuss possible preservation of the wetland areas it targets for elimination. Instead it states that it is a simple matter of "no net-loss" and that mitigation COULD include onsite and/or offsite wetland creation and/or restoration, payment of an in-lieu fee, and/or purchase of mitigation credits"[67] This mitigation is vague, unspecified, and out of keeping with the intentions of federal law and county plans. Wetlands in the headwaters area of Wolf Creek, in which both of these projects are proposed to take place, have greatly declined due to previous mine activity and subsequent urban and residential development. Each portion of wetlands is irreplaceable and connected organically with the hydrology of the watershed. Paying money in compensation for destroying wetlands is not an acceptable option for this project. Restoring wetlands in some generic way outside the sites and outside the watershed is not an acceptable option for this project. Project design options that avoid wetland destruction must be presented and evaluated. Why has the DEIR not looked at these options? Why has it not detailed any potential creation or restoration of wetland on-site? Applying for a permit and paying money is not an adequate mitigation.

Issue 2.g - Allow substantial impacts to riparian or wetland habitats, or disturbance within 100 foot setbacks from the South Fork Wolf Creek. (4.4-3)

Grp 31-59

Finally, the DEIR in its discussion of mitigations necessary to protect wetland, watercourse, and riparian areas is negligent in a number of respects.

First, the DEIR omits and avoids full consideration of wetland and riparian habitats at the Centennial site, making it impossible to judge to what extent those habitats would be impacted and how successful mitigations to those impacts would be.

[65] DEIR 4.4-76 to 4.4-80
[66] DEIR 4.4-80-81
[67] DEIR 4.4, Mitigation 4.4-3(c), 4.4-90

Second, the mitigations proposed for wetland mitigation unreasonably leave the reader with a bare list of mitigation options, ranging from:

> onsite and/or offsite wetland creation and/or restoration, purchase or placement of conservation easements, payment of an in-lieu fee, and/or purchase of mitigation credits. DEIR 4.4-90

Yet, the Nevada County Land Use and Development Code along with other federal and state agencies assert that

Grp 31-60

> "avoidance is the preferred standard unless the Planning Agency determines that implementation of this standard effectively removes the potential for the reasonable development of the parcel."[68]

The DEIR does not specifically consider and detail alternatives that would involve avoidance. Nor does it include any analysis of the potential for onsite or offsite wetland creation or restoration, which is preferable to fees or mitigation credits. In this sense, the DEIR is not pursuing any due diligence in considering options that would protect wetland or riparian areas. Why does the DEIR omit any consideration of specific alternatives? Could the site plans allow for avoidance of proposed disturbances to these habitats? Are there suitable on-site locations for creation or restoration? None of this is included in the DEIR.

Third, impacts due to disturbance to the section of South Fork Wolf Creek (with its unassessed BMI and trout populations) that flows through the existing culvert and the pond (PD-1) that currently contains significant (also unassessed) biological resources are not considered.[69]Why is that not the case? Surely stream connectivity suggests significant impacts to the SFWC if no mitigation is considered. In the same way, biological resources of the pond could be impaired or extirpated if no consideration is given to their existence.

Grp 31-61

Fourth, violations to the 100 foot setback from streams is not adequately addressed. Policy 11.7 of the Nevada County General Plan states:

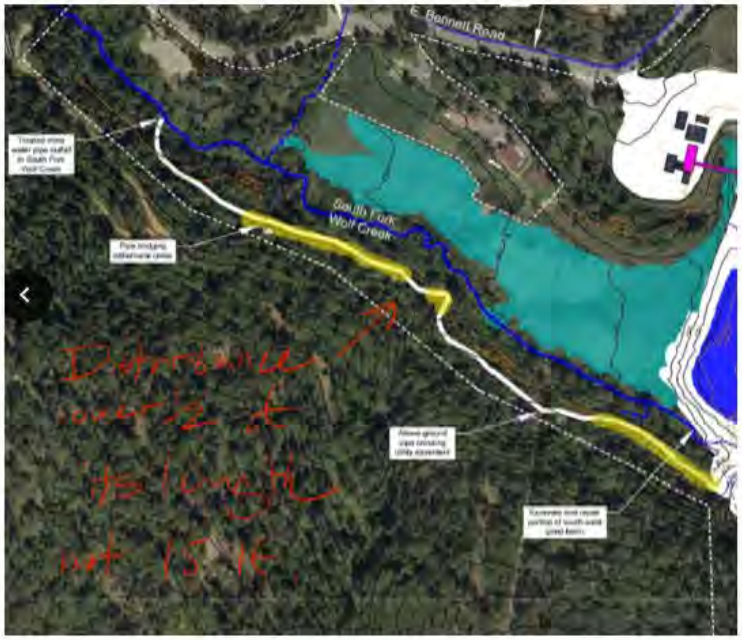
> Through the development and application of Comprehensive Site Development Standards, and project environmental review, establish and enforce minimum building setback lines from perennial streams and significant wetlands that are adequate to protect stream and wetland resource values.[70]

Grp 31-62

Yet, when considering stream setbacks the DEIR on the Brunswick and Centennial sites, the DEIR notes a number of instances where the proposed project would indeed violate minimum

[68] As quoted in DEIR, 4.4-49
[69] DEIR, 4.4-85
[70] As quoted in DEIR 4.4-46

setbacks.[71] Again, the DEIR does not explore alternatives to the described encroachment. Further, the extent of encroachment would appear to be misconstrued in the DEIR. At 4.4-85 the text suggests no more than 15 linear feet of permanent impact, but does not describe in sufficient detail the impact of the pipe paralleling South Fork Wolf Creek to the discharge point. Close examination of the accompanying map at 4.4-84 shows that this pipe would impact the "non-disturbance buffer zone" along approximately half its length, a much greater amount of impact that is not measured or quantified. The DEIR describes the route chosen for the pipe as along "an existing dirt road". This is a mischaracterization. It is not a road, it's a path through a riparian zone inhabited by trillium, equisetum, and the rattlesnake plantain orchid. It may have been used for logging 50 years ago, but it is not a road. One has to step over fallen trees, dodge poison oak, and jump over streams in the rainy season. The DEIR must be revised to accurately describe the proposed pipeline route as it really is; it must describe how the minimum setbacks will be maintained from the perennial creek and the multiple seasonal streams in this area, and how the riparian resource value will be maintained.



In sum, the DEIR does not consider carefully enough, comprehensively enough, or with an eye to their actual potential and the manner necessary to mitigate them, the impacts to biological resources involved in this proposed project.

[71] DEIR, 4.4-81

4.4-6 Cumulative Impacts and Mitigation Measures

Grp 31-63

The project proposed as presented in the DEIR includes a significant range of potential impacts that could persist, occur through accident or mismanagement over time, or be exacerbated by changing factors over the proposed 80 years of the project. The DEIR in no way addresses the potential synergies of these cumulative impacts, the likelihood of mitigations NOT protecting biological resources due to various foreseeable and indeed probable circumstances, or the extent to which changing climate or other serious environmental or human factors in the future might undermine mitigations or dramatically increase risks. This negligence on the part of the DEIR can be detailed through a number of specific issues.

Issue 3.a - Does not address the loss of forest land and associated stresses on forests as an essential factor of environmental health for the community (4.2-3)

Grp 31-64

The DEIR identifies more than 33 acres of forest land that would be lost as a consequence of the project, 31 acres of forest replaced by mine waste (which the DEIR chooses to call 'engineered fill'),[72] and somewhat less than 4 acres at the Centennial Site. This of course does not include any forest land not addressed or disclosed in the DEIR at the Centennial Site due to claim of separate consideration in an as yet incomplete DTSC RAP.[73] This forest land represents much of the diversity of forest habitats in the Wolf Creek Watershed and is a significant amount of forest land lost. This impact is ignored in the DEIR in spite of the language of impact 4.2-3 specifically mentioning

> *"the loss of forest land or conversion of forest land to non-forest use."*[74]

Why is this impact not considered? Loss of forest land impacts the whole watershed and the ecological resilience of forest land that is essential for the health and well-being of our community. It impacts water retention and storage in the watershed, a crucial factor in the context of increasing periods of drought due to climate change. It reduces forest species diversity and abundance, and limits breeding habitat and connectivity for species. Loss of forest is an impact that adds to others to be a cumulative impact on biological resources. Why is the cumulative impact of loss of forest land not fully addressed?

Grp 31-65

Issue 3.b - Does not address potential cumulative impacts of impaired air quality on forests, nearby meadow, or wetland and its associated species (4.3-1) (4.3-2)

[72] DEIR 2.0, Executive Summary, 2-2, DEIR 4.4-7 through DEIR 4.4-10
[73] DEIR 2.0, Executive Summary, 2-2, DEIR 4.4-4 through 4.4-6. This is based on comparing the acreage and map of forest habitats with the project description. It appears that a small section of Montane Hardwood Conifer habitat would remain outside the area of 'engineered fill.'
[74] DEIR 2.0, Executive Summary, 2-13

Air quality impacts forest, meadow, and wetland health as well as its related species. Whether it is emissions caused by the crushing of mine rock or the fumes of diesel trucks, this air quality impacts can have a cumulative, chronic impact on biological resources. Trees and other plant species are impacted by chronic exposure to airborne toxins and pollutants.[75] Why are the impacts of air quality on biological resources not addressed or evaluated?

Issue 3.c - Does not consider the loss of habitat an impact to special-status species, present or potentially present (4.4-1) (4.4-2) (4.4-6)

Grp 31-66

In its consideration of species of special concern only a few are considered to have an essential need for habitat. For others removal and destruction or impairment of habitat is deeded acceptable. Yet habitat loss across landscapes is cumulative. Why does the DEIR not address the overall loss of habitat for species of special concern (much less the whole complex of forest species that are essential to forest health) involved in the project?

Issue 3.d - Considers the net loss of wetland within the Wolf Creek Headwaters area in which the project is proposed to be an acceptable mitigation, significantly reducing and unduly impacting the environmental resiliency of the associated local ecosystems. (4.4-3)

Grp 31-67

Loss of wetland in one part of the watershed impacts other parts of the watershed. The watershed needs to be seen as a vital network of hydrological connections, much as we view our circulatory or lymphatic system. The impacts accumulate and impact the health of biological resources. Why does the DEIR not address the cumulative loss of wetland habitat proposed in this project?

Issue 3.e - Does not adequately consider the cumulative impact of mine water discharge or failure of water treatment or water retention at the Brunswick site. (4.6-2) (4.8-3) (4.8-7)

Grp 31-68

Mining operations in the Wolf Creek Watershed have had a history of creating severe impacts due to the failure of water treatment or the persistence of unmonitored and unmitigated mine discharges into its streams. The Magenta Mine discharge required legal action and millions of dollars of mitigation. The mine discharge from North Star mine shafts owned by Newmort upstream of the City of Grass Valley's water treatment plant similarly involved years of litigation and extensive re-engineering to successfully mitigate. In the meantime, streams of the watershed suffered through years of toxic discharge that impacted biological resources. The DEIR must present data, analytical study, and assurances that similar negative impacts to streams downstream of the proposed project would not happen. The DEIR simply references adherence to pertinent law and regulation and a water treatment plan that is not presented for consideration. No calculation of the impact of foreseeable accidents is discussed. No discussion of public monitoring and rigorous oversight is included. No calculation of increased potential for

[75] EPA, Plant Response to Air Pollution, 2002, https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NHEERL&dirEntryId=50437

failure of water retention at the Brunswick site due to the increased intensity of storm events over the 80 year lifetime of the project is considered, nor any other intensifying impacts due to climate change. Mining, historical or modern, has a track record of having impacts in real operation far beyond what is projected in project proposals.[76] Why are these exigencies not detailed, elaborated, and considered? Any heavy industrial operation has the potential to include increasingly significant impacts, to water quality and to biological resources over time. Why is this not examined, given that the project proposes 80 years of operation?

Issue 3.f - Does not address environmental impacts of decreased groundwater in the the meadow/grassland reach of SFWC or other projected impact areas of the watershed. (4.8-2)

Grp 31-69

Drawdown of the water table due to mine dewatering is largely underestimated in the DEIR as well as the degree of certainty of those predictions. Additionally, increased temperatures and decreasing soil moisture due to accelerating climate change will likely combine with a lowering water table in forest or meadow areas adjacent to the proposed mine to exacerbate "stress complexes" leading to "increasing numbers of forest dieback events."[77] Depth-to-groundwater is a crucial factor for vegetation. As Eamus (2016) states,

> *An increased depth-to-groundwater may lead to reduced plant growth, mortality and change in species compositions.*[78]

The cumulative impact of changes in groundwater as it might impact biological resources is not considered or evaluated. This project is proposed to last 80 years. Why does the DEIR ignore the potential cumulative impacts of loss of groundwater to biological resources?

Issue 3.g - Does not consider the need to monitor existing mine seeps on the main stem of Wolf Creek in the event that mine dewatering impacts these seeps in ways that are not predicted.

Grp 31-70

At DEIR 4.8-14 four drains discharging mine water are discussed - Eureka Drain, East Eureka Shaft Drain, East Eureka Shaft and 'Unknown Origin' all of which empty in Wolf Creek. Water quality testing of these drains reveals high levels of some heavy metals. The DEIR suggests that, as these drains are connected to the network of mine shafts holding ground water, mine dewatering will eliminate these seepages. Nonetheless, given the groundwater connectivity of these drains with groundwater zones impacted by the proposed project, a reasonable amount of uncertainty exists. Dewatering might not reduce the outflow from these drains, or expansion of mine workings could alter the fracture typology of underground rock so that mine water seepage from these drains actually increases. Therefore, due diligence indicates that monitoring of these

[76] James R. Kuipers, et al., Comparison of Predicted and Actual Water Quality at Hardrock Mines, 2006
[77] Glazer & Likens, The Water Table: The Shifting Foundation of Life on Land, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3472013/
[78] Eamus, et. al., Groundwater Dependent Ecosystems: Classification, Identification Techniques and Threats, 2016, https://link.springer.com/chapter/10.1007/978-3-319-23576-9_13

existing mine seeps needs to be included. Why does the DEIR not include ongoing monitoring of these drains? In addition, the DEIR must address the fact that upon closure or decommissioning of the project (whether in 80 years or sooner), the underground workings will inevitably re-fill with water, and reemerge, with the same mix of contaminated water. Where will this water reemerge? The DEIR must also describe the treatment facility that will be necessary upon closure of the project, including funding sources for construction, maintenance, replacement after the expected life cycle of the facility, in perpetuity.

Issue 3.h - Does not address the impact to overall development impacts for the community of changing the land use zoning designation from light industrial to heavy industrial/mining. (4.9-4)

Grp 31-71

The change to county zoning that would allow a designation change from light industrial to heavy industrial has significant, cumulative impacts for the community, the county, and the watershed. Would this change allow other similarly intensive developments to take place? Or would it cause a reduction of less environmentally impactful developments due to the presence of the proposed project? How would future changes in zoning impact the watershed? These questions about the cumulative impact of land zoning changes need to be addressed. Why hasn't this been considered?

Issue 3.i - Does not adequately address impacts of increased noise on species, habitats, and ecosystems. (4.10-1) (4.10-2) (4.10-3)

Grp 31-72

Wildlife disturbance due to noise is partially addressed in the Biological Resources chapter at page 4.4-74. It included no data, and relies only on generalizations and citations from a limited selection of sources that create a one-sided picture of the impacts of noise on species, suggesting that species will become "acclimatized" to noise disturbance, that protected species have a "low potential" to be on the site, and that non-protected species can 'decline' due to noise disruption as their populations are not at risk of "declining below self-sustaining levels."[79] This callous disregard of potential impacts is negligent in that it discounts the potential impact and does not fully consider the various lines of research that do exist, and that increasingly link noise disruption with serious impacts to species. As the National Park Service states:

> In general, a growing number of studies indicate that animals, like humans, are stressed by noisy environments (Shannon et al. 2015). The endangered Sonoran pronghorn avoids noisy areas frequented by military jets; female frogs exposed to traffic noise have more difficulty locating the male's signal; gleaning bats avoid hunting in areas with road noise (Barber et al. 2009). When these effects are combined with other stressors such as winter weather, disease, and food shortages, sound impacts can have important implications for the health and vitality of wildlife populations…[80]

[79] DEIR 4.4-74
[80] NPS.gov, Effects of Noise on Wildlife, https://www.nps.gov/subjects/sound/effects_wildlife.htm

In fact, numerous studies suggest that noise disruption can negatively impact breeding success among migrating bird species, and that species leave habitat in order to be less impacted by noise.[81] The chronic impact of noise over the life of the project potentially would seriously impact species populations. Noise is a cumulative impact; along with the many other potential impacts mentioned, it works to negatively affect the biological integrity of large areas of the Wolf Creek Watershed. Why doesn't the DEIR investigate the cumulative impact of noise disturbance more completely, particularly with regard to the negative impacts already shown by research? Why doesn't it include specific data measuring potential db levels at various locations where biological resources might be impacted and correlate that data with the current range of noise research?

Issue 3.j - Does not fully address potential increases in risk of wildfire in an 80 year period that will see increasingly large and uncontrollable fire. (4.13-2) (4.13-5)

Catastrophic wildfire is a fast-increasing reality in our forest landscape. Yet, the DEIR barely considers its impact over the 80 year life of the proposed project. Why is this? The potential impacts, cumulatively should be obvious and therefore fully analyzed and considered.

Importantly, the DEIR needs to incorporate the science summarized in the California Department of Fish and Wildlife paper, Wildfire Impacts, 2022, where it states,

Grp 31-73

> Managing forests, woodlands, shrublands, and grasslands for broad ecological and societal benefits has become a challenging issue in California

And details the multiple impacts to biological resources:

> Due to increasing fire size, frequency, and susceptibility to beetle outbreaks and drought driven mortality, forest biodiversity and composition is changing rapidly. Changes in vegetation structure alter important aspects of fire regimes (e.g., magnitude, frequency, seasonality), and these changes affect the management of biodiversity, groundwater management, forestry, recreation, as well as human safety. Atypically large patches of high-severity fire can hinder the ability of an ecosystem to recover, potentially undermining conservation of native biodiversity by long-term or permanent loss of native vegetation, expansion of non-native, invasive species, and long-term or permanent loss of essential habitat for native fauna.[82]

[81] Graeme Shannon et. al., A synthesis of two decades of research documenting the effects of noise on wildlife, 2015, https://onlinelibrary.wiley.com/doi/abs/10.1111/brv.12207; see also the research of Colorado State University's Sound and Light Ecology Team, https://sites.warnercnr.colostate.edu/soundandlightecologyteam/publications/

[82] CA Department of Fish and Wildlife Science: Wildfire Impacts, 2022, https://wildlife.ca.gov/Science-Institute/Wildfire-Impacts

Wildfire, just last year, passed through portions of the Centennial site.[83] Other, larger, recent fires, such as the River Fire threatened the city of Grass Valley and the area where this project is proposed.[84] Over the projected lifetime of this project, the likelihood of wildfire or prescription burning is close to 100%. Yet, the DEIR does not incorporate any discussion of the risk, the probability, and the impact of fire to the project or to the biological impacts created by the project. Why is this? Does the DEIR assert that increasing impacts of wildlife do not interact or influence impacts required to be considered by CEQA? The governor's recently created California Wildfire and Forest Resilience Task Force in January of 2021 published its *California's Wildfire and Forest Resilience Action Plan*. In it, clear guidelines are set forth that this DEIR needs to consider, follow, and analyze:

- Does this proposed project contribute to "restoring the health of our forests?"
- Does this proposed project "protect and expand urban canopy and forests?"
- Does this proposed project "increase prescribed fire?"
- Does this proposed project increase fuel breaks, protect wildfire-prone homes and neighborhoods, improve utility-related wildfire risk, create fire-safe roadways, reduce health impacts of smoke?"
- Does this proposed project "utilize best available science…to expand and improve monitoring?"[85]

The challenges are immense, but existential for California, for its communities and for its biological resources. The DEIR needs to fully address the cumulative impacts of these challenges over the lifetime of this project. Why has the DEIR not done this? How can this DEIR be considered complete without addressing these concerns?

80 years from now is the year 2102. Given the potential acceleration of climate change just to the year 2050, much less the turn of the next century, surely it is not only reasonable but imperative that this DEIR include an extended analysis of the impacts of increasing wildfire and prescribed burning, and the ways in which the potential impacts of this project could synergize or exacerbate impacts to biological resources.

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[83] Cal Fire, Bennett Fire Incident, 08/25/21 - 08/28/21, https://www.fire.ca.gov/incidents/2021/8/25/bennett-fire/
[84] Cal Fire, River Fire Incident, 08/04/21 - 09/13/21, https://www.fire.ca.gov/incidents/2021/8/4/river-fire/
[85] California Wildfire & Forest Resilience Task Force, California's Wildfire and Forest Resilience Action Plan, 2021, https://fmtf.fire.ca.gov/media/cjwfpckz/californiawildfireandforestresilienceactionplan.pdf

Grp 31-74

Final Comments

Based on the failure of this section of the DEIR to identify and account for impacts to biological resources and its inadequate proposals for mitigation we identify 5 areas of impact where the impact designation should be changed.

Impact	DEIR's Proposed level of Significance	Actual potential level of significance
4.4-1 Special Status Plant Species	LS	S
Does not adequately address impacts to Pine Hill Flannelbush and other species of special concern		
4.4-2 Special Status Wildlife Species	LS	S
Does not include or adequately address impacts to Monarch Butterfly, Yellow-breasted Chat, Willow Flycatcher, California Spotted Owl, and other species of special concern		
4.4-3 Riparian habitat, wetland or other sensitive natural community	LS	S
Does not address impacts to Centennial wetlands, to the full length of South Fork Wolf Creek, to the Brunswick Pond, to BMI, and to aquatic ecosystems downstream impacted by mine water discharge		
4.4-4 movement of native fish or wildlife	LS	S
Does not address movement of native fish along the full length of South Fork Wolf Creek		
4.4-6 Cumulative Impacts	LCC	CC
Does not address loss of forest or wildlife habitat, or cumulative impacts due to chronic stress for species, lowering of water table, air quality, noise, risk of system failure over time, wildfire, and climate change		

LS = Less Than Significant LCC = Less Than Cumulatively Considerable
S = Significant CC = Cumulatively Considerable[86]

[86] See table 2-1 in DEIR, Chapter 2, Executive Summary, pages 2-30 and following

Grp 31-75

Overall, this DEIR fails to consider biological resources as a whole, interconnected system of living parts, each dependent on the other, as well as on the complex of abiotic factors that make the integrity and resilience of the whole possible. Our comments have highlighted the many ways in which the details of the DEIR's data and analysis are incomplete and inadequate. However, it is the lack of regard for the cumulative, interconnected impacts that most stands out. We ask that this DEIR be recirculated so that its lack of data can be addressed, its omissions of biological resources corrected, its conclusions and analysis of impacts and mitigations rewritten. Most importantly, we ask that the biologists who engage in the writing of this DEIR truly consider the biological wholeness of what they study and make judgment upon. We are all part of an interconnected system of relations. We who live in this community are all of one watershed.

Sincerely,

Gary Griffith
Josie Crawford
Jonathan Keehn

Wolf Creek Community Alliance
http://www.wolfcreekalliance.org
P.O. Box 477, Grass Valley, CA 95945
(530) 913-2347 / wolf@wolfcreekalliance.org
jbkeehn@sierraemail.com

GROUP LETTER 31: JONATHAN KEEHN, WOLF CREEK COMMUNITY ALLIANCE

Response to Comment Grp 31-1

This is an introductory comment and does not provide a comment on an environmental issue associated with the project. Comment noted.

Response to Comment Grp 31-2

The commenter generally states the DEIR biological analysis was insufficient. Specific concerns are provided by the commenter in the following comments. Please see Master Response 30 - Technical Study Adequacy, and Responses to Comments Grp 31-3 to Grp 31-7 below.

Response to Comment Grp 31-3

The commenter states that the DEIR improperly separates the Centennial cleanup project and therefore does not consider the current existing baseline at the Centennial site. Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 31-4

The commenter asserts the upstream and offsite portions South Fork Wolf Creek were not analyzed nor considered for potential impacts, including movement of trout and other species. The DEIR, including Appendix F.7, identifies the onsite portion of South Fork Wolf Creek as perennial. The upstream portion of South Fork Wolf Creek is offsite and would not be impacted by the project.

Flows from offsite upstream drainage that flows through the existing onsite culvert were analyzed as part of the site drainage analysis when sizing the onsite detention basin. Preliminary Drainage Analysis (PDA) (Nevada City Engineering, 2019) was prepared and included as DEIR Appendix K.5. As described in DEIR Section 4.8.4, the PDA was peer reviewed by the County and potential impacts were analyzed in Impact 4.8-3. As stated in the conclusion to Impact 4.8-3:

> "The drainage analyses discussed above conclude that the project would not significantly alter the drainage patterns of the sites in a manner which would result in substantial erosion or siltation on- or off-site, nor substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, nor create or contribute to runoff water which would exceed the capacity of existing stormwater drainage systems, nor impede or redirect flood flows. West Yost's independent peer review concurs with this conclusion." (DEIR page 4.8-75)

In addition, the DEIR biology and hydrology sections included analysis of treated water discharge into South Fork Wolf Creek. DEIR Impact 4.4-2 analyzed potential impacts to special status species that may use South Fork Wolf Creek and the surrounding habitat. DEIR Impact 4.4-3 considered potential impacts to the riparian habitat surrounding South Fork Wolf Creek. DEIR Impact 4.8-1 considered whether treated water discharge would degrade water quality standards. DEIR Impact 4.8-2 analyzed potential drawdown impacts to South Fork Wolf Creek resulting from dewatering. DEIR Impact 4.8-3 considered potential erosion and sedimentation impacts resulting from treated water discharge. As demonstrated above, impacts to South Fork Wolf Creek were considered and analyzed in the DEIR.

Please also see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 34 - Resident Fish, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Grp 31-5

The DEIR, and Appendix F.7, both identify the onsite pond as a historic man-made clay-lined pond that was associated with historic saw milling operations. The pond is a non-jurisdictional "water of the United States" but may be considered a "water of the State of California." Special-status species that may use the pond and surrounding habitat were considered in Impact 4.4-2. This impact was considered potentially significant but reduced to a less than significant level with mitigation. Mitigation covered a variety of special-status species and required preconstruction surveys, potential state and federal permitting, implementation of avoidance and protection measures, and preparation of management plans. Impacts to "waters" was considered in DEIR Impact 4.4-3. This impact was considered potentially significant but reduced to a less than significant level with mitigation. Mitigation included additional state and federal permitting and preparation of management plans.

Response to Comment Grp 31-6

Please see Response to Comment 31-4 above. In addition, please also see Master Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 34 - Resident Fish, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

Response to Comment Grp 31-7

The commenter asserts that species were misidentified or incompletely identified, and that the DEIR downplays potential presence of special-status species. However, the commenter does not specifically state which species they believe were mistaken or excluded. Please see Master Response 30 - Technical Study Adequacy, Master Response 31 - Rare Plants, Master Response 34 - Resident Fish, and Master Response 37 - Birds and Raptors.

Response to Comment Grp 31-8

The comment generally states the mitigation measures in the DEIR are inadequate, and provides specific concerns in the following comments. Please see Responses to Comments Grp 31-9 to Grp 31-15.

Response to Comment Grp 31-9

The commenter raises concerns that Mitigation Measure 4.4-1(a), which requires a habitat management plan for Pine Hill flannelbush impacts, does not contain sufficient detail regarding monitoring and success criteria. As explained in Appendix F.4, a maintenance and monitoring program is identified for transplanted Pine Hill flannellbush. Monitoring will occur every six months for the first two years. If transplantation does not meet success criteria, monitoring and maintenance will continue until those success criteria are achieved (see Appendix F.4, section 6.3.2). Irrigation is not prohibited by the DEIR, and could be utilized if determined necessary to ensure the success of transplantation. The monitoring and maintenance will continue until success criteria are achieved. If those success criteria cannot be achieved, the Mitigation Measure 4.4-1(a)(5) and the draft habitat management plan provides alternative maintenance transplantation measures to help achieve success criteria.

Mitigation measure 4.4-1(a) provides the requirements the management plan must include in order to be approved by the County and some of the performance and success criteria that should be included in the habitat management plan. Mitigation measure 4.4-1(a) is not intended, nor required, to have every detail of the habitat management plan, which is a separate document that was included in Appendix F.2 to the DEIR. The mitigation measures, consistent with the requirements of CEQA, provide clear standards, timeframes, and responsibility such that



mitigation measures can be enforced by the County. Follow up special-status plant species surveys were conducted the last two weeks of June 2022 within the project area, including areas impacted by the 2021 fire that occurred within the Centennial site, and flannelbush seedlings were documented growing in a very small portion of the area impacted by fire within the Centennial site. No other special-status plant species were identified within the areas impacted by fire or within the overall project site. Given the USFWS does not consider any flannelbush species in Nevada County to be the listed variety, an ESA consultation would not be required with the agency as part of the approval and permitting of the project. However, coordination with CDFW regarding the flannelbush will occur as part of the project regarding the implementation of Mitigation Measure 4.4-1(a). Notably, CDFW had no recommendations for further mitigation for the species as part of their DEIR comment letter dated April 4, 2022, which is evidence that the expert agency, CDFW, found the mitigation to be sufficient.

Response to Comment Grp 31-10

Please see Master Response 37 - Birds and Raptors, regarding yellow-breasted chat and Willow flycatcher. The showy milkweed was identified on the project site but is not a listed plant and therefore not analyzed in the DEIR.

The CNDDB has only historically tracked overwintering sites for monarch butterfly, not breeding locations. As such, no monarch occurrences are documented within the 9 quad CNDDB review, nor is it included as unprocessed data within the 9 quad CNDDB search. The species has not been documented within the project site during the many site visits and wildlife surveys conducted between December 2018 through June 2022. The showy milkweed is not protected (has no CNPS status), but it was identified in both the Centennial and Brunswick sites during the 2019 botanical surveys. However, given the project sites are not located along a known monarch butterfly migration corridor and the species has not been mapped within the 9 quad CNDDB search, the species is considered to have a low potential to occur on the project site. Table 4.4-6 of the DEIR (page 4.4-35), is hereby revised to discuss the monarch butterfly and identify the potential for monarch butterfly occurrence onsite as low.

Common and Scientific Name	Legal Status	Habitat Requirements	Potential for Species/Habitat Presence
Monarch butterfly *Danaus plexippus*	FC/--	Monarch butterfly has not been documented within the CNDDB within 5 miles of either the Centennial Industrial Site or Brunswick Area. Neither site contains many milkweed plants, the host plant for the species. This species is of a Federal Candidate for listing under the ESA.	**Centennial Industrial Site and Brunswick Area** **Low.** The species was not identified within either area during the surveys conducted in 2018, 2019, and 2022. Both sites contain very few and scattered milkweed plants. Anecdotal evidence shows the species to have been previously documented within the greater Grass Valley area. It is unlikely to occur in the Centennial Industrial Site or Brunswick Industrial Site.

Page 4.4-39 of the DEIR is also hereby revised to include additional discussion of monarch butterfly as set forth below:

Monarch butterfly (*Danaus plexippus*) – Federal Candidate for ESA Listing

The monarch butterfly has not been previously identified within five miles of the Centennial Industrial Site and Brunswick Area per an updated review of the CNDDB (CNDDB 2022); however, there is some anecdotal evidence that the species has been documented within the greater Grass Valley area (per iNaturalist). Per a review of iNaturalist, the species has never been documented within the Empire Mine State Historical Park located adjacent to the Brunswick Area; however, such websites are not peer reviewed scientifically or by state or federal biologists and should be considered anecdotal until additional documentation of the species are considered validated by state and/or federal biologists, or the scientific community. The species is considered a Federal Candidate for listing under the ESA and the USFWS maps the entirety of the United States as potential habitat for the species. The Centennial Industrial Site and Brunswick Area contain a few, scattered milkweed plants (the host plant of the monarch butterfly), but given the species was never documented within either the Centennial Industrial Site or the Brunswick Area during botanical and wildlife surveys, the species is considered to have a low probability of occurring within either the Centennial Industrial Site or the Brunswick Area.

The above changes are provided for clarification purposes, and do not alter the analysis, nor conclusions of the DEIR.

With regard to California spotted owl, please see Master Response 37 - Birds and Raptors. As discussed therein, in response to several public comments and information available on the Biogeographic Information and Observation System (BIOS) managed by CDFW, the Final EIR includes specific discussion of the California spotted owl (CSO) species. The California spotted owl is not listed as threatened or endangered in the federal Endangered Species Act (ESA) or the California State Endangered Species Act (CESA) but is rather referred to as a Species of Special Concern by CDFW, which do not require take permits for incidental take, but do require analysis under CEQA. The DEIR acknowledges that raptor nests and eggs are protected by Section 3503.5 of the California FGC, which states, “It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto.” Notably, the DEIR also acknowledged that the Brunswick site has suitable habitat for raptors (owls are a type of raptor), and included mitigation specifically for raptor and nesting bird species. (See Mitigation Measure 4.4-2(g).)

As identified in the BIOS database, a CSO nest was documented within the Brunswick Area in 2011. Three additional follow up surveys in 2012, 2016 and 2018 did not document the presence of a nest but did document the presence of a pair of CSO (in 2012 and 2016) and a single male CSO in 2018. Based on the information from BIOS, and to clarify the analysis provided in the DEIR on impacts to raptors, two surveys for presence and nesting status of California spotted owl were conducted by a qualified biologist pursuant to the United States Forest Service (USFS) protocol (1992) on the Brunswick site. California spotted owl callback surveys were conducted at two locations within the Brunswick Area on August 5, 2022 and then again on August 11, 2022. No CSO responded to any of the calls from either survey station either night (Please see Appendix I to this Final EIR for the Technical Memorandum for the Idaho-Maryland Mine Project – Brunswick Area California Spotted Owl Surveys and Assessment, August 2022).

Given the information obtained via BIOS 6, identifying four previous sightings of CSO on the Brunswick Site, Table 4.4-6 in the DEIR has been updated in Section 4.4 of the FEIR to include California Spotted owl by name, and to indicate that the potential for CSO nesting onsite is

Moderate, while potential for presence of transitory CSO onsite is High, as shown on the following page.

In addition, page 4.4-39 has been revised to include a species discussion of California spotted owl, as follows:

> California Spotted Owl (*Strix occidentalis occidentalis*) – CA State Species of Concern
>
> California spotted owl have been previously identified within five miles of the Centennial Industrial Site and Brunswick Area, including a location potentially within the border area of the southwestern section of the Brunswick Area and adjacent to the Empire State Historic Park border (CDFW BIOS 2022). The Brunswick Area is generally considered wintering habitat for the California spotted owl and suitable nesting sites for the species are generally considered to be located to the east of Brunswick Road (see CDFW BIOS 2022 habitat mapping for the species). The individuals identified within the southwestern section of the Brunswick Area could be individuals that have moved in from nesting sites outside the Brunswick Area, including the Empire State Mine Historic Park where a pair of California spotted owls have previously been identified (State Parks, 2009). Surveys conducted within the Brunswick Area forested habitat for the project in December 2018, January 2019, and July 2019 did not identify the presence of the species when reconnaissance-level biological resources surveys were conducted for special-status wildlife species. In addition, on August 5, 2022, a raptor biologist with previous experience conducting USDA Forest Service protocols for surveying the California spotted owl did not identify the presence of the species when amplified calls of the California spotted owl were conducted from two (2) locations within the southwestern and western sections of the Brunswick Area (see USFWS 1992 for protocol for the presence, absence, and nest sites for the California spotted owl).
>
> California spotted owl inhabits older, closed canopy forests and forages for prey that require woody debris and understory vegetation for cover. The species nests in cavities of trees and snags. To accurately document the location of a California spotted owl nest, USDA as part of their protocol for the California spotted owl, includes both the identification of a pair of owls and documenting the female in the nest or a male bringing a prey item (usually a mouse placed by the observer) back to a female in the nest. A sighting and/or call back of an individual, pair, and/or juvenile California spotted owl does not reflect that the species is nesting at that exact location given a California spotted owl territory can be quite large (mean up to 946 to 1,520 acres in the Tahoe Nation Forest, see Roberts 2017). The USFWS (1992) protocol for determining whether nesting is confirmed at a location includes that the following conditions are observed:
>
> - Two observations, at least 1 week apart, are required to determine nesting status if the first observation occurs before 1 May. This is necessary because the owls may show signs of initiating nesting early in the season without actually laying eggs and their behavior could easily be mistaken for nesting behavior.
> - After 1 May, a single observation is sufficient. Nesting is confirmed if, on 2 visits before 1 May, or 1 visit after 1 May several additional parameters are met.

Common and Scientific Name	Legal Status[1]	Habitat Requirements	Potential for Species/Habitat Presence
California spotted owl *Strix occidentalis occidentalis*	--/SSC	California spotted owl inhabits older, closed canopy forests and forages for prey that require woody debris and understory vegetation for cover. The species nests in cavities of trees and snags.	**Centennial Industrial Site** **None**. Suitable habitat for the species is absent. **Brunswick Area** **Moderate potential for CSO nesting, and High potential for transitory CSO**. Brunswick Industrial Site contains habitat within the southern section of the site. The species has been previously documented within that area along the border of the site with the neighboring parcel. Species documented in 2011, 2012, 2016, and 2018, but the species was not identified within the site during the surveys implemented in December 2018, early January 2019, July 2019, or August 2022. A nest has not been seen onsite since 2011. Further, the two protocol surveys conducted in 2022 did not identify any CSO onsite. Therefore, the potential for CSO nesting onsite is Moderate, while the potential for CSO that may be moving through the site or foraging onsite is High.

The observer that documented the California spotted owls within the southwestern section of the Brunswick Area on April 28, 2011 stated that the sighting's highest use could be a nest and that a single young was also sighted on that day. Follow up surveys for the California spotted owl within the southwestern section of the Brunswick Area were conducted in May 2012 and in April 2016, when a pair of owls was documented within the same general location each time, but nesting was not listed as the highest level of use, just use by a pair of owls was listed. Furthermore, in 2018 (no date or month was given), a single resident California spotted owl was documented in the same general area in the southwestern section of the Brunswick Area and was considered a resident and not part of a pair.

Therefore, given there is no additional information to confirm the site was an active nest in 2011 (no confirmation of a female within the nest or confirmation of male bringing prey to an active nest with a prey item like a mouse), and given that a required follow up survey was not conducted by the observer at least 7 days after the initial documentation of the owls at this location since the initial documentation occurred in April 2011 (per the USFWS 1992 protocol), it is inaccurate to call this location a nesting site. Based on the site visits in late 2018, early 2019, and summer 2019, which did not identify the area within the southwestern section of the Brunswick Area as suitable nesting habitat for the species given a lack of required snags, etc. within that section of the Brunswick Area, it is quite likely that a single resident or pair of California spotted owl that live within the Empire State Historic Mine Park use the forested area of the southwestern section of the Brunswick Area for potential foraging and overwintering.

Centennial Industrial Site: No potential suitable habitat for this species occurs within the Centennial Industrial Site.

Brunswick Area: The potential for this species to occur within the forested areas within the southwestern and western sections of the Brunswick area is considered high. This area represents wintering and foraging habitat for the species and it is highly unlikely the species uses the area for nesting given the lack of snags and open areas within the ground that is required for foraging when nesting. Given that any vegetation to be removed within the southwestern and western forested areas of the Brunswick Area would occur between September and January, there is no likelihood for this species to be impacted, given that if present, they would fly away during the removal of such vegetation.

Chapter 7, references of the DEIR is also hereby revised to add the following citations:

U.S. Fish and Wildlife Service (USFWS). 1992. Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls.

State of California. 2009. Addendum and Final Initial Study and Mitigated Negative Declaration Osborne Hill Trail Network Project State Clearinghouse #2008112086 (within the Empire Mine State Historic Park). Department of Parks and Recreation, Sacramento, California (January 2009).

Roberts, S.L. 2017. Chapter 3: California Spotted Owl Habitat Characteristics and Use. In USDA Forest Service General Technical Report PSW-GTR-254: The California Spotted Owl Current State of Knowledge.

As discussed in Master Response 37, the DEIR already acknowledges that raptor nests and eggs are protected by Section 3503.5 of the California FGC, which states, "It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto." Notably, the DEIR also acknowledged that the Brunswick site has suitable habitat for raptors (owls are a type of raptor), and included mitigation

specifically for raptor and nesting bird species. For clarification purposes, Mitigation Measure 4.4-2(g) has been revised as shown in Master Response 37.

The above changes amplify the existing discussion of raptors in the DEIR, for which mitigation has already been included, and do not alter the conclusions of the DEIR, which remains less than significant with implementation of mitigation measures.

Response to Comment Grp 31-11

Please see Response to Comment Grp 31-4 above.

Response to Comment Grp 31-12

The commenter states that the DEIR should focus on Benthic Macroinvertebrates, but does not provide any specific comment on how the project could have an adverse impact. Please see Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 34 - Resident Fish, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependant Vegetation, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog. CDFW conducted a thorough review of the DEIR and submitted a comment letter on the DEIR (letter dated April 4, 2022). CDFW also conducted electrofishing within three stretches of the South Fork Wolf Creek to identify native fish populations downstream of the proposed discharge (Memorandum report dated March 23, 2022). CDFW did not make any comments on the project's potential impacts to BMI and they only identified two non-native fish species downstream of the proposed discharge point within the Brunswick site. CDFW is concerned with impacts to riparian vegetation and fish and amphibian populations downstream, but did not mention BMI as a concern in either their comment letter or electrofishing Memorandum.

There are no US EPA water quality criteria for the protection of aquatic life for electrical conductivity, total dissolved solids, and sulphate (See page D-34 of Order R5-2022-0006). However, the secondary MCL for Electrical conductivity of 900 umhos/com is the recommended level for the protection of agricultural supply by the Central Valley Water Board (See page D-34 and D-35 of Order R5-2022-0006). As discussed on page 4-5 of Appendix K.4, electrical conductivity (EC) is associated with Total Dissolved Solids (TDS). Appendix K.2 listed EC values for the New Brunswick Shaft water as approximately 385 µS/cm. The mobilized divalent ions from the carbonate and sulfide minerals would add to that specific conductance, although it would require significant contributions of Ca, Mg, and SO4 to surpass the NPDES CAG995002 screening level of 900 uS/cm. However, if treatment is deemed necessary for TDS mitigation at some point during mining operations through required water quality monitoring (see Mitigation Measure 4.8-1(a)), it is Linkan's opinion that mobile ion exchange water softeners should be deployed as compared to building additional permanent infrastructure that may not be needed or only needed for relatively short periods. These mobile units are readily available, and various vendors offer the service of replacing them as necessary as the resin becomes spent and in need of regeneration. Additionally, the resins used for these constituents are common throughout the industry for softening water and do not pose a health or environmental risk. Therefore, the proposed water treatment plant is capable of ensuring that conductance of discharged mine water meets water quality goals and the required Notice of Applicability would ensure compliance (see Master Response 35 – Discharge to South Fork Wolf Creek). The Project Applicant must adhere to the NPDES discharge limits within South Fork Wolf Creek, which would minimize any potential impact to downstream aquatic resources.



Response to Comment Grp 31-13

As discussed in DEIR Impact 4.4-2, special-status species impacts, including potential loss of habitat, was already analyzed. This impact was considered potential significant, and the DEIR requires preconstruction surveys for species, even species not observed onsite during surveys, prior to surface disturbance.

DEIR Impact 4.4-2 considered impacts to birds, raptors, and migratory birds and determined this impact was potentially significant. Mitigation measures, including Mitigation Measure 4.4-2(g) (requiring pre-construction surveys for raptors and migratory birds) were required to reduce this impact to a less than significant level. The commenter asserts that it is problematic that nesting habitat may be removed after a nest is no longer occupied but does not explain how that would result in significant impacts to a special-status species. Please see Master Response 37 - Birds and Raptors.

Response to Comment Grp 31-14

The commenter suggests that compensatory mitigation or payment of in-lieu fees is not a reasonable mitigation strategy. However, these mitigation strategies are widely used and accepted. Mitigation Measure 4.4-3(c & d) provides a series of compensatory mitigation options that will be negotiated during the section 404 and 1600 permitting process, and the Corps and CDFW will require mitigation based on its established mitigation ratios, which are usually greater than 1:1. The mitigation option identified and ratios at which mitigation is required is based on consultation and approval by state and federal agencies involved in the permitting process. For clarification, Mitigation Measures 4.4-3(c & d), on page 4.4-91 of the DEIR, shall be revised to reflect that the minimum mitigation ratio for compensatory mitigation shall be 1:1, and higher ratios may be implemented if required by the agency issuing the respective permit. The revised language of Mitigation Measures 4.3-3(c) and 4.4-3(d) is set forth below:

4.4-3(c) *To the extent feasible, as determined by the qualified biologist in coordination with the Corps, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area. Prior to initiation of ground-disturbing activities, a Section 404 permit for fill of any jurisdictional wetlands within the Centennial Industrial Site and Brunswick Area shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the Corps "no-net-loss" policy, be provided at a minimum 1:1 ratio and be based on the final impact acreages verified by the Corps. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines. Compensatory mitigation can include but is not limited to the following: onsite and/or offsite wetland creation and/or restoration, purchase or placement of conservation easements, payment of an in-lieu fee, and/or purchase of mitigation credits at an approved Corps wetland mitigation or conservation bank.*

The applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Nevada County Planning Department.

4.4-3(d) *Prior to initiating of ground disturbing activities within the non-disturbance buffers for aquatic resources on the Centennial Industrial Site and Brunswick Area, the applicant shall apply for a Section 1600*

> *Lake or Streambed Alteration Agreement from CDFW. Impacts to CDFW 1600 jurisdictional areas shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this EIR (see Tables 4.4-9 through 4.4-11). Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Minimization and avoidance measures within jurisdictional areas shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas immediately adjacent to riparian areas with native seed, and installation of project-specific storm water BMPs. Mitigation may include restoration or enhancement of jurisdictional resources on- or off-site, purchase of habitat credits from an agency-approved mitigation/conservation bank, off-site or on-site conservation easements, working with a local land trust to preserve aquatic or riparian areas, or any other method acceptable to CDFW. Mitigation shall be provided at a minimum 1:1 ratio.*
>
> *A site revegetation plan would be required to be developed and approved by CDFW as part of a Streambed Alteration Agreement permit condition and native trees planned for removal with a diameter at breast height of 4 inches or greater would need to be mitigated for through planting of native riparian trees within adjacent stream zones not being impacted by the Idaho-Maryland Mine Project, with clear success criteria identified, monitoring and reporting required, and corrective actions to be taken if mitigation measures do not meet the proposed success criteria.*
>
> *Written verification of the Section 1600 Lake or Streambed Alteration Agreement shall be submitted to the Nevada County Planning Department.*

The above minor changes are for clarification purposes and do not affect the adequacy of the analysis contained in the DEIR.

Response to Comment Grp 31-15

The commenter states that the DEIR mischaracterizes the degree and extent of the disturbance to South Fork Wolf Creek setbacks. As analyzed in DEIR Impact 4.4-3, encroachment into the South Fork Wolf Creek 100-foot setback is necessary for the replacement of the deteriorated culvert currently outfalling into South Fork Wolf Creek, existing clay-lined pond repair activities, and installation of the treated water pipeline discharge. These are necessary project components, so avoidance of this setback is not feasible. As such, this encroachment was considered a potentially significant impact. Mitigation measures have been required, including additional agency permitting (Mitigation Measure 4.4-3(a, c, & d) and preparation of a management plan (Mitigation Measure 4.4-3(b), and the impact has been determined to be less than significant after mitigation. The commenter does not explain its statement that the encroachment is mischaracterized.

Response to Comment Grp 31-16

The commenter generally states that the DEIR did not adequately analyze cumulative impacts of the project, due to the interconnected nature of the environment and the changing environment

due to climate change. With regard to climate change, there is no consensus on how climate change will affect groundwater recharge and numerous other areas of concern, so analysis based on varying climate change predictions would be speculative. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As analysis of climate change scenarios, when there is no consensus on how climate change will affect the project site, would be speculation, this analysis is not required by CEQA. Further the DEIR already analyzes varying climate conditions such as large storm events and multiple drought year scenarios, so the analysis already is responsive to the commenter's concerns. Please see Master Response 16 – Drought and Climate Change.

Response to Comment Grp 31-17

The commenter states that the DEIR does not address the loss of forest land and stresses on forests. As discussed in Section 4.2.1, Existing Environmental Setting (subsection Forest Resources), the project site is not zoned for forest land or timberland uses. The project site does have lands meeting the definition of forested land (10 percent or more of native tree cover) and timberland (available for, or capable of, growing a crop of trees). (See DEIR, p. 4.2-9.) As noted in Impact 4.2-3, the amount of forest and timberland converted by this project is insignificant compared to the available forest and timberland resources in the County and Statewide. For example, the conversion of 25 acres within the project site is approximately 35% of the resources within the project site, and less than 1/10 of 1 percent of the County forestlands per the General Plan. The DEIR correctly concluded this impact is less than significant. (See DEIR Impact 4.2-3.)

Response to Comment Grp 31-18

The commenter asserts that the DEIR does not address potential cumulative impacts of impaired air quality on forests, meadows, wetlands and associated species. The DEIR analyzed cumulative air quality impacts on pages 4.3-91 to 4.3-92 and determined that impacts would be less than cumulatively considerable. Please see Master Response 18 – Air Quality Thresholds and Master Response 27 – Greenhouse Gas Thresholds.

Response to Comment Grp 31-19

The commenter asserts that the DEIR does not consider the loss of habitat for special-status species, present or potentially present, to be an impact. However, as discussed in DEIR Impact 4.4-2, special- status species impacts, including potential loss of habitat, was already analyzed. This impact was considered potentially significant and required preconstruction surveys for species, even species not observed onsite during surveys, prior to surface disturbance. (See Mitigation Measures 4.4-1(a-b), 4.4-2 (a-g), and 4.4-3(a-d).)

Response to Comment Grp 31-20

The commenter states that the DEIR incorrectly considers the net loss of wetland within the Wolf Creek headwaters as acceptable mitigation. However, as discussed on page 4.4-95 of the DEIR, Mitigation Measure 4.4-3(c) would require that the proposed project conform with the Corp's "no-net-loss" policy for wetland mitigation. Thus, any wetlands lost within the project area must be compensated through the protection of existing wetlands, avoidance of wetland impacts, or creation of new wetland habitat elsewhere. Please see Response to Comment Grp 31-4.

Response to Comment Grp 31-21

The commenter states that the DEIR does not adequately consider cumulative impact of mine water discharge or failure of water treatment or water retention at the Brunswick site. Cumulative water quality impacts were already analyzed in Impact 4.8-7 of the DEIR. Please see Master

Response 36 - Flows in South Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts.

The water treatment facility will be subject to multiple permits regulating discharge of treated water into South Fork Wolf Creek, including monitoring of water quality. (See Mitigation Measure 4.8-1(a).) In the event of accident or unforeseen conditions, the operator would be subject to enforcement actions, and potential agency fines and penalties.

The water treatment pond is an existing site feature with a 40-acre foot capacity. See DEIR Impact 4.8-3 which analyzes the capacity of the water treatment pond and determines that sufficient capacity exists based on the storm events modelled. See also Appendix K.5 detailing Brunswick Industrial Site drainage and stormwater facility sizing. The clay-lined pond does not discharge and is designed to retain sufficient freeboard not to overtop (see page 4.8-73 of the DEIR).

Response to Comment Grp 31-22

The commenter asserts that the DEIR does not analyze the impact of decreased groundwater in the meadow/grassland reach of SFWC or other projected impact areas of the watershed. Please see Master Response 33 - Groundwater Dependent Vegetation; and see Itasca Memo – Simulated Drawdown of Selected Meadows attached to the Final EIR as Appendix H.

Response to Comment Grp 31-23

The commenter asserts that the DEIR does not consider the need to monitor the existing mine seeps on the main stem of Wolf Creek for dewatering impacts. However, the DEIR analyzed dewatering impacts and these impacts were determined to be less than significant after mitigation. Once mine dewatering commences, flow from the mines drains along Idaho-Maryland Road would cease and no monitoring of the existing mine seeps would be possible. (See DEIR, p. 4.8-66.)

Response to Comment Grp 31-24

The commenter asserts that the DEIR does not address the impact to overall development impacts from changing the land use zoning designation. DEIR Chapter 4.9, Land Use and Population and Housing, addresses potential project conflicts with applicable County General Plan land use goals and policies and zoning code requirements. DEIR Section 4.9.2 identified the applicability of Nevada County Ordinance No. 1853 creating the SP zoning district and that the Brunswick Industrial Site was designated M1-SP (see Table 4.9-2 and Figure 4.9-2). As discussed in DEIR Project Description, section 3.8, the applicant has requested a rezone to the parcels located at the Brunswick Industrial Site from M1-SP to Light Industrial with Mineral Extraction Combining District (M1-ME). The project does not propose to rezone the land to M2 (heavy industrial) and such a rezone is not required for the land use proposed for the project.

As such, land use impacts were analyzed in Chapter 4.9 of the DEIR, and the DEIR specifically analyzed the requested rezone from M1-SP to Light Industrial with Mineral Extraction Combining District. The DEIR concluded that land use impacts would be less than significant. Please see Master Response 1 - Non-EIR/ Administrative Issues regarding quality-of-life concerns.

Response to Comment Grp 31-25

DEIR impact 4.4-2, subsection Wildlife Disturbance, addressed potential noise and nighttime lighting impacts on wildlife populations and found the potential impact less than significant.

Response to Comment Grp 31-26

DEIR Chapter 4.13 addressed the potential for wildfire. DEIR impact 4.13-2 (wildfire) was identified as potentially significant given vegetation that would not be removed surrounding both sites and the use of hydrocarbon-powered equipment. Mitigation Measure 4.13-2 requires the preparation of a vegetation management plan for review and approval by the County Fire Marshall reducing this impact to a less than significant level.

Response to Comment Grp 31-27

The commenter summarizes the comments Grp 31-16 to Grp 31-26 and states that a new DEIR must be prepared and recirculated. The commenter's specific comments are addressed in Responses to Comments Grp 31-16 to Grp 31-26 above. The commenter has not identified a new significant impact that was not addressed in the DEIR; therefore, recirculation is not required. Comment noted.

Response to Comment Grp 31-28

The commenter asserts that the DTSC cleanup project should be analyzed as part of the DEIR so that the existing baseline of the Centennial Site can be analyzed with respect to project impacts. Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 31-29

DEIR Chapter 4.4, subsection 4.4.2, provides a detailed characterization of the vegetation communities within the Centennial Industrial Site based on extensive technical studies. Please see Master Response 30 - Technical Study Adequacy. As outlined in DEIR subsection 4.4.2, eight different vegetation communities were identified onsite based on site surveys. These individual vegetation communities were described in the DEIR, including fresh emergent marsh wetland and wet meadow, and the DEIR included descriptions of the special-status species that may occupy these communities. The intent of these descriptions was to provide a general overview of the vegetative community and the special-status species that may utilize this vegetative community and potential impacts that may occur as a result of surface disturbance to this community. Note that white brodiaea and showy milkweed mentioned by commenter are not special-status species.

Response to Comment Grp 31-30

The commenter states that the DEIR provides an inaccurate hydrological assessment of the Brunswick site, ignoring the connectivity of the South Fork Wolf Creek upstream and downstream of the culvert on the Brunswick property, along with the movement of trout and other species. Please see Response to Comment Grp 31-4 and Master Response 34 - Resident Fish.

Previous permitting of the culvert installation and NID spill easement are not environmental issues required to be analyzed in the DEIR for this project.

Response to Comment Grp 31-31

The commenter asserts that the DEIR considers the clay-lined pond to not be an aquatic resource, disregarding impacts on its biological resources. Biological impacts relating to the project's use of the clay-lined pond were addressed in DEIR Section Impact 4.4-3. Please see Response to Comment Grp 31-5.

As stated on page 4-2 of Appendix F.7 of the DEIR, a historic man-made clay lined pond (PD-1) associated with historic saw milling operations does not have a direct outlet or connection to the South Fork Wolf Creek. PD-1 contains a 2-foot clay liner to limit any potential infiltration and receives its water mainly from surface runoff and precipitation. PD-1 is a man-made pond used historically as a recycling pond for site runoff containment and log watering during mill operations.

As stated on page 4.8-30 of the DEIR, the clay-lined pond, constructed in the 1980s, for the former Bohemia Lumbermill, was permitted by the RWQCB through WDRs as a Class II Designated Waste Management Unit, under former Title 23 of the CCR, Subchapter 15, Section 2532. According to the WDRs (Order No. 88-185 for Bohemia Incorporated Grass Valley Mill), the pond was to be lined with a two-foot-thick clay layer having a permeability not to exceed 1x 10-6 cm/s. Vector Engineering found that the "clay liner system was constructed in substantial accordance with the SWRCB Title 23, Subchapter 15, Section 2532 regarding construction of the natural liner system for Class II Designated Waste Management Units." Due to the very low permeability of the existing liner, water contained in the pond does not infiltrate into and support the adjacent wetland meadow.

Response to Comment Grp 31-32

The commenter asserts that the clay-lined pond is a jurisdictional water of the U.S. and must be protected. However, the clay-lined pond is a man-made industrial pond that was created for industrial use and is not connected to South Fork Wolf Creek. Biological impacts relating to the project's use of the clay-lined pond were addressed in DEIR Section Impact 4.4. Please see Response to Comment Grp 31-5.

Response to Comment Grp 31-33

The offsite stream reach (Reach C) referenced by the commenter is outside the project site and will not be subject to project-related surface disturbance. However, potential downstream effects of the project were evaluated in the DEIR. Please see Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 34 - Resident Fish, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependant Vegetation, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

Response to Comment Grp 31-34

See Response to Comment Grp 31-33 above.

Response to Comment Grp 31-35

The commenter states that the DEIR contains insufficient observation over time of stream flow. However, the DEIR contains voluminous baseline surface water quality data, including flow of relevant streams. The baseline surface water quality data are described within DEIR Section 3.4.1.2 and presented in Tables 3.5 through 3.10 of Appendix K.2 of the DEIR. The baseline data include results from samples collected from the underground workings, from drains that discharge water from the underground workings, from Wolf Creek, and from South Fork Wolf Creek. The results include field parameters, general water chemistry parameters, and metals. In particular, Table 3-8 of Appendix K.2 contains pH, temperature, dissolved oxygen (DO), electrical conductivity, and oxidation-reduction potential (ORP) measurements from three locations along South Fork Wolf Creek and two locations on the former SPI site that discharge to South Fork Wolf Creek. Table 3-8 of Appendix K.2 presents laboratory analytical results for 18 general water chemistry parameters and 19 different metals from two samples collected along South Fork Wolf Creek at locations that will be upstream and downstream of the proposed treated water discharge location.

Table 3-10 of Appendix K.2 provides field measurements of flow, temperature, specific conductance, pH, and turbidity for two locations (upstream and downstream) along South Fork Wolf Creek measured during five different storm flow conditions, including summer baseflow, early-season post-storm (comparable to first-flush) flows, winter baseflow, rising flows during a

"qualifying rain event" of 1.25 inches, and peak flows during the same "qualifying rain event". Additional details regarding flow conditions and baseline water quality conditions in South Fork Wolf Creek are also provided in Appendix K.1 of the DEIR.

Further analysis of the baseline water quality data is provided in Section 3.4.2 of Appendix K.2 of the DEIR. In particular, data from South Fork Wolf Creek are presented on Figures 3-12 and 3-19 of Appendix K.2 of the DEIR, while the baseline data from the underground workings, drains, and Wolf Creek are presented on Figures 3-12 through 3-18 of Appendix K.2 of the DEIR.

Response to Comment Grp 31-36

The commenter asserts that stream data for South Fork Wolf Creek presented in the DEIR is insufficient. Please see Response to Comment Grp 31-35 above.

Response to Comment Grp 31-37

The commenter asserts that the DEIR contains inadequate study and characterization of mine water discharge, stream flow, sedimentation, stream velocity profiles, loss of seasonality and loss of streambed or bank habitat. Please see Response to Comment Grp 31-35 above and Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, and Master Response 32 - Temperature of Mine Water Discharge.

Response to Comment Grp 31-38

The commenter asserts that the DEIR failed to address impacts to the SFWC and associated species in stream reach D that runs through Empire Mine State Park. Please see Response to Comment Grp 31-4, Responses to Comment Letter Agcy 1, Master Response 30 - Technical Study Adequacy, Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 34 - Resident Fish, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependant Vegetation, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

It is acknowledged and analyzed in the DEIR impact analysis (see Section 4.4.4) that species exist within the project site that are common to the area. Potential impacts to these species were analyzed and mitigation measures have been provided where it was determined impacts to species could occur as a result of project activities, including the implementation of preconstruction surveys and agency permitting requirements. The only migratory species acknowledged by the County General Plan is deer migration corridors. Per the Migratory Deer Ranges Nevada County General Plan map, the project site is located in an area of potential Deer Winter Range. Although this map dates from 1991, that is the most recent map for the local deer range that CDFW has published. The project site does not contain any known major deer migration corridors, known deer holding areas, nor critical deer fawning areas. Any deer within or adjacent to the project site would move outside the project site to the remaining forest surrounding the site and would be uninhibited to move into and out of the project site and the areas outside the project site. Impact 4.4-4 addressed the project's impact to this potential migratory corridor and concluded it less than significant.

Response to Comment Grp 31-39

The commenter states that the DEIR should focus on Benthic Macroinvertebrates, but does not provide any specific comment on how the project could have an adverse impact. Please see Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 34 - Resident Fish, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependant Vegetation, and Master

Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog. CDFW conducted a thorough review of the DEIR and submitted a comment letter on the DEIR (letter dated April 4, 2022). CDFW also conducted electrofishing within three stretches of the South Fork Wolf Creek to identify native fish populations downstream of the proposed discharge (Memorandum report dated March 23, 2022). CDFW did not make any comments on the project's potential impacts to BMI and they only identified two non-native fish species downstream of the proposed discharge point within the Brunswick site. CDFW is concerned with impacts to riparian vegetation and fish and amphibian populations downstream, but did not mention BMI as a concern in either their comment letter or electrofishing Memorandum. The Project Applicant must adhere to the NPDES discharge limits within South Fork Wolf Creek, which would minimize any potential impact to downstream aquatic resources.

Response to Comment Grp 31-40

Please see Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 34 - Resident Fish, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependant Vegetation, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog, regarding the impacts to fish, discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. There are no US EPA water quality criteria for the protection of aquatic life for electrical conductivity, total dissolved solids, and sulphate (See page D-34 of Order R5-2022-0006). However, the secondary MCL for Electrical conductivity of 900 umhos/com is the recommended level for the protection of agricultural supply by the Central Valley Water Board (See page D-34 and D-35 of Order R5-2022-0006). As discussed on page 4-5 of Appendix K.4, electrical conductivity (EC) is associated with Total Dissolved Solids (TDS). Appendix K.2 listed EC values for the New Brunswick Shaft water as approximately 385 µS/cm. The mobilized divalent ions from the carbonate and sulfide minerals would add to that specific conductance, although it would require significant contributions of Ca, Mg, and SO4 to surpass the NPDES CAG995002 screening level of 900 uS/cm. However, if treatment is deemed necessary for TDS mitigation at some point during mining operations through required water quality monitoring (see Mitigation Measure 4.8-1(a)), it is Linkan's opinion that mobile ion exchange water softeners should be deployed as compared to building additional permanent infrastructure that may not be needed or only needed for relatively short periods. These mobile units are readily available, and various vendors offer the service of replacing them as necessary as the resin becomes spent and in need of regeneration. Additionally, the resins used for these constituents are common throughout the industry for softening water and do not pose a health or environmental risk. Therefore, the proposed water treatment plant is capable of ensuring that conductance of discharged mine water meets water quality goals and the required Notice of Applicability would ensure compliance (see Master Response 35 – Discharge to South Fork Wolf Creek).

Response to Comment Grp 31-41

The commenter asserts that the DEIR contains errors in identification of species, typographical errors and incomplete identifications. As the DEIR contains thousands of pages of information, a small number of typographical errors can be expected, and as stated by California Courts, "[t]he need for thorough discussion and analysis is not to be construed unreasonably… to serve as an easy way of defeating projects. Absolute perfection is not required." (Laurel Heights Improvement Assn., supra, 47 Cal.3d at p. 406.). The project sites have been field checked many times by qualified biologists and botanists and a complete plant species list, including native plants, is included in the appendices of the DEIR. Please see Appendix F.2, F.6, F.9, F.11 of the DEIR and Master Response 30 - Technical Study Adequacy. The reference to Populus tremuloides is an



error in the report. Page 4.4-9 of the DEIR has been corrected in the FEIR as set forth below (additions in underline, deletions in ~~strikeout~~):

> The montane riparian in the placer diggings and areas created from earth movement are characterized by ~~black~~Fremont cottonwood (Populus ~~tremuloides~~ fremontii ssp. fremontii), red willow (Salix laevigata), arroyo willow (Salix lasiolepis), and occasionally ponderosa pine in the overstory.

The species of pine referred to on page 4-4-10 of the DEIR is Ponderosa Pine. Page 4.4-10 of the DEIR has been corrected in the FEIR as set forth below (additions in underline, deletions in ~~strikeout~~):

> The montane riparian vegetation along both sides of the South Fork Wolf Creek is dominated by white alder (Alnus rhombifolia), red willow (Salix laevigata), and arroyo willow (Salix lasiolepis), with other overstory species from adjacent vegetation types, including California black oak, Ponderosa pine and Douglas fir.

This minor error and clarification in species name in the DEIR and appendices does not affect the impact determination included in the EIR.

Response to Comment Grp 31-42

The commenter notes that the California spotted owl is under review as an endangered species by the USFWS; however, the USFWS determined that listing was not warranted on 11/8/2019, and there are no pending listing petitions for the species. Please see Master Response 37 - Birds and Raptors.

Response to Comment Grp 31-43

Please see Master Response 37 - Birds and Raptors, regarding the Yellow-breasted chat.

Response to Comment Grp 31-44

Please see Master Response 37 - Birds and Raptors, regarding the Willow flycatcher.

Response to Comment Grp 31-45

Please see Response to Comment Grp 31-10.

Response to Comment Grp 31-46

Please see Master Response 30 - Technical Study Adequacy and Master Response 31 - Rare Plants.

Response to Comment Grp 31-47

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog, regarding impacts to amphibian species.

Response to Comment Grp 31-48

The commenter asserts that the DEIR did not adequately survey for presence of Western Pond Turtle, and does not consider loss of stream bank habitat due to higher stream levels, or properly protect turtle hatchlings. DEIR Impact 4.4-2 analyzed potential impacts to Western Pond Turtle and concluded a potentially significant impact may occur. Mitigation Measure 4.4-2(b) requires a preconstruction survey by a qualified biologist no more than seven days prior to proposed disturbance of perennial waters on the project site. While the project would discharge up to 5.6

cfs into South Fork Wolf Creek, peak flows from the site during storm events are expected to be lower than under baseline conditions due to the construction of a stormwater detention pond on the Brunswick site. As such, the peak flows are expected to be within or less than the same range as currently exist, resulting in a less than significant impact related to Western Pond Turtle habitat due to stream level (see DEIR Impact 4.8-3). Potential downstream impacts to the stream channel and associated riparian zone along both sides of South Fork Wolf Creek from the additional discharge of 5.6 cfs would be minimal on such sensitive biological resources and do not represent a potential significant impact to the stream channel or associated riparian zone within South Fork Wolf Creek (See page 9 of Appendix F.10 and Master Response 36 - Flows in South Fork Wolf Creek).

Please see Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, and Master Response 32 - Temperature of Mine Water Discharge regarding treated water discharge to South Fork Wolf Creek and the limited potential for impacts to the stream bank.

Response to Comment Grp 31-49

The commenter asserts that the DEIR did not include bat surveys and did not consider the impacts of bat habitat loss. However, the DEIR (see Impact 3.4-4) conservatively concludes a potential impact to bat species despite determining bat species have a low likelihood of occurring onsite. Mitigation Measure 4.4-2(f) provides extensive detail regarding a required survey for bats that must occur prior to site disturbance, and specifically requires that surveys shall occur no more than seven days prior to surface disturbance. Mitigation Measure 4.4-2(f) also specifies reporting requirements if bats are not found, passive removal if bats are identified, and avoidance until breeding roots have dispersed. This mitigation measure allows for potential bats to be identified, prevented from returning to disturbance areas, and/or avoidance of bats to limit the potential for impact. As a result, this impact was considered less than significant following mitigation. The commenter also asserts that the DEIR does not analyze loss of woodland and riparian habitat; however, the DEIR acknowledges that "On the Brunswick Industrial Site, approximately 18.7 acres of forested areas (Montane Hardwood-Conifer, Montane Hardwood, Ponderosa Pine, and Sierran Mixed Conifer vegetation communities) would be disturbed and trees would require Removal … [and] [o]n the Centennial Industrial Site, up to approximately 5.3 acres of forested areas (Montane Hardwood-Conifer and Montane Hardwood vegetation communities) would be disturbed and trees would require removal." (DEIR p. 4.3-59.) Further, the DEIR acknowledges that the project could have significant impacts on riparian habitat and provides mitigation to reduce those potential impacts. (See DEIR, p. 4.4-87.) The project does not have a significant permanent impact on Riparian habitat, and the loss of approximately 24 acres of forested areas is insignificant compared to the acreage of forested lands within Nevada County. Accordingly, the project's impacts to forested lands and riparian habitats would not cause significant impacts to bats or bat habitat.

Response to Comment Grp 31-50

The commenter asserts that Cooper's Hawk and Olive-sided Flycatcher could be impacted by the project and were not properly considered in the DEIR. Please see Master Response 37 - Birds and Raptors.

Response to Comment Grp 31-51

The commenter asserts that more biological surveys need to be completed in order to identify every species that could potentially be on site. Identification of potential special-status species was based on a 5-mile radius search of the CNDDB database, site surveys by qualified local

biologists, and local knowledge of habitats and species that may occupy those habitats. Also, consistent with the County's independent biology expert's comments, the DEIR requires preconstruction surveys to identify species that may not have been identified on the project site as part of the DEIR process. Accordingly, the biology analysis was prepared by local experts, was peer reviewed by the County's independent expert, who found the analysis to be adequate after incorporation of that expert's revisions. Please see Master Response 30 - Technical Study Adequacy and Master Response 31 - Rare Plants.

Response to Comment Grp 31-52

The commenter generally asserts that the biological resources analysis and mitigation is inadequate. The commenter's specific assertions are addressed below in Responses to Comments Grp 31-53 through Grp 31-62.

Response to Comment Grp 31-53

The commenter raises concerns that Mitigation Measure 4.4-1(a), which requires a habitat management plan for Pine Hill flannelbush impacts, does not contain sufficient detail. Mitigation measure 4.4-1(a) provides the requirements the management plan must include in order to be approved by the County and some of the performance and success criteria that should be included in the management plan. Mitigation measure 4.4-1(a) is not intended, nor required, to have every detail of the management plan, which is a separate document. The mitigation measures, consistent with the requirements of CEQA, provides clear standards, timeframes, and responsibility such that mitigation measure can be enforced by the County. Follow up special-status plant species surveys were conducted the last two weeks of June 2022 within the project area, including areas impacted by the 2021 fire that occurred within the Centennial site, and flannelbush seedlings were documented growing in a very small portion of the area impacted by fire within the Centennial site. No other special-status plant species were identified within the areas impacted by fire or within the overall project site. Given the USFWS does not consider any flannelbush species in Nevada County to be the listed variety (as stated in their 2019 5-year review of the species), an ESA consultation would not be required with the agency as part of the approval and permitting of the project. However, coordination with CDFW regarding the flannelbush will occur as part of the project and the implementation of Mitigation Measure 4.4-1(a) should be adequate with the agency given they had no recommendations for further mitigation for the species as part of their DEIR comment letter dated April 4, 2022.

Response to Comment Grp 31-54

Please see Response to Comment Grp 31-10. Please see Master Response 37 - Birds and Raptors, regarding Yellow-breasted Chat and Willow Flycatcher.

Response to Comment Grp 31-55

Please see Response to Comment Grp 31-5.

Response to Comment Grp 31-56

Please see Master Response 34 - Resident Fish. Please see Response to Comment Grp 31-12 regarding Benthic Macroinvertebrates. Please also see Master Response 36 - Flows in South Fork Wolf Creek, Master Response 35 - Discharge to South Fork Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 33 - Groundwater Dependant Vegetation, and Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog.

The proposed project will have no impact on migratory fish. As stated in the CDFW's Memorandum (dated March 23, 2022), which details electrofishing at three locations downstream of the Brunswick site, the areas upstream closest to the Brunswick site were found to have brown trout with poor body conditions. CDFW stated that ideal spawning and rearing habitats for brown trout, a non-native fish species in California, are located further downstream and that some fish may migrate up into the areas closer to the Brunswick site. The Brunswick site will not inhibit any movement of fish from below the project site to upstream of the project site given the stream will continue to flow from upstream, through the Brunswick site, and then downstream of the Brunswick site as it currently functions. As stated on page iii of Appendix H.1 of the DEIR, the existing culvert that conveys water through the Brunswick site appears to be approaching the end of its lifespan and is recommended for replacement. The replacement of this culvert by the proposed project will therefore improve fish passage, as the existing culvert is degraded, and could fail without replacement, which would sever connectivity and likely result in subsequent substantial erosion as the flow sought another path.

Response to Comment Grp 31-57

The commenter asserts that the mitigation provided in the DEIR for special-status species is insufficient because it allows disturbance once the habitat is no longer occupied and does not consider avoidance. However, habitat for the special status species with a potential to occur onsite is not by itself protected by the California Endangered Species Act or Federal Endangered Species Act. Rather, the species themselves are protected and habitat for those species require protections only when occupied. However, Mitigation Measures 4.4-2(a), through 4.4-2(f) require consultation with the respective state or federal agencies for determination of appropriate avoidance and minimization measures. As discussed in DEIR Impact 4.4-2, special-status species impacts, including potential loss of habitat, was analyzed. This impact was considered potentially significant and the DEIR required preconstruction surveys for species, even species not observed onsite during surveys, prior to surface disturbance. In the event a special-status species is identified during preconstruction surveys, the mine operator is required to consult with state and/or federal agencies regarding how, where, when, and by whom those species can be relocated. Moreover, the County's independent biology expert reviewed the proposed mitigation measures and found the measures to be adequate to reduce impacts to a less than significant level.

Response to Comment Grp 31-58

The Centennial site cleanup project is a separate project. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

The commenter suggests that compensatory mitigation or payment of in-lieu fees is not a reasonable mitigation strategy. However, these mitigation strategies are widely used and accepted. Avoidance of the onsite wetlands that are proposed to be removed is not feasible due to project design constraints and the need to use the clay-lined pond for water treatment purposes. As shown on Figure 4.4-4 of the DEIR, the Brunswick site has small artificial wetlands dispersed throughout the project area which have formed in depressions created by previous disturbance on the site. The retention of these wetlands (MA-1, MA-2, MA-3, MA-4, MA-5, MA-6, WM-A, WM-2, WM-3, RI-4) would prevent the construction of most of the proposed buildings, the storm water detention pond, and the engineered fill pile and therefore would be infeasible. Large natural wetlands (WM-3, RI-2, and RI-3) are preserved by the project design. Mitigation Measure 4.4-3(c & d) provides a series of compensatory mitigation options that will be negotiated during the section 404 and 1600 permitting process. The mitigation option identified and ratios at which mitigation is required is based on consultation and approval by state and federal agencies involved in the

permitting process. For clarification, Mitigation Measures 4.4-3(c & d) shall be revised to reflect that the minimum mitigation ratio for compensatory mitigation shall be 1:1, and higher ratios may be implemented if required by the agency issuing the respective permit. Please see Response to Comment Grp 31-14.

Response to Comment Grp 31-59

The commenter asserts that the DEIR omits discussion of wetland and riparian habitats on the Centennial Site in their existing condition. Please see Master Response 4 - Clean-Up Project is a Separate Project Under CEQA.

Response to Comment Grp 31-60

The commenter cites language from Mitigation Measure 4.4-3(c) for the proposition that the DEIR did not consider avoidance of wetlands. However, the commenter omits language in that mitigation measure that specifically calls for consideration of avoidance if feasible, as follows "To the extent feasible, as determined by the qualified biologist in coordination with the Corps, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area. As such, the mitigation provided already calls for avoidance where feasible. The commenter asks that the County consider an alternative that avoids wetlands. As shown on Figure 4.4-4 of the DEIR, the Brunswick site has small artificial wetlands dispersed throughout the project area which have formed in depressions created by previous disturbance on the site. The retention of these wetlands (MA-1, MA-2, MA-3, MA-4, MA-5, MA-6, WM-A, WM-2, WM-3, RI-4) would prevent the construction of most of the proposed buildings, the storm water detention pond, and the engineered fill pile and therefore would be infeasible. Large natural wetlands (WM-3, RI-2, and RI-3) are preserved by the project design. Additionally, the commenter asks whether onsite or offsite wetland creation could be considered. The Project Proponent could consider offsite creation of wetlands as part of specific wetlands mitigation in consultation with the Corps or CDFW, but no specific offsite mitigation site is currently under consideration. For example, the large natural wetlands on the property discussed above could be enhanced and/or permanently protected Please see Responses to Comments Grp 31-57 and -58 above.

Response to Comment Grp 31-61

The commenter asserts that impacts to South Fork Wolf Creek have not been assessed. Please see Response to Comment Grp 31-4, Master Response 36 - Flows in South Wolf Creek and Wolf Creek, Master Response 32 - Temperature of Mine Water Discharge, Master Response 34 - Resident Fish, and Master Response 35 - Discharge to South Wolf Creek, regarding the discharge flow volumes, temperature, and quality, potential for erosion, and species impacts. Additionally, the commenter asserts that the clay-lined pond (PD-1) is connected to South Fork Wolf Creek; however, this is not correct. The clay-lined pond is a man-made industrial pond that was created for industrial use and is not connected to South Fork Wolf Creek. Please see Response to Comment Grp 31-31. Biological impacts relating to the project's use of the clay-lined pond were addressed in DEIR Section Impact 4.4. Please also see Response to Comment Grp 31-5.

Response to Comment Grp 31-62

The commenter asserts that encroachments into the 100-foot setback from streams has not been addressed in the DEIR. However, the encroachment was specifically addressed in the DEIR. Please see Response to Comment Grp 31-15 regarding the necessary encroachment and analysis. As stated on page 4.4-86 of the DEIR, the proposed treated mine water discharge pipe is an aboveground pipe that would be located along an existing access road on the south side of

South Fork Wolf Creek. The existing access road crosses the ephemeral stream feature E-1. A support structure would be constructed across the ephemeral stream (E-1) so that the pipe crosses over the two-foot-wide stream instead of through the stream, which may cause a temporary impact to approximately 16 linear feet of the stream. Riparian vegetation, if present along the existing access road, may be impacted from placement of the discharge pipe. The pipeline has been routed along an existing access road to minimize the potential impacts to riparian environments, as well as the 50-foot non-disturbance buffer of the ephemeral stream (pursuant to Nevada County LUDC Section L-II 4.3.17).

The commenter suggests that the existing road where the discharge pipe will be placed is inhabited by trillium, equisetum, and rattlesnake plantain orchid. However, none of these plants are special-status plants. Therefore, any disturbance, assuming they were located on parts of the existing road where the proposed treated mine water discharge pipe would be placed, would not be a significant impact under CEQA.

Response to Comment Grp 31-63
Please see Response to Comment Grp 31-16.

Response to Comment Grp 31-64
Please see Response to Comment Grp 31-17.

Response to Comment Grp 31-65
Please see Response to Comment Grp 31-18.

Response to Comment Grp 31-66
Please see Response to Comment Grp 31-57.

Response to Comment Grp 31-67
DEIR Impact 4.4-3 analyzed the projects potential to impact state or federally protected waters and wetlands and determined this impact was potentially significant. Surface disturbance on the Centennial Industrial Site has the potential to impact approximately 0.033-acre of ephemeral streams. Mitigation measures 4.4-3(a-d) were identified that reduce this impact to a less than significant level. Surface disturbance on the Brunswick Industrial Site has the potential to impact approximately 0.57-acre of wetlands and 293 linear feet (0.103-acre) of mapped streams. This insignificant reduction in wetlands would not result in cumulatively considerable impacts to wetland and associated species viability in the region, as discussed in Impact 4.4-6 of the DEIR.

Response to Comment Grp 31-68
Please see Response to Comment Grp 31-21.

Response to Comment Grp 31-69
Please see Master Response 33 - Groundwater Dependent Vegetation.

Response to Comment Grp 31-70
Please see Response to Comment Grp 31-23. Once mine dewatering commences flow from the mines drains along Idaho-Maryland Road will cease and no monitoring of the existing mine seeps would be possible. It is not possible for groundwater seeping into dewatered mine workings to flow out of the existing mine drains.

As discussed on page of Appendix K.2 of the DEIR, the restoration of the post-mining discharge through the drains would be comparable to existing conditions and, thus, not an impact under CEQA. However, once the mine discharge from the drains resumed, compliance measures may

be required by RWQCB to address the Basin Plan, antidegradation, and other water quality standards. These measures might include sealing off areas of the underground workings that are the primary source of arsenic in the existing drain water, sealing the underground workings sufficiently to prevent seepage of water from the connected mine workings, obtaining an Individual NPDES permit upon closure, or treating of the mine water seeps after closure.

Response to Comment Grp 31-71

The commenter alleges that the DEIR does not address the impact of changing the land use zoning designation from light industrial to heavy industrial/mining. The commenter mischaracterizes the rezone application, however, as the existing zoning for the Brunswick site is Light Industrial, Site Performance Combining District, and would be rezoned to Light Industrial with Mineral Extraction Combining District to allow for surface mining facilities. The commenter's statement that the rezone changes the zoning to heavy industrial is incorrect. Moreover, the existing zoning already allows for industrial-type uses such as lumber yards, auto dismantling yards, large wholesaling and distribution facilities, and other industrial uses. The primary change in the zoning categories is that the new zoning allows surface mining uses in connection with underground mining, for which the impacts are specifically addressed in the DEIR. The commenter does not identify any specific impacts that would occur due to the change in zoning, but merely speculates that such impacts may occur. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." The rezone would allow light industrial uses similar to those already allowed under the existing light industrial zoning, and the additional permitted uses associated with the mineral extraction zone combining district have already been analyzed in the DEIR. Accordingly, no further analysis is required. Please see Response to Comment Grp 31-24.

Response to Comment Grp 31-72

Please see Response to Comment Grp 31-25.

Response to Comment Grp 31-73

Please see Response to Comment Grp 31-26 and Master Response 6 - Wildfire. The commenter alleges that the project may be inconsistent with the California Wildfire and Forest Resilience Action Plan, but does not provide any specific examples. The California Wildfire and Forest Resilience Action Plan does not have any specific mandates that apply to the project, and moreover, the DEIR concluded that the project's wildfire impact was less than significant after mitigation.

With respect to climate change, there is no uniform consensus on how climate change will affect wildfire patterns, so analysis based on varying climate change predictions would be speculative. As stated in CEQA Guidelines Section 15384, "[a]rgument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence." As analysis of climate change scenarios, when there is no consensus on how climate change will affect the project site, would be speculation, this analysis is not required by CEQA. Please see Master Response 16 – Drought and Climate Change.

Response to Comment Grp 31-74

This is a summary comment of the comments previously addressed. Please see Responses to Comments Grp 31-1 through Grp 31-73.

Response to Comment Grp 31-75

This is a summary comment of the comments previously addressed. Please see Responses to Comments Grp 31-1 through Grp 31-73

Group Letter 32

To: Members of the Nevada County Planning Commission,
Nevada County Board of Supervisors,
and Nevada County Planning Department Staff
Attn: Matt Kelley, Senior Planner
950 Maidu Ave, Suite 170
Nevada City, CA 95959
Ph: 530 265-1423
matt.kelley@co.nevada.ca.us
To All Concerned:



Summary Comments on the Draft Environmental Impact Report (DEIR) for the proposed Idaho Maryland Mine project[1]

32-1 As a community-based environmental organization Wolf Creek Community Alliance (WCCA) has worked to monitor, protect and restore the Wolf Creek Watershed since 2004. The Wolf Creek headwaters in which this proposed project would take place is a crucial component of our watershed. We at Wolf Creek Community Alliance are concerned that the DEIR is deficient in a number of ways.

Two general comments -

Chapter 4.5 Cultural & Tribal Resources

32-2 We are surprised that the cultural resources identified in the draft are all mining sites. Not a single pre-mining site is identified, in spite of archeological sites well-known to the State Park existing in the Area of Potential Impacts, and public maps showing the existence of Nisenan village sites on both the South Fork Wolf Creek and Wolf Creek itself. That the report simply records outreach to tribes without succeeding in actually consulting with them speaks more to the failure of the draft than to the absence of knowledge of important sites on the part of tribal communities. The draft needs to more adequately survey for archeological and traditional tribal sites and fully consult with local tribes.

Biological Resources - Section 4.4.2 Environmental Setting

32-3 Second, the environmental setting should be framed more accurately. The proposed project sits within areas with some of the highest biological diversity in the county. A network of undeveloped land provides heavily used wildlife corridors and rare refugia for significant species. Aquatic resources continue to provide crucial ecological function to the watershed downstream. Instead of being characterized primarily as 'disturbed industrial zones' suitable only for further development, they more accurately should be seen as biological resources that, though damaged by a long history of mining, continue to be resilient and over time have shown a remarkable ability to recover. SFWC is a perennial stream starting above Brunswick Road not out of a metal culvert. The pond there is not a mere collector of storm water, but a consequence of the natural hydrology of the valley, and currently a productive biological resource. The wetland habitats at the Centennial site that the draft seeks to ignore by setting a poorly defined future baseline are important hydrologically for the headwaters and contain species of special concern.

[1] More detailed comments with citations to follow.

32-4 Further, as the proposed permit is for 80 years, into the 22nd century, considerations of impacts should be fully analyzed for predicted and probable changes we will see due to drought, wildfire and climate change in those 80 years. Given the severity of that future, the criteria should be not just to minimize the negative impacts, but to ensure the continued recovery and resilience of biological functions crucial to our future. The draft does none of this and ignores future considerations as if we live in a static universe.

32-5 Regarding the details in **Biological Resources,** chapter 4.4, we see 5 areas where the impact designation should be changed from **less than significant (LS)** to **significant (S)**, or from **less than cumulatively considerable (LCC)** to **cumulatively considerable (CC)**.

32-6 **Mitigation 4.4-1 - Special Status Plant Species**. The draft does not adequately address potential impacts to stebbins morning glory, chaparral sedge, finger rush, and sierra brodiaea. The management plan to protect the endangered Pine Hill flannelbush also fails to protect that species. Botanical surveys did not take place during blooming seasons and dismissed probable occurrence in spite of suitable habitat. Pine Hill flannelbush management does not incorporate sufficient buffers, plans for treatment with prescribed burning, or study to show that transplanting would be successful, all details that the Recovery Plan for Gabbro Plants of the Central Sierra Nevada require. **The level of impact should be changed to significant.**

32-7 **Mitigation 4.4-2 - Special Status Wildlife Species.** The draft does not consider impacts to Monarch Butterfly and showy milkweed, present at the Centennial site, or Yellow-breasted Chat and California Spotted Owl, present close to the Brunswick site. It also fails to adequately consider impacts to Foothill Yellow-legged and Red-legged Frog, Western Pond Turtle, Cooper's Hawk, Willow Flycatcher, and Olive-sided Flycatcher. Surveys are inadequate and mitigations for impacts to Western Pond Turtle and raptors do not adequately protect breeding habitat. **The level of impact should be changed to significant.**

32-8 **Mitigation 4.4-3 Riparian Habitat, Wetland, and other Sensitive Communities.** The draft does not include the full length of South Fork Wolf Creek or the Pond at the Brunswick site for its aquatic or biological resources. It also excludes impacts to wetlands as they currently exist at the Centennial site. It does not adequately address impacts downstream to South Fork Fork Creek due to dewatering. Whole reaches of South Fork Wolf Creek are not studied for basic hydrology or biological resources. Benthic Macroinvertebrates (BMI) are not collected for study. Changes to seasonality of stream flow, water temperature, and habitat for BMI are not considered. Conclusions about the potential for increased sedimentation are questionable and not supported with sufficient data. The drawdown of the water table due to dewatering is underestimated and its impacts to meadow, wetland, and forest habitats not considered. **The level of impact should be changed to significant.**

32-9 **Mitigation 4.4-4 Movement of Native Fish or Wildlife.** By not characterizing perennial reaches of South Fork Wolf Creek as being aquatic resources, the DEIR neglects to consider the movement of fish and other aquatic species within the full length of the stream. **The level of impact should be changed to significant.**

32-10 **Mitigation 4.4-6 Cumulative Impacts.** The DEIR does not address loss of forest or wildlife habitat, or cumulative impacts due to chronic stress for species, air quality, noise, risk of system failure over time,

wildfire, and climate change. **The level of impact should be changed to cumulatively considerable.**

Finally we are concerned how the DEIR deals with the long-term impacts of the project.

APPENDIX C Reclamation Plan 5.12. Removal and Closure Activities fail to address how Rise Gold will protect the community from heavy metal contamination once the mining company has ceased operations, which could happen in 6 months or 80 years. There is no plan and no way to mitigate for the leaking effluent that inevitably leaks from the underground tunnels into the creeks.

When sulfides, which co-occur with gold, contact water and air, they form sulfuric acid which leaches heavy metals from the rocks: arsenic, manganese, iron, cadmium, and lead are the leading toxins. When the mines close, tunnels fill with water, eventually bust loose somewhere, and begin draining into the creeks, in difficult to predict places. Acid mine drainage is considered the most serious threat to streams. It doesn't matter how "green" the mining process is, as long as the tunnels fill with water, they will leach toxic metals.

32-11

The Idaho Maryland Mine, Empire Mine, and North Star mines operated for about 100 years. Today, sixty-eight years after the mines closed in Grass Valley, the community and environment are still paying for what happens after the mines closed. There are brownfields sites all over the County from hard rock mines. Magenta Drain, the Drew tunnel, Little Wolf Creek are 3 examples that have been toxic to the soil and water and very expensive to clean up and treat.

The Idaho Maryland mine is currently draining water into Wolf Creek, out of four sites on Idaho Maryland Rd, with arsenic and manganese levels above the acceptable range for recreational waters according to State standards.

This water will need to be treated forever. Mine tunnels will fill, rupture, leak, and leach heavy metals forever. We can't predict when or where. There is no plan in place to address this issue in the DEIR. We think it is an unavoidable significant impact. This expensive problem and the reasons above and from my colleagues should be enough reason not to grant a permit to Rise Gold.

32-12

Based on these concerns, both general and specific, we feel that the DEIR is inadequate and does not address the real impacts of the proposed project.

Thank you,

Jonathan Keehn, President Josie Crawford, Executive Director
BJ Schmitt, Board Member Gary Grifith, Board Member

Wolf Creek Community Alliance
http://www.wolfcreekalliance.org
P.O. Box 477, Grass Valley, CA 95945
(530) 272-2347 / wolf@wolfcreekalliance.org

GROUP LETTER 32: JONATHAN KEEHN, WOLF CREEK COMMUNITY ALLIANCE

Response to Comment Grp 32-1

This is an introductory comment. The commenter generally states the DEIR is deficient. Responses to specific comments are provided below.

Response to Comment Grp 32-2

The commenter is surprised no pre-mining cultural sites are identified in the DEIR on the project sites. As explained in Impact 4.5-2 of the DEIR, a site-specific cultural resources survey was conducted by a qualified archeologist meeting the Secretary of the Interior's Professional Qualification Standards. This included outreach to the Native American Heritage Commission, surrounding Native American tribes and historical entities, and the Nevada County Landmark Commission, as well as a pedestrian survey on May 9 and 10, 2019, using 20 meter transects (see DEIR pages 4.5-19 – 21). The analysis, conclusion, and mitigation measure in Impact 4.5-2 was based on this extensive site-specific analysis and broad outreach and reflects the judgment of professional experts in the field and the best available information.

Response to Comment Grp 32-3

The commenter states the proposed project sits within areas with some of the highest biological diversity in the county with wildlife corridors and rare refugia for significant species and aquatic resources provide crucial ecological function to the watershed downstream. The commenter is referred to sections 4.4 and 4.8 of the DEIR which describes the environmental setting and analyzes project impacts to biological and aquatic resources.

The commenter states that South Fork Wolf Creek is a perennial steam starting above Brunswick Road. The DEIR, including Appendix F.7, identifies the onsite portion of South Fork Wolf Creek as perennial. The upstream portion of South Fork Wolf Creek is offsite and would not be impacted by the project.

The commenter states that the pond is the consequence of the natural hydrology of the valley and is a productive biological resource. The DEIR, and Appendix F.7, both identify the onsite pond as a man-made clay-lined pond that was associated with historic saw milling operations. The pond is a non-jurisdictional "water of the United States" but may be considered a "water of the State of California." Special-status species that may use the pond and surrounding habitat were considered in Impact 4.4-2. This impact was considered potentially significant but reduced to a less than significant level with mitigation. Mitigation covered a variety of special-status species and requires preconstruction surveys, potential state and federal permitting, implementation of avoidance and protection measures, and preparation of management plans. Impacts to "waters" was considered in DEIR Impact 4.4-3. This impact was considered potentially significant but reduced to a less than significant level with mitigation. Mitigation included additional state and federal permitting and preparation of management plans.

The commenter states that wetland habitats at the Centennial site are ignored by setting a poorly defined future baseline. Please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Response to Comment Grp 32-4

Please see Response to Comment Grp 31-16.

Response to Comment Grp 32-5

The commenter states that 5 areas in Chapter 4.4 of the DEIR should be changed to significant impacts. Responses are provided to specific comments below.

Response to Comment Grp 32-6

This comment summarizes comments made by this commenter in other letters.

Regarding Stebbins morning glory, chaparral sedge, finger rush, and sierra brodiaea. Please see Response to Comment Grp 31-46.

Regarding Pine Hill Flannel bush, please see Response to Comment Grp 30-40, 31-9, and 31-53.

Response to Comment Grp 32-7

This comment summarizes comments made by this commenter in other letters.

Please see Master Response 37 - Birds and Raptors, regarding yellow-breasted chat, copper hawk, Olive-sided flycatcher and Willow flycatcher and protection of breeding habitat for raptors.

Regarding showy milkweed and the monarch butterfly, please see Response to Comment Grp 31-45 and 31-10.

Regarding the California spotted owl, please see Response to Comment Grp 31-42 and 31-10.

Please see Master Response 38 - Foothill Yellow Legged Frog and California Red Legged Frog, regarding impacts to amphibian species.

Regarding Western Pond Turtle, please see Response to Comment Grp 31-48.

Response to Comment Grp 32-8

This comment summarizes comments made by this commenter in other letters.

Regarding study of the full length of South Fork Wolf Creek, please see Responses to Comments Grp 31-33 and Grp 31-34.

Regarding the aquatic and biological resources of the pond at the Brunswick site, please see Response to Comment Grp 31-5.

Regarding wetlands at Centennial site and project baseline, please see Master Response 4 - Cleanup Project is a Separate Project Under CEQA.

Regarding benthic invertebrates, please see Responses to Comments Grp 31-12, Grp 31-39, and Grp 31-40.

Regarding increased sedimentation, please see Master Response 36 - Flows in South Fork Wolf Creek.

Regarding impacts to meadows, wetland, and forests from mine dewatering, please see Master Response 33 - Groundwater Dependent Vegetation.

Response to Comment Grp 32-9

This comment summarizes comments made by this commenter in a separate letter. Please see Response to Comment Grp 31-56.

Response to Comment Grp 32-10

This comment summarizes comments made by this commenter in other letters. Please see Responses to Comments Grp 31-63 through Grp 31-66.

Response to Comment Grp 32-11

The commenter states that heavy metal contamination would occur once mining has ceased, the mine is flooded and drainage from the mine recommences. As stated on page 4.8-51 of the DEIR, after mining is completed, and as underground mine workings fill with groundwater, water from the underground mine workings would begin to seep from the existing drains. The water that would seep from the underground workings is anticipated to have similar water quality to the water that currently discharges from the existing drains. Specifically, it may contain elevated levels of iron and manganese. Therefore, the conditions after mining is completed would be similar to existing, or baseline, conditions, such that re-activation of the seeps would not represent a potentially significant impact under CEQA. Although part of the existing environmental setting, some of the seeps have elevated arsenic levels that could pose a threat to human health or the environment. However, despite these existing discharges from the drains, the reported concentrations of all metals and other constituents in the Wolf Creek samples are well below the NPDES water quality standards. Please also see Master Response 8 - Mine Waste Characterization.

Response to Comment Grp 32-12

The commenter states the DEIR is inadequate. Responses to specific comments are provided above.

Form Letter A 1

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/16/2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Gold mines creates a lot of waste that can contain toxic substances that threaten to pollute groundwater and surface waters. My personal reasons to oppose the Gold Mining is my and my family health, my property value decrease.

A 1-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: ANASTASIA OSLING

Address: 155 Success Mine Loop
Grass Valley, CA 95945

Phone number: (530) 446-6691

Email: Mizzsolaris@gmail.com

RECEIVED
FEB 22 2022
NEVADA COUNTY
PLANNING DEPARTMENT

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 1: ANASTASIA OSLING

Response to Comment A 1-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With regard to the pollution of groundwater and surface water, please refer to Impact 4.8-1 in Chapter 4.8, Hydrology and Water Quality, of the DEIR, which provides a detailed analysis of whether the project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Please also see Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 2

Dist 3

RECEIVED
FEB 22 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Date: 2/16/2022

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 2-1 The Gold Mining in Grass Valley will create a lot of waste that contain toxic substances that threaten to pollute ground and surface waters.
My personal reason to oppose the Gold Mine is my / my family health and my property value going down.
Do not open the Idaho - Maryland Mine.

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Anastasia Osing

Address: 155 Success Mine Loop
Grass Valley, CA 95945

Phone number: (530) 446-6691

Email:

FORM LETTER A 2: ANASTASIA OSLING

Response to Comment A 2-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With regard to the pollution of groundwater and surface water, please refer to Impact 4.8-1 in Chapter 4.8, Hydrology and Water Quality, of the DEIR, which provides a detailed analysis of whether the project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Please also see Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 3

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 3-1

If opening a mine here is a good idea, someone locally or within CA or USA would have done this long ago. So I object to it happening at all and certainly not by a company from outside the U.S. Rise Gold also has litigation against them which doesn't make them sound like a company to be trusted with our local, valuable assets.

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Barbara Brown

Name: BARBARA BROWN

Address: 251 Willow Valley Rd #14, Nevada City

Phone number: 530-265-6027

Email: barbara95959@gmail.com

RECEIVED
JAN 28 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER A 3: BARBARA BROWN

Response to Comment A 3-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter A 4

Dist 1

RECEIVED
FEB 22 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

EACH SUPERVISOR REC'D

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/15/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 4-1

As a native of Nevada City and as a homeowner here, I oppose the reopening of the mine for reasons of quality of life. There will be more air pollution with the increase of dust and traffic. I'm afraid the project will lead to blight both environmentally and socially. Please vote NO!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our mission calls us "to use our human, spiritual and financial resources to make a difference in our local community and the world." Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: CARLETON FORSMAN

Address: 12952 Forsman Pl. Nevada City 95959

Phone number: 415-305-9383

Email: Catzforsman@gmail.com

FORM LETTER A 4: CARLTON FORSMAN

Response to Comment A 4-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns about air quality, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns related to increased traffic on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR. With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter A 5

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 18 January 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

WHERE DO YOU THINK THE WATER will come from since were possibly in continuous DRAUGHT ?
DO YOU Really THINK the WATER will be safe to recycle?
Noise !!! Explosions Large commercial trucks in our Our quality of life will never be the same !

A 5-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: CARMEN Riley

Address: 355 North church St GV 95945

Phone number: 530. 272.2803

Email: redlavacade@yahoo.com

RECEIVED
JAN 29 2022

FORM LETTER A 5: CARMEN RILEY

Response to Comment A 5-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With regards to concerns about drought, please see Master Response 16. With regard to concerns about noise pollution, please refer to Impacts 4.10-1 through 4.10-3 in Chapter 4.10, Noise and Vibration, of the DEIR, which provide a detailed analysis of whether the project would result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Form Letter A 6

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 18 January 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

WHERE DO YOU THINK THE WATER IS COMING FROM SINCE WE'RE POSSIBLY IN CONTINUED DRAUGHT?!
DO YOU REALLY THINK THE WATER WILL BE SAFE TO RECYCLE?
NOISE!!! CONSTANT EXPLOSIONS
OUR QUALITY OF LIFE WILL NEVER BE THE SAME!

A 6-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: CARMEN RILEY

Address: 355 NORTH CHURCH ST GV 95945

Phone number: 530.272.2803

Email: redlarkcache@yahoo.com

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 6: CARMEN RILEY

Response to Comment A 6-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With regards to concerns about drought, please see Master Response 16. With regard to concerns about noise pollution, please refer to Impacts 4.10-1 through 4.10-3 in Chapter 4.10, Noise and Vibration, of the DEIR, which provide a detailed analysis of whether the project would result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Form Letter A 7

Dist 1

RECEIVED
JAN 21 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Jan 19, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 7-1 The mine will pollute the air. I suffer from asthma and chronic lung problems.
The mine could remove 1 to 3 million gallons of water per day for years dewatering hundreds of wells. I have a well so this is of concern to me.
The dumping of wastewater into South Fork Wolf Creek will destroy ecosystems and natural habitats.
Property values could go down by 30% or more & wells go dry.

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Carol Hyndman
Address: 14740 Orrfalli Rd Grass Valley CA 95949
Phone number: 530) 477-0693
Email:

FORM LETTER A 7: CAROL HYNDMAN

Response to Comment A 7-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 8

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan 19, 2022



Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Senior & suffer from Asthma and Chronic lung problems the air pollution is of concern to me
The ~~mass~~ removal of 1-3 million gallons of water per day as warrisen senior & am on a well. Property values could drop by up to 30% if wells go dry
The waste water will destroy natural habitats and ecosystems.

A 8-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Carol Hyndman

Address: 14740 Oregon Ridge Grass Valley, CA 95945

Phone number: 530) 477-0693

Email:

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 8: CAROL HYNDMAN

Response to Comment A 8-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 9



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/17/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 9-1

My cardio-respiratory system is already sensitized (allergic) to diesel exhaust, which contains hundreds of toxic chemicals, as well as particulates fine enough to get into one's blood with adsorbed chemicals. The mine anticipates continuous diesels (hauling explosives + rock — 100 trips a day. NO!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our mission calls us "to use our human, spiritual and financial resources to make a difference in our local community and the world." Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Carol Kuczora

Name: CAROL KUCZORA

Address: 11198 BUTLER RD

Phone number: (530) 273-7771

Email: CAROL.KUCZORA98@GMAIL.COM

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER A 9: CAROL KUCZORA

Response to Comment A 9-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as diesel exhaust, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter A 10



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/17/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 10-1

My CARDIO-RESPIRATORY SYSTEM IS ALREADY SENSITIZED (ALLERGIC) TO DIESEL EXHAUST, WHICH CONTAINS HUNDREDS OF TOXIC CHEMICALS, AS WELL AS PARTICULATES FINE ENOUGH TO GET INTO ONE'S BLOOD WITH ADSORBED CHEMICALS. THE MINE ANTICIPATES CONTINUOUS DIESELS HAULING EXPLOSIVES + ROCK — 100 TRIPS A DAY. NO!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our mission calls us "to use our human, spiritual and financial resources to make a difference in our local community and the world." Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Carol Kuczora

Name: CAROL KUCZORA

Address: 11198 BUTLER RD

Phone number: (530) 273-7771

Email: CAROL.KUCZORA98@GMAIL.COM

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER A 10: CAROL KUCZORA

Response to Comment A 10-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as diesel exhaust, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter A 11

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/18/2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

1) Rise Gold has never opened a hard rock mine & has never made a profit on previous ventures. He has been charged with environmental violations in BC.
2) Removal of precious water (which is more precious than gold) 1-3 MILLION GALLONS of contaminated water, to our streams and emptying our wells as good water flows into mine shafts

A 11-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Carolyn Battaini

Name: Carolyn Battaini

Address: 14027 Liquidambar Ln. Grass Valley CA 95945

Phone number: 650-996-1939

Email: crosjb@me.com

RECEIVED
FEB 23 2022
NEVADA COUNTY PLANNING COMMISSION

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 11: CAROLYN BATTAINI

Response to Comment A 11-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 12

RECEIVED
JAN 20 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/17/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The quality of life in Nevada County would be seriously damaged: air quality, truck traffic, blasting, environmental damage— Haven't we learned our lessons from hard-rock and hydraulic mining? These kinds of damages can not be undone.

A 12-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Cheryl Morris

Name: Cheryl Morris

Address: 113 Defiant Way, GV 95945

Phone number: 530-273-1980

Email: Jmorris4550-cheryl@yahoo.com

FORM LETTER A 12: CHERYL MORRIS

Response to Comment A 12-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter A 13

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

RECEIVED
JAN 21 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Date: 1/17/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The quality of life in Nevada County would be seriously damaged: air quality, truck traffic, blasting, environmental damage. Haven't we learned our lessons from hardrock and hydraulic mining? These kinds of damages cannot be undone.

A 13-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Cheryl Morris

Name: Cheryl Morris

Address: 113 Defiant Way, GV 95945

Phone number: 530-273-1990

Email: jmorris4550-cheryl@yahoo.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 13: CHERYL MORRIS

Response to Comment A 13-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter A 14

RECEIVED
JAN 20 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- the mine will pollute our air & increase lung disease.
- hard rock mining is the single largest source of toxic waste in the U.S.
- Clouds of airborne toxic mining dust, including asbestos, will drift downward into Grass Valley!!!

A 14-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Constance Wright
Address: 196 Northridge Dr. Grass Valley 95945
Phone number: 530-205-9835
Email: connie jean wright 123@gmail.com

FORM LETTER A 14: CONSTANCE WRIGHT

Response to Comment A 14-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter A 15

RECEIVED
JAN 21 2022
NEVADA COUNTY PLANNING DEPARTMENT

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan 22, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine will pollute our air and increase lung disease
- Homeowners can lose an estimated 20% in their property values
- Vast amounts of diesel exhaust will be produced from continuous operation, including the trucking in of explosives

A 15-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Constance J Wright
Address: 196 North Ridge Dr, Grass Valley 95945
Phone number: 503 205 9835
Email: Conniejeanwright123@gmail.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 15: CONSTANCE WRIGHT

Response to Comment A 15-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization.

Form Letter A 16

Dist 3

RECEIVED
JAN 20 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1-17-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The risks to the environment far outweigh the benefits. The volume of water that will be discharged into Wolf Creek will forever change that eco system. Hard rock mining is the single largest source of toxic waste in the US. The noise and increase industrial truck traffic will change the quality of life in G.V. There are so many other concerns, but these are my top two

A 16-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,
Gwen P. Eymann

Name: Gwen Eymann
Address: 512 Butler St., G.V. CA 95945
Phone number: 530 274-7965
Email: gweneymann@gmail.com

FORM LETTER A 16: GWEN P. EYMANN

Response to Comment A 16-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With regard to concerns about noise pollution, please refer to Chapter 4.10, Noise and Vibration, of the DEIR. Regarding concerns about increased truck traffic, please refer to Chapter 4.12, Transportation, of the DEIR.

Form Letter A 17

RECEIVED
JAN 21 2022
NEVADA COUNTY
PLANNING

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1-17-22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:
The risks to the environment far outweigh the benefits of this project. The volume of water that will be discharged into Wolf Creek will forever change that eco system. Hard rock mining is the single most toxic waste producing industry in the USA. The noise and increase industrial truck traffic will change the quality of life in G.V. And there is so much more but these are my two biggest concerns

A 17-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,
Gwen P. Eymann

Name: Gwen P. Eymann
Address: 512 Butler St. Grass Valley, CA 95945
Phone number: 530 274-7965
Email: gweneymann@gmail.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 17: GWEN P. EYMANN

Response to Comment A 17-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With regard to concerns about noise pollution, please refer to Chapter 4.10, Noise and Vibration, of the DEIR. Regarding concerns about increased truck traffic, please refer to Chapter 4.12, Transportation, of the DEIR.

Form Letter A 18

Dist 1

February 12, 2022

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading, and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, piling it higher than a 6-story building at the Centennial site.
- Blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area.
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- While Rise Gold shareholders profit, the local community gets little revenue.
- Where will the imported workers live when housing is so limited in our area?

A 18-1

I am a member of the local faith-based organization the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Janet L. Dunstan
19595 Bow Valley Road
Grass Valley, CA 95945
Phone number: 530-205-8154
Email: janetldunstan@gmail.com

FORM LETTER A 18: JANET DUNSTAN

Response to Comment A 18-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter A 19

Past 3

RECEIVED
JAN 20 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 17 Jan. 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Degradation of the environment

A 19-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Jennifer O. Dewey
Address: 1049 Laurel Lane, Grass Valley, Ca. 95945
Phone number: (530) 210-6320
Email: hennifreed@gmail.com

FORM LETTER A 19: JENNIFER O. DEWEY

Response to Comment A 19-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter A 20

RECEIVED
JAN 21 . 22
NEVADA COUNTY
PLANNING DEPARTMENT

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 17 Jan. 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Degradation of the environment

A 20-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Jennifer O. DEWEY

Address: 1049 laurel lane, grass Valley, Ca. 95945

Phone number: (530) 270-6320

Email: jennifercdo@gmail.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

this in our h

FORM LETTER A 20: JENNIFER O. DEWEY

Response to Comment A 20-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter A 21

RECEIVED
Dist 3
FEB 16 2021
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/27/21

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I (and 80% of my friends) live & work nearby.

A 21-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Jesse Wilson (CEO, Brown Banana Books)
Address: 671 Maltman Dr., Grass Valley
Phone number: 530-886-9509
Email: [redacted]@protonmail.com
BrownBananaBooks

FORM LETTER A 21: JESSE WILSON

Response to Comment A 21-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter A 22

D.ist 3

RECEIVED

JAN 21 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

THEY REMOVE AT LEAST 1 MILLION GALLONS OF WATER EVERY DAY DEWATERING HUNDREDS OF WELLS

A 22-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: JOEL HOUTMAN

Address: 446 CHAPEL ST, GRASS VALLEY

Phone number: 530-273-2925

Email: jhoutman@gmail.com

FORM LETTER A 22: JOEL HOUTMAN

Response to Comment A 22-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model.

Form Letter A 23



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

THE REMOVAL OF AT LEAST 1 MILLION GALLONS OF WATER EVERY DAY DEWATERING HUNDREDS OF WELLS

A 23-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: JOEL HOUTMAN

Address: 418 CHAPEL ST, GRASS VALLEY, CA

Phone number: 530-273-2725

Email: jhoutman@gmail.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 23: JOEL HOUTMAN

Response to Comment A 23-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model.

Form Letter A 24

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan. 23, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

air pollution - I recently read a presentation by Pam Heard, a respitory therapist given on Dec 16, 2021 she detailed toxic air pollutants that would be released by the mine operations — diesel ex haust, radon silica & asbestos. I moved here in 2019 with my daughter, son-in-law & grand-children. The mine would dash our hopes for a safe, beautiful environment

A 24-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Mary Pickett

Address: 305 West Main St. Apt 205, Grass Valley, CA 95945

Phone number: 575.779.2737

Email: ~~Mary~~ marypickett2@gmail.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

RECEIVED
JAN 29 2022

FORM LETTER A 24: MARY PICKETT

Response to Comment A 24-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter A 25

Unable to identify

RECEIVED

JAN 19 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Jan 13, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:
our quality of life. ongoing econ. effects, air, water etc

A 25-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely, MRidgway

Name: MELISSA Ridgway

Address: 222 Maidu Lane

Phone number:

Email:

FORM LETTER A 25: MELISSA RIDSWAY

Response to Comment A 25-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life and economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter A 26

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan 13, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:
quality of life, econ., water, air, seismic etc

A 26-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

RECEIVED
JAN 19 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Sincerely, melissa Ridgway

Name: melissa Ridgway

Address: [redacted]

Phone number:

Email:

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 26: MELISSA RIDSWAY

Response to Comment A 26-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Quality of life and economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter A 27

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/21/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

(1.) County does not have the ability to monitor EPR mitigations 24/7, seven days per week
(2.) Bad track record of Rise Gold Mine mgmt.
(3.) Lowering my property value. I have lived 33 yrs. less than 5 miles from the mining site off Brunswick

A 27-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Paul B Elms
Address: 12125 Crystal Springs Rd.
Phone number: 530-414-6055
Email: ppcpaulie2000@gmail.com

FEB 25 2022

FORM LETTER A 27: PAUL ELINS

Response to Comment A 27-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter A 28

RECEIVED
FEB 10 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/6/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Hard rock mining is the single largest souce of toxic waste in the USA.
Trucks hauling 1000 tons of waste rock, 100 trips every day, down Brunswick Rd.
Blasting 7 days a week in the tunnels under Grass Valley.
Homeowners can lose an est. 20% in property values.
Removal of 1-3 million gallons of contaminated water per day, dewatering hundreds of wells and ruining downstream ecosystems.

A 28-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our mission calls us "to use our human, spiritual and financial resources to make a difference in our local community and the world." Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Ruth Edwards

Name:
Ruth Edwards
Address:
17833 Foxtail Drive, Penn Valley, CA 95946
Phone number: 530-278-6030
Email: ruthjoedwards@hotmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER A 28: RUTH EDWARDS

Response to Comment A 28-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 29

RECEIVED
FEB 10 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/7/22
D5th

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Hard rock mining is the single largest source of toxic waste in the USA.
Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Rd.
Blasting 7 days a week in tunnels under Grass Valley.
Homeowners can lose an est. 20% in property values.
Tourist trade will be hurt.
Removal of 1-3 million gallons of contaminated water per day, dewatering hundreds of wells and ruining downstream ecosystems.

A 29-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our mission calls us "to use our human, spiritual and financial resources to make a difference in our local community and the world." Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Ruth Edwards

Name: Ruth Edwards
Address: 17833 Fortail Drive, Penn Valley, CA 95946
Phone number: 530-278-6030

Email: ruthjoedwards@hotmail.com

FORM LETTER A 29: RUTH EDWARDS

Response to Comment A 29-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter A 30

Dist 1

RECEIVED
FEB 22 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/18/2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Lies, deceptions, and false claims to the community, and his investors.

If approved will leave a path of destruction for us – and he goes back home to Canada,

A 30-1

Can't afford this mistake!!!!!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely, [signature]

Name: Steven J. Battaini

Address: 14027 Liquidambar Ln., Grass Valley CA 95945

Phone number: 530-240-5060

Email: dvsjb7@gmail.com

FORM LETTER A 30: STEVEN BATTAINI

Response to Comment A 30-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter A 31

Dist 1

RECEIVED

JAN 28 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/25/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine would significantly change the cultural/social environment, away from the current focus on culture, art, crafts, writing and healthy retirement.
- Traffic issues in the 174/Brunswick corridor, already difficult, would decline
- N County taxpayers should not be asked to risk/trust Rise Gold + Mossman, based on the sad history of both.
- Mossmans legal/environmental issues with indigenous BC does not bode well in our area.
- The energy demands of a functional I/M would require downgrading of our ambitions and progressive county plan to reduce fossil fuel dependency.
- Published health risks of mine communities are a big negative for some vulnerable seniors in our large retirement communities

A 31-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely, Steve Temple

Name: Steven Temple

Address: 13459 Bass Trail GV 95945

Phone number: 530 220-0995

Email: SRTemple@UCDavis.edu

FORM LETTER A 31: STEVEN TEMPLE

Response to Comment A 31-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Social and economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns related to increased traffic on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR. Regarding energy demand, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter A 32

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/25/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- It will significantly change the cultural/social environment in a negative way.
- It would add large traffic issues in the 174/Brunswick corridor.
- No taxpayer should not be asked to trust Rise Gold and Mossman based on Mossman's legal issues with native people in B.C. is serious, their collective history.
- The energy demands of the mine would require major revision of our N.C. plan and strategy for reducing energy dependence on fossil fuels.
- Our NC community thrives on retirement seniors vulnerable to some of the numerous health concerns.

A 32-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Steven Temple

Name: Steven Temple

Address: 13459 Bass Trail, GV, 95945

Phone number: 530-220-0995

Email: SRTemple@UCDavis.edu

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

RECEIVED
JAN 31 2022

FORM LETTER A 32: STEVEN TEMPLE

Response to Comment A 32-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Social and economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns related to increased traffic on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR. Regarding energy demand, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter A 33

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: February 17, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:
Rise has yet to say how they will mitigate the air pollution produced by multi-ton diesel trucks running 16 hrs/day, 7 days/week, 365 days/year nor the heavy, diesel-powered equipment. GV is already known as the "bad pipe" of Gold County with the air pollution from Sacramento & the Central Valley trapped here each summer. Will I be forced to wear a mask on every dog walk, bike, stroll through neighborhood? I want to live here and breathe !!

A 33-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,
Susan Merrill

Name: Susan Merrill

Address: 115 Union Jack St. #47
Grass Valley, CA 95945

Phone number: 415-505-1251

Email:
merrillsl@comcast.net

RECEIVED
FEB 23 2022
NEVADA COUNTY
COMMUNITY DEVELOPMENT

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 33: SUSAN MERRILL

Response to Comment A 33-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, please refer to Impact 4.3-2 in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy of the DEIR, which provides a detailed analysis of whether the project would expose sensitive receptors to substantial pollutant concentrations, including toxic air contaminants such as diesel exhaust.

Form Letter A 34

Dist 3

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: February 18, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 34-1 Rise has yet to say how they will mitigate the air pollution caused by multi-ton diesel trucks running 16 hrs./day, 7 days/week, 365 days/year and the diesel-powered, heavy equipment. GV is already known as the "tail pipe" of Gold County due to the air pollution from Sacramento and the Central Valley that gets trapped here every summer. Will I be forced to wear a mask year round on ~~so~~ every dog walk, hike, stroll through the neighborhood or even stepping out to ~~greet~~ greet a neighbor? I want to live here and I want to BREATHE!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Susan Merrill

Name: Susan Merrill

Address: 115 Union Jack St. #47
Grass Valley, CA 95945

Phone number: 415-505-1251

Email: merrillsl@comcast.net

FORM LETTER A 34: SUSAN MERRILL

Response to Comment A 34-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, please refer to Impact 4.3-2 in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy of the DEIR, which provides a detailed analysis of whether the project would expose sensitive receptors to substantial pollutant concentrations, including toxic air contaminants such as diesel exhaust.

Form Letter A 35

Dist 3

RECEIVED

Date: FEB 11 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 35-1

Rise Gold is in litigation on their last project for failing to adhere to environmental infractions and clean it up. There is not a single reason for this mine reopening that is beneficial to our community or environment. The only benefit goes to share holders & politicians who are in their pocket. Wake up and do what is right!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely Teresa Freeman

Name: Teresa Freeman

Address: 334 S. School St. Apt B
Grass Valley, CA 95945

Phone number: 530-545-3142

Email: T-Freeman48@Hotmail.com

FORM LETTER A 35: TERESA FREEMAN

Response to Comment A 35-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter A 36

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/18/2022

RECEIVED
JAN 21 2022
COUNTY PLANNING DEPARTMENT

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Hard rock mining is the largest source of toxic waste in the U.S. Trucks will haul mine waste rock, 100 trips every day down Brunswick road, making a pile higher than 6 stories at the Centennial site. Not only that, but Rise Gold already has numerous violations of mining & environmental laws.

A 36-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Theresa Houtman

Name: Theresa Houtman
Address: 418 Chapel, Grass Valley
Phone number: 530 277-9294
Email: Gardenangel481@Gmail.com.

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 36: THERESA HOUTMAN

Response to Comment A 36-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization.

Form Letter A 37

Bost 3

RECEIVED
JAN 0 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/16/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

This mine will
1. Run 24hrs a day
2. Large trucks will be running locally continuously All day long
3. Lower property values of homes due to disruption
4. Large volumes of contaminated water dumped into Wolf creek continuously.
5. a minimal number of people will be Locally hired
6. It will hurt tourism
7. stress, noise, traffic

A 37-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Walter Holtan

Name: Walter Holtan

Address: 512 Butler St
Grass Valley CA 95945

Phone number: 530 274 7965

Email: bstiknbb@gmail.com

FORM LETTER A 37: WALTER HOLTAN

Response to Comment A 37-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter A 38



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/16/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The mine will

1. Run 24 hrs per Day
2. Large trucks will be running loudly continuously all Day.
3. Lower property values of homes
4. Large volumes of contaminated water dumped into Wolf Creek and Idaho Maryland Mine.

A 38-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Wally Holtan

Name: WALTER HOLTAN

Address: 512 Butler St
Grass Valley, CA 95945

Phone number: 530 274 7965

Email: bstikal60@gmail.com

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER A 38: WALTER HOLTAN

Response to Comment A 38-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter A 39

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 11 Feb 22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Keep the Gold in the ground!
Do not pollute and use our water!
Do not pollute our air - I am 84 years old - protect our Health!
potential Rise danger!

A 39-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely, W Bault

Name: WILLIAM BAULT
Address: 231 Woodside CT. Grass Valley
Phone number: 530-272-1736
Email: — none

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

RECEIVED
FEB 18 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER A 39: WILLIAM BAULT

Response to Comment A 39-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With regard to the pollution of groundwater and surface water, please refer to Impact 4.8-1 in Chapter 4.8, Hydrology and Water Quality, of the DEIR, which provides a detailed analysis of whether the project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Please also see Master Response 35 - Discharge to South Fork Wolf Creek. Please refer to Chapter 4.13, Wildfire, of the DEIR with regard to impacts associated with potential fire danger.

Form Letter A 40

Dist 3

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Date: 11 Feb 22

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A 40-1

Keep the gold in the ground!
Do not pollute and use our water!
Do not pollute the air – I am 84 years old – protect our Health.
Potential fire danger!

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely, WBault

Name: William Bault
Address: 231 Woodside CT, Grass Valley
Phone number: (530) 272-1736
Email: none

FORM LETTER A 40: WILLIAM BAULT

Response to Comment A 40-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With regard to the pollution of groundwater and surface water, please refer to Impact 4.8-1 in Chapter 4.8, Hydrology and Water Quality, of the DEIR, which provides a detailed analysis of whether the project would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Please also see Master Response 35 - Discharge to South Fork Wolf Creek. Please refer to Chapter 4.13, Wildfire, of the DEIR with regard to impacts associated with potential fire danger.

Form Letter B 1

Not a County resident

RECEIVED

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: FEB 07 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I will not buy property here or support business if mine opens

B 1-1

Frequent visitor

I am ~~resident~~ of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, [signature]

Name: Aaron Corbiere

Address:

Phone number: 800 753-8733

Email:

FORM LETTER B 1: AARON CORBIECE

Response to Comment B 1-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 2



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/8/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses. Their untruthful "poll" of our sample citizenry, complete with prevarications of support for the mine, have been an affront, plastered on the back page of the Union.

There are many reasons this mine should NOT be reopened. My personal reasons are:

1. Concern for the wellbeing and safety of the thousands of residents surrounding the mine and waste sites.
2. Water contamination or dewatering of the wells of the surrounding properties.
3. Air pollution; toxic asbestos dust, diesel exhaust.
4. Underground tremors from blasting.
5. Noise of crushers running 24/7.
6. Previous and continuing violations of mining and environmental laws by Rise Gold.
7. Bankruptcy of Rise Gold.
8. Lowering of property values.
9. The disruption of our quiet, rural way of life, the very thing that brought us to this idyllic area from the noisy, contaminated, exceptionally crowded Los Angeles megalopolis.

B 2-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

This is a bad company, out to extract money from our land at any price, regardless of the welfare of our citizens, our water, our state, our environment. Please vote NO.

Sincerely,

Name: Alan James
Address: 13430 Jeabjo Way, Nevada City, CA 95959
Phone number: 530-263-4996
Email: alanmjames@yahoo.com

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 2: ALAN JAMES

Response to Comment B 2-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek. Vibration associated with blasting, as well as noise impacts related to the proposed project operations, is addressed in Chapter 4.10, Noise and Vibration, of the DEIR.

Form Letter B 3

Dist 4 RECEIVED
FEB 11 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/9/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses. Their untruthful "poll" of our sample citizenry, complete with prevarications of support for the mine, have been an affront, plastered on the back page of the Union.

There are many reasons this mine should NOT be reopened. My personal reasons are:

1. Concern for the wellbeing and safety of the thousands of residents surrounding the mine and waste sites.
2. Water contamination or dewatering of the wells of the surrounding properties.
3. Air pollution; toxic asbestos dust, diesel exhaust.
4. Underground tremors from blasting.
5. Noise of crushers running 24/7.
6. Previous and continuing violations of mining and environmental laws by Rise Gold.
7. Bankruptcy of Rise Gold.
8. Lowering of property values.
9. The disruption of our quiet, rural way of life, the very thing that brought us to this idyllic area from the noisy, contaminated, exceptionally crowded Los Angeles megalopolis.

B 3-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

This is a bad company, out to extract money from our land at any price, regardless of the welfare of our citizens, our water, our state, our environment. Please vote NO.

Sincerely,

Name: Alan James
Address: 13430 Jeabjo Way, Nevada City, CA 95959
Phone number: 530-263-4996
Email: alanmjames@yahoo.com

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 3: ALAN JAMES

Response to Comment 3-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek. Vibration associated with blasting, as well as noise impacts related to the proposed project operations, is addressed in Chapter 4.10, Noise and Vibration, of the DEIR.

Form Letter B 4

RECEIVED
MAR 23 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: March 20, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Are you Kidding Me??!! (Were do you live??)
Please Do your Homework on this company!
I have done a complet Info check and I give them a (F-).
Please open your eyes and look into your hearts!
the Impack on our community will be change forever!

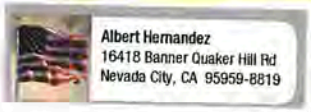
B 4-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Mr Albert Hernandez

And I care about our Community and this beautiful Co.

Name:
Address:



Phone number: 530 . 864-2480

Email: N/A I dont have a computer!

FORM LETTER B 4: ALBERT HERNANDEZ

Response to Comment B 4-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

Form Letter B 5

Dist 2

RECEIVED
MAR 17 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 3/13/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 5-1

Air + Water toxins
traffic snarls
roads diminished
quality of small-town life destroyed
noise pollution

Don't do it!

I am resident of Nevada County and observe that Rise Gold corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Alison Osborn

Name: Alison Osborn

Address: PO Box 453 Grass Valley 95945

Phone number: 20073 Ocelot Dr Grass Valley 95949

Email: alisonosborn@sbcglobal.net

FORM LETTER B 5: ALISON OSBORN

Response to Comment B 5-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 6

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 3/13/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 6-1

air + water toxins
traffic !
roads diminished
quality of small-town life destroyed
noise pollution
Don't do it!

RECEIVED
MAR 18 2022
NEVADA COUNTY
PLANNING DEPARTMENT

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Alison Osborn

Name: Alison Osborn

Address: PO Box 453 Grass Valley 95945

Phone number:

Email: alisonosborn@sbcglobal.net

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 6: ALISON OSBORN

Response to Comment B 6-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 7

NO MINE!!!
Too Risky!!

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/16/2022

RECEIVED
FEB 22 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I have concerns about the energy and water consumption of this enterprise, in particular the potential to drive up prices for these commodities in the area, potential to drain wells of people who are currently self-sufficient in water. Also, I have concerns about the noise and pollution of the mine and the potential for sinkholes and other problems, environmental in nature, that will be created in Wolf Creek. This is an area where a major sinkhole had already opened up in 2017 (across Nevada City, CA 95959) considered to be a "critical drain" for the city of Grass Valley. Wolf Creek goes right through downtown, so massive increased water flow could have enormous impact if it floods, causes excess debris, or more sinkholes as a result of high flow.

B 7-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Amanda Ganong

Name: Amanda Ganong

Address: 10626 Banner Lava Cap Rd, Nevada City, CA 95959

Phone number: ~~857~~ 928.4043

Email: amandaganong@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 7: AMANDA GAHONG

Response to Comment 7-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns over energy consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. With regard to concerns about noise pollution, please refer to Chapter 4.10, Noise and Vibration, of the DEIR. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Please see Master Response 29 – Near Surface Workings, regarding sink hole concerns.

Form Letter B 8

NO MINE!!!
Too Risky!!

Dist 1

RECEIVED
FEB 22 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/16/2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I have concerns about the energy and water consumption of this enterprise, in particular the potential to drive up prices for these commodities in the area, and the potential to drain wells of people who are currently self-sufficient in water. Also, I have concerns about the noise and pollution of the mine and the potential for sink holes and other problems, environmental in nature, that will be created in Wolf Creek. This is an area that is considered a "central drain" for the city of Grass Valley, and a place where a sink hole had already opened up in 2017. Wolf creek flows right through downtown with some underground culverts, so a massive increase in waterflow as predicted by the large amounts of water the mine anticipates in pumping — could have devastating consequences if it floods or clogs with debris.

B 8-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Amanda Gaunary

Address: 10626 Banner Lava Cap RD, Nevada City, CA 95959

Phone number: 857-928-4843

Email: amandaGaunary@gmail.com

FORM LETTER B 8: AMANDA GAHONG

Response to Comment B 8-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns over energy consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. With regard to concerns about noise pollution, please refer to Chapter 4.10, Noise and Vibration, of the DEIR. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Please see Master Response 29 – Near Surface Workings, regarding sink hole concerns.

Form Letter B 9

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Feb 1, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- Nevada County currently has a surplus of unfilled job positions.
- Where will the imported workers live when housing is so limited in our area.

B 9-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Amanda Kenney

Name: Amanda Kenney

Address: 17842 Gray Oak dr RR Ca 95975

Phone number: 916-769-9674

Email: Coasta4@live.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 07 2022

FORM LETTER B 9: AMANDA KENNEY

Response to Comment B 9-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, Master Response 2 – Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

Form Letter B 10

Dist 4

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

RECEIVED Date: Feb 1, 2022

FEB 07 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 10-1 @ Claims that a few hundred jobs cannot justified the likelihood of increased Lung Cancer in Nevada County.

I am resident of Nevada County and observe that Rise Gold corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Amanda Kenney

Name: Amanda Kenney
Address: 17843 Gray Oak dr RR Ca 95975
Phone number: 916-769-9674
Email: coasta4@live.com

FORM LETTER B 10: AMANDA KENNEY

Response to Comment B 10-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, Master Response 2 – Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

Form Letter B 11

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/9/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 11-1

The mine will pollute our air and increase lung disease. My daughter already has lung disease. This could make it worse.
Cloud of airborne toxic mining dust including asbestos will drift down wind into Grass Valley.
Removal of 1-3 million gallons of contaminated water per day for next 80 years dewatering hundreds of wells.
Wastewater dumped into S. Fork Wolf Cr. will destroy habitat and shrimp, toxic residues

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Amy B. Edwards

Address: 17833 Foxtail Dr. Penn Valley CA 95946

Phone number: 530 277 7773

Email: MS.MOUSKIN41@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 14 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 11: AMY EDWARDS

Response to Comment B 11-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns about water quality and contaminated discharge into South Fork Wolf Creek, please see Master Response 35. Finally, regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 12

Dist 4

RECEIVED
FEB 14 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2-9

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 12-1

The mine will pollute our air and increase lung disease. My daughter already has lung disease. This could make it worse.
Clouds of airborne toxic mining dust, including asbestos will drift downwind into Grass Valley
Removal of 1 million - 3 million gallons of contaminated water per day for the next 80 years de-watering hundreds of wells.
Waste water will be dumped into S. Fork Wolf Creek destroying habitat and stirring up toxic residues.

I am resident of Nevada County and observe that Rise Gold corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Amy B Edwards

Name: Amy B Edwards

Address: 17833 Foxtail Dr. Penn Valley CA 95946

Phone number: 530 277-7773

Email: ms.mouskin41@gmail.com

FORM LETTER B 12: AMY EDWARDS

Response to Comment B 12-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns about water quality and contaminated discharge into South Fork Wolf Creek, please see Master Response 35. Finally, regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 13

12575

RECEIVED

JAN 20 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

January 17, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, Amy R Patterson, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.
- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.
- Hard rock mining is the single largest source of toxic waste in the United States.
- Vast amounts of diesel exhaust will be produced from continuous operation, including the trucking in of explosives.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Crushing of 1,500 tons of mine waste rock every day, all day, using massive machines.
- Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, piling it higher than a 6-story building at the Centennial site.
- Blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area (see map).
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems.
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Claims that a few hundred jobs cannot justify the likelihood of increased lung cancer in Nevada County.
- Nevada County currently has a surplus of unfilled job positions.
- Business that depends on tourism will be hurt.
- Homeowners can lose an estimated 20% in their property values and more if the wells are dry.
- A working mine will shatter the peace and quiet of many neighborhoods.

B 13-1

- Underground blasting is planned for 7 days a week and will be felt by those living above the
2,585 acres of mine underground mineral rights -- see map!
- While Rise Gold shareholders profit, the local community gets little revenue.
- The relatively few theoretical jobs gained will not offset the harm done.
- Where will the imported workers live when housing is so limited in our area?
- An estimated 85% of vendor spending will not be local (explosives, chemicals, concrete, steel...).

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,



Amy R Patterson

267 Hughes Road

Grass Valley, CA 95945-5643

530-273-4681

FORM LETTER B 13: AMY PATTERSON

Response to Comment B 13-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Vibration associated with blasting is addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Finally, regarding concerns about underground blasting effects throughout the mineral rights area, please see Master Response 7.

Form Letter B 14



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

January 17, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, Amy R Patterson, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- Mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.
- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.
- Hard rock mining is the single largest source of toxic waste in the United States.
- Vast amounts of diesel exhaust will be produced from continuous operation, including the trucking in of explosives.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Crushing of 1,500 tons of mine waste rock every day, all day, using massive machines.
- Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, piling it higher than a 6-story building at the Centennial site.

B 14-1

- Blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area (see map).
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems.
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Claims that a few hundred jobs cannot justify the likelihood of increased lung cancer in Nevada County.
- Nevada County currently has a surplus of unfilled job positions.
- Business that depends on tourism will be hurt.
- Homeowners can lose an estimated 20% in their property values and more if the wells are dry.
- A working mine will shatter the peace and quiet of many neighborhoods.
- Underground blasting is planned for 7 days a week and will be felt by those living above the 2,585 acres of mine underground mineral rights -- see map!
- While Rise Gold shareholders profit, the local community gets little revenue.
- The relatively few theoretical jobs gained will not offset the harm done.
- Where will the imported workers live when housing is so limited in our area?
- An estimated 85% of vendor spending will not be local (explosives, chemicals, concrete, steel...).
- Nevada County revenue will be from ordinary property taxes, not from gold.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

Sincerely,



Amy R Patterson

267 Hughes Rd

Grass Valley, CA 95945-5643

530-273-4681

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 14: AMY PATTERSON

Response to Comment B 14-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Vibration associated with blasting is addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Finally, regarding concerns about underground blasting effects throughout the mineral rights area, please see Master Response 7.

Form Letter B 15

Dist 1

RECEIVED
FEB 01 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 01/22/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

POLUTION REASONS

B 15-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: ANDREA STOUT

Address: 560 E. BROAD ST. N.C. 95959

Phone number: 5609551579

Email: ANDREJKSTOUT@GMAIL.COM

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 15: ANDREA STOUT

Response to Comment B 15-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 16

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 01/22/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

POLUTION REASONS

B 16-1



I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: ANDREA STOUT

Address: 560 E. BROAD ST. N.C. 95959

Phone number: 530 955 1579

Email: ANDREJEAMIN@GMAIL.COM

FORM LETTER B 16: ANDREA STOUT

Response to Comment B 16-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 17

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: March 20, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 17-1

The "significant and unavoidable" impacts of noise and vibration! Though the EIR determined that this would only happen during the initial construction activities my feeling and experience with noise is that it can be omnipresent when dealing with a VALLEY which "We are in"! Even minor noises tend to be compounded in hather usual situations (accidents, fire engines, even minor (so called) explosions. Vibration also has significant impacts in an area like ours which has tourist traffic as its major industry. A visit to downtown Grass Valley reveals many businesses use hanging and wall displays to promote their merchandise. Vibration travelling up from under-ground blasting would create havoc with glass, ceramic, and other breakable products. It might be severe enough to put small business "out of business" because of breakage & disarray. We need our tourists to keep the ambiance we have worked so hard to create over the years

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Anita Wald-Tuttle, former co-owner of Tanglewood Forest Gallery for 25 years. A majority of our products being from our trees

Name:
Anita Wald-Tuttle

Address:
6 Rockwood Drive

Phone number:
530-277-6195

Email: anitawlt3@gmail.com

RECEIVED
MAR 24 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 17: ANITA WALD-TUTTLE

Response to Comment B 17-1

The commenter expresses general concerns regarding the noise and vibration impacts of the project, but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Vibration associated with blasting, as well as noise impacts related to the proposed project operations, is addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Also see Master Response 7 related to underground blasting effects.

Form Letter B 18

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: March 20, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 18-1

The "significant and unavoidable" impacts of noise and vibration! Though the EIR determined that this would only happen during the initial construction activities my feeling and experience with noise is that it can be omnipresent when dealing with a VALLEY which "we are in"! Even minor noises tend to be compounded in hither-to usual situations (accidents, fire engines, even minor (so called) explosions. Vibration also has significant impacts in an area like ours which has tourist traffic as its major industry. A visit to downtown Grass Valley reveals many businesses use hanging and wall displays to promote their merchandise. Vibration travelling up from under-ground blasting would create havoc with glass, ceramic, and other breakable products. It might be severe enough to put small business "out of business" because of breakage & disarray. We need our tourists to keep the ambiance we have worked so hard to create over the years

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Anita Wald-Tuttle, former co-owner of Tanglewood Forest Gallery for 25 years. A majority of our products hung from our trees

Name:
Anita Wald-Tuttle
Address:
6 Rockwood Drive
Phone number:
530-277-6195
Email: anitaw1t3@gmail.com

RECEIVED
MAR 24 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 18: ANITA WALD-TUTTLE

Response to Comment B 18-1

The commenter expresses general concerns regarding the noise and vibration impacts of the project, but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Vibration associated with blasting, as well as noise impacts related to the proposed project operations, is addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Also see Master Response 7 related to underground blasting effects.

Form Letter B 19

RECEIVED
JAN 24 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/16/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The mine will polute our air!

B 19-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Anne Emerson
Address: 11859 Old Wood Rd, Nev City
Phone number:
Email: shantiemerson@yahoo.com

FORM LETTER B 19: ANN EMERSON

Response to Comment B 19-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 20

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/31/22

FEB 1 6 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 20-1

When I first heard reports questioning the long-term viability of our Cal Fire air attack base because of encroaching housing developments, I was at a loss for words. Why would we ever jeopardize the safety of existing development to make room for just a little more. And now we think it's a good idea to approve a plan that puts 100 trucks hauling toxic waste on the road connecting that airport & new housing development? I hope my use of "we" doesn't include you. It sounds like a threat to that airport that is our lifeline.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name:
Anna Frizzell
Address:
10392 Willow Valley Rd., Nevada City
Phone number:
707-321-3479
Email: annadfrizzell@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 20: ANNA FRIZZELL

Response to Comment B 20-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 21

Dist 1

RECEIVED
FEB 16 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/14/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 21-1 I am again shocked that we are considering anything that could be cited as threatening our lifeline. I'm referring to our Cal Fire Air Attack base located just down the road from the proposed mine site. I was shocked to hear rumors questioning the long-term viability of the air attack base reported on by the Union in 2021, cited as due to the new housing developments ~~just~~ (Loma Rica). And now we're considering a plan that puts 100 trucks hauling toxic waste on that road connecting the airport & new housing development to town? It sounds like a recipe for disaster to me. + all of the environmental risks to our precious water resources.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Anna Frizzell

Address: 10392 Willow Valley Rd., Nevada City

Phone number: 707-321-3479

Email: annafrizzell@gmail.com

FORM LETTER B 21: ANNA FRIZZELL

Response to Comment B 21-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 22

Dist 4

RECEIVED
FEB 07 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/1/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I don't want the damage to the community
The mine will cause, especially to the environment.

B 22-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Anne Adden

Name: ANNE ADDEN

Address: 10784 PENN VALLEY, CA 95946

Phone number: 530-277-6684

Email: aadden722@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 22: ANNE ADDEN

Response to Comment B 22-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 23

RECEIVED
MAR 23 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Date: 3/19/22

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 23-1

Mining does not belongs so close to our cities and residences. Noise, truck traffic, air quality, and water quality/availability are major concerns. The questionable prior practices of Rise Gold (or it's owner) and Rise Gold's "to good to be true" promises are also major concerns.
We do not need another reason for people to move from the area.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Please NO MINE!

Sincerely, Anne Padget

Name: Anne Padget
Address: 303 Redbud Way NC 95959
Phone number: 530-913-0339
Email: apadget844@gmail.com

FORM LETTER B 23: ANNE PADGET

Response to Comment B 23-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter B 24

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:



Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 24-1

3,6 million gallons of treated wastewata would be released everyday ento the South Fork Wolf Creek for 6 monchs, then 1.2 million gallons a day there after.

Depletion of our region groundwata and impacts to private wells.

Rise Gold claims "zero risk to wells" is a flawed privately funded hydrology study.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Annespeagle

Name:
Annie Speegle
Address:
504 main St. N.C., Ca 95959
Phone number:
530-913-9776
Email:
alspeegle@sbcglobal.net

FORM LETTER B 24: ANNIE SPEEGLE

Response to Comment B 24-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. With respect to effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 25

Dist 1

RECEIVED

JAN 26 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan. 23, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 25-1 Rise Gold Corp. disregards the fact that hard rock gold mining is in no way compatible with the community that Grass Valley has become. The environmental destruction that inevitably comes with mining, the risks to private wells already impacted by drought, and the decline in value for properties in the region. Grass Valley needs cleaner industries with staying power to contribute to economic resiliency.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Annie Speegle

Name: Annie Speegle

Address: 506 main St. Nevada City, Ca, 95959

Phone number: (530) 913-9776

Email: ahspeegle@sbcglobal.net

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 25: ANNIE SPEEGLE

Response to Comment B 25-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3. Property values and economic resiliency concerns are outside the scope of CEQA – Please see Master Response 2.

Regarding concerns about the proposed project's compatibility with the surrounding land uses, please refer to Chapter 4.9, Land Use and Population and Housing, of the DEIR. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells..

Form Letter B 26

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2.18.21

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 26-1 Home owner property values will plummet in neighborhoods impacted by operations & transportation.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Ari Haze
Address: 15420 Lower Colfax Rd. Grass Valley
Phone number: (415) 308-6691
Email: Ari@HopeArch.net

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 18 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 26: ARI HOPE

Response to Comment B 26-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, Master Response 2 – Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

Form Letter B 27

RECEIVED
JAN 26 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: January 22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- air pollution and lung disease
- removing millions of gallons of contaminated water will deplete our already low water supply
- waste water will be dumped in the creek near my home.
- toxic chemicals that are dumped will harm the ecosystem.
- dry wells = less people moving near here = no money

B 27-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Aseyn Neal
Address: 122 Berriman loop
Phone number: 231-715-8249
Email: aselfnelpza@gmail.com

FORM LETTER B 27: ASELIN NEAL

Response to Comment B 27-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. With respect to concerns regarding water contamination and effects on nearby wells, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 35 - Discharge to South Fork Wolf Creek. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization.

Form Letter B 28

BIST S

RECEIVED

JAN 26 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/22/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- Removal of 1-3 million gallons of contaminated water per day for the next 60 years, dewatering 100's of wells
- Trucks hauling 1,000 tons of water rock, 100 trips every day, down Brunswick Rd, piling it higher than a 6 story bulding at the Centennial site.
- while Rise Gold shareholders profit, the local community gets little revenue.

B 28-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Ashley Berry
Address: 13470 Mule Canyon Rd. Grass Valley, CA 95945
Phone number: (413) 588-8302
Email: ashleyberrybodywork@gmail.com

FORM LETTER B 28: ASHLEY BERRY

Response to Comment B 28-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, Master Response 2 – Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 29

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/22/22

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 29-1

- Removal of 1-3 million gallons of contaminated water per day for the next 80 years, dewatering 100's of wells
- Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Rd. piling it higher than a 6 story building at the Centennial site
- While Rise Gold Shareholders profit, the local community gets little revenue

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name:
Ashley Berry
Address:
13470 Mule Canyon Rd. Grass Valley, CA 95945
Phone number:
(413) 588-8302
Email: ashleyberrybodynorc@gmail.com
Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 29: ASHLEY BERRY

Response to Comment B 29-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, Master Response 2 – Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 30

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: January 23, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 30-1 If reopening a mine here was a good idea, someone locally or within CA would have done this long ago. So I object to it happening at all and certainly not by someone outside the ~~Country~~ Company. Rise Gold has litigation against them which does not make them sound like a company to be trusted with our great assets here.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Barbara Brown

Name: BARBARA BROWN

Address: 251 Willow Valley Rd #14 Nevada City, CA

Phone number: 530-265-6028

Email: barbara95959@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

JAN 28 2022

FORM LETTER B 30: BARBARA BROWN

Response to Comment B 30-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 31

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Such an intense industrial use is not compatable with the residential areas surrounding it.

B 31-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Barry Wasse

Name:

Address: 11225 Vista Ave, Grass Valley CA

Phone number: 530 409 2954

Email: barry2775@gmail.com

RECEIVED
FEB 09 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 31: BARRY WASSERMAN

Response to Comment B 31-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Regarding concerns about the proposed project's compatibility with the surrounding land uses, please refer to Chapter 4.9, Land Use and Population and Housing, of the DEIR.

Form Letter B 32

RECEIVED
FEB 10 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Such an intense industrial use is a terrible idea for a residential area.

B 32-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Barry Wass

Name: Barry Wasserman
Address: 11225 Vista Ave, Grass Valley CA
Phone number: 530 409 2954
Email: barry2275@gmail.com

FORM LETTER B 32: BARRY WASSERMAN

Response to Comment B 32-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 33

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 24 Mar 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 33-1

A large factory on Brunswick Rd is in the middle of hundreds of family homes (zoned residential). Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, ~~enter~~ the noise pollution will be heard where I live & the roads are bad enough!

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Bethejean L Spatafore

Name:
Bethejean L Spatafore
Address:
14118 Idaho Maryland Rd Nevada City CA 95959
Phone number:

Email: Bethejean@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
MAR 30 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 33: BETTEJEAN SPATAFORE

Response to Comment B 33-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns about the proposed project's compatibility with the surrounding land uses, please refer to Chapter 4.9, Land Use and Population and Housing, of the DEIR. With regard to concerns about noise pollution, please refer to Chapter 4.10, Noise and Vibration, of the DEIR. Regarding concerns related to increased trips on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR.

Form Letter B 34
Dist 3

RECEIVED
FEB 24 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2-22-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

1. It is too close to GRASS VALLEY and many homes
2. CEO Mossman has an unreliable track record.
4. DRAFT EIR leaves many questions unanswered.
5. This industry will negatively impact property values
6. Gold may be our history but it is not our future.
7. Do you want to be associated with the approval of this mine?

B 34-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Bill Lawrence

Address: 10201 Ridgeview Dr. Grass Valley, 95945

Phone number: 206-612-7925

Email: bplawrence@q.com.

FORM LETTER B 34: BILL LAWRENCE

Response to Comment B 34-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property value concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter B 35

RECEIVED
JAN 26 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/22/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

This will impact my property value. Poison the animals I so enjoy sharing land w/.

B 35-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Brittany Russel

Address: 15364 Norvin Way Grass Valley, CA 95949

Phone number: 541-531-8282

Email: Russelbrittany@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, ~~Principal~~ Planner Tyler Barrington

FORM LETTER B 35: BRITTANY ROUSSEL

Response to Comment B 35-1

The commenter's opposition to the project and concerns regarding property values and the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues, Master Response 2 – Non-EIR/Administrative Issues, and Master Response 3 - Operator Responsibility.

Form Letter B 36

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 36-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Brock Grininger

Name: Brock Grininger

Address: 12076 Thunder rd Grass Valley, CA

Phone number: 530-400-5262

Email: brockgrininger@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 11 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 36: BROCK GRININGER

Response to Comment B 36-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 37

Dist 2

RECEIVED

FEB 23 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: February 21, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.
- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.

B 37-1

- Hard rock mining is the single largest source of toxic waste in the United States.
- Vast amounts of diesel exhaust will be produce from continuous operation, including the trucking in of explosives.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Crushing of 1,500 tons of mine waste rock every day, all day, using massive machines.
- Trucks hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, piling it higher than a 6-story building at the Centennial site.
- Blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area (see map).
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems.

- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Claims that a few hundred jobs cannot justify the likelihood of increased lung cancer in Nevada County.
- Nevada County currently has a surplus of unfilled job positions.
- Business that depends on tourism will be hurt.
- Homeowners can lose an estimated 20% in their property values and more if the wells are dry.
- A working mine will shatter the peace and quiet of many neighborhoods.
- Underground blasting is planned for 7 days a week and will be felt by those living above the 2,585 acres of mine underground mineral rights -- see map!
- While Rise Gold shareholders profit, the local community gets little revenue.
- The relatively few theoretical jobs gained will not offset the harm done.
- Where will the imported workers live when housing is so limited in our area?
- An estimated 85% of vendor spending will not be local (explosives, chemicals, concrete, steel...).
- Nevada County revenue will be from ordinary property taxes, not from gold.
- The history and business practices of Rise Gold Corp. do not inspire trust.
- Rise Gold Corp. has never opened a hard rock mine and has never made a profit on its business ventures.
- Rise Gold CEO, Ben Mossman, has been charged with environmental violations in B.C. Canada.
- There are many questions about the financial stability of Rise Gold Inc.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,



Name: Bruce McVicker

Address: 17485 Brewer Rd.

Phone number: 530-273-4983

Email: brumcv@icloud.com

FORM LETTER B 37: BRUCE MCVICKER

Response to Comment B 37-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek. Vibration associated with blasting is addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Finally, regarding concerns about underground blasting effects throughout the mineral rights area, please see Master Response 7.

Form Letter B 38

1 of 1

RECEIVED
JAN 26 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: JAN 22 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Jeopardizing the groundwater source for residents in this community at a time when California is experiencing epic droughts is beyond irresponsible and shows a complete lack of concern for your constituents, the residents of Grass Valley. The potential economic benefits of this project will only be realized by a small number of people (mainly the Rise Gold Mine owners) and ~~are~~ are negligible when compared to the environmental and economic damages the community will experience over the coming decades. Please vote against this environmental disaster.

B 38-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: C. Greg Chapman

Address: 506 Main St, Nevada City, CA 95959

Phone number: (916) 216-0408

Email: gchapmanusanc@gmail.com

FORM LETTER B 38: C. GREG CHAPMAN

Response to Comment B 38-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding groundwater and drought, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 – Drought and Climate Change.

Form Letter B 39

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: JAN 22, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 39-1 Jeopardizing the groundwater aquifers at a time when California is experiencing epic droughts is irresponsible and shows a complete lack of concern for the residents of Grass Valley. The potential economic benefits are negligible compared to the economic and environment damages the community will experience over the coming decades.
Please vote against this enviromental disaster.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: C. Greg Chapman

Address: 506 Main St., Nevada City CA 95959

Phone number: (916) 216-0408

Email: gchapmanusanc@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 39: C. GREG CHAPMAN

Response to Comment B 39-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding groundwater and drought, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 – Drought and Climate Change.

Form Letter B 40

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/15/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 40-1 As a Nevada County native and resident I fear that the reopening of the mine will threaten our quality of life up here. The mine dust alone will cause more air pollution along with the increase in traffic. Please preserve the quality of life, the ground water and the property values of our fine County. Please vote NO!

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: CARLETON FORSMAN

Address: 12952 Forsman Pl. Nevada City 95959

Phone number: 415-305-9303

Email: catzforsman@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 40: CARLETON FORSMAN

Response to Comment B 40-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns about air quality, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns related to increased traffic on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR. With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 41

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/15/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 41-1

I'm a Native to Nevada City, born in Mercy Hospital in 1956. I oppose the reopening of the mine because of it's threat to the quality of life in Nevada County. There will be an increase in traffic which will decrease air quality and the mining will threaten ground water. Property values will decrease with the quality of life.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: CARLETON FORSMAN

Address: 12952 Forsman Pl. Nevada City 95959

Phone number: 415-305-9383

Email: catzforsman@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 24 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 41: CARLETON FORSMAN

Response to Comment B 41-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns about air quality, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns related to increased traffic on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR. With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 42

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/15/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 42-1 I'm a Nevada City native born in Miner's Hospital in 1956. I oppose the reopening of the mine because of the increase in traffic, air pollution and the threat to ground water. The completed project would lead to blight I believe and a decrease in property values

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: CARLETON FORSMAN

Address: 12952 Forsman Pl. Nevada City 95959

Phone number: 415-305-9383

Email: ctzforsman@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 42: CARLETON FORSMAN

Response to Comment B 42-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns about air quality, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns related to increased traffic on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR. With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells.

Form Letter B 43

Dist 3

RECEIVED

FEB 22 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 43-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Carol A Zappelli

Name: Carol A. Zappelli

Address: 115 Union Jack St #79

Phone number: 530 721-2785

Email: tahoe1650@aol.com

FORM LETTER B 43: CAROL ZAPPELLI

Response to Comment B 43-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 44

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 44-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Carol Zappelli

Name: Carol Zappelli

Address: 115 Union Jack St #79

Phone number: 530-721-2785

Email: tahoe6850@aol.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 23 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 44: CAROL ZAPPELLI

Response to Comment B 44-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

Form Letter B 45

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

February 16, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.

B 45-1

- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.
- The mine will pollute our air and increase lung disease.

. Hard rock mining is the single largest source of toxic waste in the United States.

- Vast amounts of diesel exhaust will be produced from continuous operation, including the trucking in of explosives.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Claims that a few hundred jobs cannot justify the likelihood of increased lung cancer in Nevada County.

RECEIVED
FEB 22 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Page 2

Letter to Commission

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

Sincerely,

Carole McCammon

928 Morgan Ranch Drive

carole_mccammon@yahoo.com

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 45: CAROLE MCCAMMON

Response to Comment B 45-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 46

Dist 3

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

February 16, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock:

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

• Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.

• If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.

• There is serious risk to our health, our environment, our property value, and our peace and quiet.

B 46-1 • The mine will pollute our air and increase lung disease.

. Hard rock mining is the single largest source of toxic waste in the United States.

• Vast amounts of diesel exhaust will be produced from continuous operation, including the trucking in of explosives.

• A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).

• Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems

• The Rise Gold CEO already has numerous violations of mining and environmental laws. • Claims that a few hundred jobs cannot justify the likelihood of increased lung cancer in Nevada County.

Page 2

Letter to Supervisors

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Carole McCammon

Carole McCammon

928 Morgan Ranch Drive

carole_mccammon@yahoo.com

FORM LETTER B 46: CAROLE MCCAMMON

Response to Comment B 46-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 47

Dist 2

CAROLEE WEISBERG
134 BERRIMAN LOOP
GRASS VALLEY, CA 95949
caroleestrong@gmail.com
530-263-3026

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

February 14, 2022

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I oppose to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Raise Gold Corporation to be inconsistent, misleading, and manipulative. They fail to mitigate significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are multiple reasons this mine should NOT reopen. My personal reasons are:

B 47-1

1- The mine will pollute our air and increase lung disease.
2- Clouds of airborne toxic mining dust, including asbestos, will drift downwards into Grass Valley.
3- Hard rock mining is the single largest source of toxic waste in the United States.
4- Trucks hauling 1,000 tons of waste rock, making one hundred trips every day down Brunswick Road, piling it higher that a 6-story building at the Centennial site.
5- Blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area.
6- Crushing of 1,500 tons of waste rock every day, all day, and using massive machines.

I am a resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Raise Gold Corporation has developed.

Sincerely,

Carolee Weisberg

FORM LETTER B 47: CAROLEE WEISBERG

Response to Comment B 47-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. Regarding concerns related to increased trips on local roadways, please refer to Chapter 4.12, Transportation, of the DEIR.

Form Letter B 48

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 3.24.22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 48-1

Enviromental, property value, our health, water concerns. Rise Gold does not appear to be a company that has the locals best interest in mind.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, CKmcknight.

Name: Caroline mcknight

Address: 13206 Banner Lava Cap Rd. N.C

Phone number: 860 930 5776

Email:

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
MAR 30 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 48: CAROLINE MCKNIGHT

Response to Comment B 48-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 49

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 3-20-2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 49-1

I live downstream, so do many people in this town. As our country is on the verge of war, we must protect our waterways, which is the most critical element needed to survive. Make the right decision for Nevada County. Vote NO on reopening the mine!

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

RECEIVED
MAR 24 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Name: CARRIE Zoll

Address: 17127 Brewer Rd, Grass Valley

Phone number: 541-505-4699

Email: carrie.zoll@hotmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 49: CARRIE ZOLL

Response to Comment B 49-1

The commenter's opposition to the project and concern regarding the Project Applicant is noted for decisionmakers. The commenter is referred to Master Response 1 - Non-EIR/Administrative Issues and Master Response 3 - Operator Responsibility.

With regard to concerns about impacts to waterways, please refer to Chapter 4.8, Hydrology and Water Quality, of the DEIR.

Form Letter B 50

B 50-4

RECEIVED
JAN 26 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Jan. 23, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

All the usual reasons: pollution of many kinds - air, water, noise. Negative impacts on quality of life. But mostly, for me, larger water stewardship issues.

B 50-1

WATER - Since it is impossible to know how wells and other groundwater and surface water resources will be affected, piped, treated NID water should be provided to everyone in Western Nevada County before remotely considering any subsurface activity. Last time I checked, it was going to cost me $30,000 just to apply to NID for consideration of providing service.

Unkown beyond this is the actual cost of trenching, installing pipelines and meters.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Charles M. Chisholm

Address: 11224 Orion Way, Grass Valley, CA 95949

Phone number: 530-913-3913

Email: charles.chisholm@sbcglobal.net

FORM LETTER B 50: CHARLES CHISHOLM

Response to Comment B 50-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

With regard to concerns related to water resources, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, Master Response 35 - Discharge to South Fork Wolf Creek, and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 51

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan. 23, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

All the usual reasons: pollution of many kinds - air, water, noise. Negative impacts on quality of life. But mostly, for me, larger water stewardship issues.

B 51-1

WATER - Since it is impossible to know how wells and other groundwater and surface water resources will be affected, piped, treated NID water should be provided to everyone in Western Nevada County before remotely considering any subsurface activity. Last time I checked, it was going to cost me $30,000 just to apply to NID for consideration of providing service.

Unkown beyond this is the actual cost of trenching, installing pipelines and meters.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

Sincerely,

Name: Charles M. Chisholm

Address: 11224 Orion Way, Grass Valley, CA 95949

Phone number: 530-913-3913
Email: charles.chisholm@sbcglobal.net

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 51: CHARLES CHISHOLM

Response to Comment B 51-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

With regard to concerns related to water resources, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, Master Response 35 - Discharge to South Fork Wolf Creek, and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 52



Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2-12-2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 52-1

Many Concerns! We are NO longer the "Wild West" where NO body cares about the Land, People. Live here. Many People! Mining is Just Not compatable with residential. Water: In a time of diminishing rainfall & impending drought It makes NO SENSE to pump thousands of gallons of water out of the ground and dump it!

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Charles Lindquist

Address: P.O. Box 1121 Nevada City, CA 95959

Phone number: 530-723-9737

Email: GVRUNNER99@GMAIL.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 52: CHARLES LINDQUIST

Response to Comment B 52-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns about the proposed project's compatibility with surrounding land uses, please refer to Chapter 4.9, Land Use and Population and Housing, of the DEIR. With regards to concerns about drought, please see Master Response 16.

Form Letter B 53

Dist 3

RECEIVED

FEB 16 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2-12-2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Many Concerns! We are NO longer the "wild west" where NO one cares about the land. People Live here. Many People! Mining is Not compatable with residental!

B 53-1

Water: In a time of deminishing Rain & impending drought it MAKES NO Sense to dump thousands of gallons of water out of the ground and dump it!

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Charles Lindquist

Name:
Charles Lindquist
Address:
P.O. Box 1121 Nevada City, CA 95959
Phone number:
530-723-9737
Email:
GVRUNNER99@gmail.com

FORM LETTER B 53: CHARLES LINDQUIST

Response to Comment B 53-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns about the proposed project's compatibility with surrounding land uses, please refer to Chapter 4.9, Land Use and Population and Housing, of the DEIR. With regards to concerns about drought, please see Master Response 16.

Form Letter B 54

Dist 3

RECEIVED
MAR 23 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 3-21-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

None of the benefits to the area touted to us; are useless. Every level of business here is short of workers. So we don't need jobs.

B 54-1 The potential for environmental harm is too great. Over & Over we read about environmental hazards that "could never happen", happening. Polluted water from Fracking IE. a big oops.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

C. Schmidt

Name: CHARLES SCHMIDT

Address: POB 2584 G VALLEY 95945

Phone number: 274 7116

Email: CNSCHMIDT75@GMAIL.COM

FORM LETTER B 54: CHARLES SCHMIDT

Response to Comment B 54-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 55

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 18 January 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My greatest areas of concern include:

B 55-1

- Past environmental record and business practices of Rise Gold management
- Doubts about the effectiveness of proposed treatment efforts to remove metals from the enormous amounts of water to be released into South Wolf Creek
- Significant additional energy requirements, particularly of fossil fuels and the associated air pollution from their exhaust
- Noise pollution from mining operations
- Fairly limited local economic benefits

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Chris Schneider

Address: 10491 Boulder St, Nevada City

Phone number: (530) 470-8468

Email: Schmed@TransPac.com

RECEIVED
JAN 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

FORM LETTER B 55: CHRIS SCHNEIDER

Response to Comment B 55-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns about discharge into South Fork Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek. With regard to concerns about air pollution and energy consumption, please see Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Noise associated with the proposed project is addressed in Chapter 4.10, Noise and Vibration, of the DEIR.

Form Letter B 56

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 18 January 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My greatest areas of concern include:

- Past environmental record and business practices of Rise Gold management
- Doubts about the effectiveness of proposed treatment efforts to remove metals from the enormous amounts of water to be released into South Wolf Creek
- Significant additional energy requirements, particularly of fossil fuels and the associated air pollution from their exhaust
- Noise pollution from mining operations
- Fairly limited local economic benefits

B 56-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Chris Schneider

Name: Chris Schneider

Address: 10491 Boulder St, Nevada City

Phone number: (530) 470-8468

Email: Schmed@TransPac.com

RECEIVED
JAN 18 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 56: CHRIS SCHNEIDER

Response to Comment B 56-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding concerns about discharge into South Fork Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek. With regard to concerns about air pollution and energy consumption, please see Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Noise associated with the proposed project is addressed in Chapter 4.10, Noise and Vibration, of the DEIR.

Form Letter B 57

RECEIVED
FEB 17 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Feb-17-2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons ar

Please see attached letter.

B 57-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: CHRISTIE HARRIS

Address: 16909 Brac Place, Grass Valley, Ca. 95949

Phone number: (530) 798-8480.

Email: N/A

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

17 feb-2022

Nevada Canty Supervisors and Commissioners,

I am writing to you with my concerns about the Idaho-Maryland Mine.
First, the amount of water which Will be used.
We are in a state wide drought and at times are told we cannot water our own yards. So pumping Millions of gallons of water from under Nevada Canty is not smart at all, and in NO way can it be a benifit to our County.
Another reason for high concern is, this county has had several sink holes over the years, some very large and very recent. If people start digging, drilling, and removing the ground out from underneith our Canty, which is now populated with Many people and Many types of buildings we will be in danger and at Risk of becoming a sink hole. Other Concerns I have about this mine opening, Without going into detail are, The increased fire danger to our County, the

p.2 17 feb 2022

impact on the Wildlife in our County which are already being Negatively impacted by all the Construction going on in our County, the waste the Mine will produce, the toxic harmful Waste, the list goes on.

Ive read the information from Rise GrassValley, which tells how they will open the mine with No Noticable impact on our County, or its residence, and that is just not true.

If you approve the re-opening of the Idaho-Maryland Mine it will devastate our County, and destroy our local much loved community as Well will have a direct Negative result on many of our Countys residence, their homes, properties, and their lives.

Thank you in advance for protecting Nevada County, and the decision to Not re-open the Idaho-Maryland Mine.

Sincerely, Christie R. Harris.

16909 Boreal place Cv.
(530) 798-8480

FORM LETTER B 57: CHRISTIE HARRIS

Response to Comment B 57-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns about water consumption and drought, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 – Drought and Climate Change. Please see Master Response 29 – Near Surface Workings, regarding sink hole concerns. Impacts related to fire risks are addressed in Chapter 4.13, Wildfire, of the DEIR. Potential effects on wildlife are addressed in Chapter 4.4, Biological Resources, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization.

Form Letter B 58

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Feb 17 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:
please see attached letter.

B 58-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Christie Harris

Name: CHRISTIE Harris

Address: 16909 Brac Place, Grass Valley, Ca. 95949

Phone number: (530) 798-8480

Email: N/A.

RECEIVED
FEB 17 2022
NEVADA COUNTY
BOARD OF SUPERVISORS
Dist 2

17 feb-2022

Nevada Canty Supervisors and Commissioners,

I am writing to you with my Concerns about the Idaho-Maryland Mine.
First, the amount of water which Will be used.
We are in a state wide drought and at times are told we cannot water our own yards. So pumping Millions of gallons of water from under Nevada County is not Smart at all, and in NO way can it be a benifit to our County.
Another reason for high concern is, this county has had several sink holes over the years, some very large and very recent. If people start digging, drilling, and removing the ground out from underneith our Canty, which is now populated with Many people and Many types of buildings We will be in danger and at Risk of becoming a sink hole. Other Concerns I have about this mine opening, Without going into detail are, The increased fire danger to our County, the

p.2

17 feb 2022

impact on the Wildlife in our County which are already being Negatively impacted by all the Construction going on in our County, the waste the Mine will produce, the toxic harmful Waste, the list goes on.

Ive read the information from Rise GrassValley, which tells how they will open the mine with No Noticable impact on our County, or its residence, and that is just not true.

If you approve the re-opening of the Idaho-Maryland Mine it will devastate our County, and destroy our local much loved Community as Well will have a direct Negative result on many of our Countys residence, their homes, properties, and their lives.

Thank you in advance for protecting Nevada County, and the decision to Not re-open the Idaho-Maryland Mine.

Sincerely,

Christie R. Harris

16909 Boreal place Gv.
(530) 798-8480

FORM LETTER B 58: CHRISTIE HARRIS

Response to Comment B 58-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns about water consumption and drought, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, Master Response 15 - Adequacy of Groundwater Monitoring Wells, and Master Response 16 – Drought and Climate Change. Please see Master Response 29 – Near Surface Workings, regarding sink hole concerns. Impacts related to fire risks are addressed in Chapter 4.13, Wildfire, of the DEIR. Potential effects on wildlife are addressed in Chapter 4.4, Biological Resources, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization.

Form Letter B 59

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2-14-22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 59-1 I am quite concerned about the impacts This mine will have on local noise pollution, traffic, ground water levels and air pollution. I'm also not impressed with the way Rise Gold Corps has handled previous projects.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Christina Sabin

Name: Christina Sabin

Address: 11147 Squirrel Creek Rd, Grass Valley, CA 95945

Phone number: 530-274-3447

Email: christina.sabin@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 18 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 59: CHRISTINA SABIN

Response to Comment B 59-1

The commenter expresses general concerns regarding the noise and vibration impacts of the project, but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Impacts related to noise are addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Impacts related to traffic are addressed in Chapter 4.12, Transportation, of the DEIR. With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Impacts related to air pollution are addressed within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter B 60

Dist 3

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Date: 2-14-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I am quite concerned about the impacts this mine will have on local noise pollution, traffic, ground water levels and air pollution. I'm also not impressed with the way Rise Gold Corps has handled previous projects.

B 60-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Christina Sabin

Name: Christina Sabin
Address: 11147 Squirrel Creek Rd, Grass Valley, CA, 95945
Phone number: 530-274-3447
Email: christina.sabin@gmail.com

FORM LETTER B 60: CHRISTINA SABIN

Response to Comment B 60-1

The commenter expresses general concerns regarding the noise and vibration impacts of the project, but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Impacts related to noise are addressed in Chapter 4.10, Noise and Vibration, of the DEIR. Impacts related to traffic are addressed in Chapter 4.12, Transportation, of the DEIR. With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Impacts related to air pollution are addressed within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter B 61

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1/29/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 61-1

I recently moved here from Los Angeles to be in a quiet area, in nature, away from noise pollution - and away from traffic. Also I suffer from chronic bronchitis and adding more air pollution is a big concern.

I'm also concerned about the economic impact, the value of my home and the loss of tourism.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Christine Feodorov

Address: 10407 S. PONDEROSA WAY, ROUGH + READY, CA 95975

Phone number: 562-665-5312

Email: run2west@yahoo.com

RECEIVED
FEB 02 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 61: CHRISTINE FEODOROV

Response to Comment B 61-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns, including property values, are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Impacts related to air pollution are addressed within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter B 62

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

There is a serious risk to our health, our environment, our property value and our peace and quiet. There is already an increase in cancer in our county, perhaps due to previous mining industry. As a cancer survivor, I can not support this industry.

B 62-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Cindy Foxcroft

Name: Cindy Foxcroft

Address: 418 Factory St Nevada City, CA 95959

Phone number: 530-559-2009

Email: cindyfox@gv.net

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 11 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 62: CINDY FOXFOOT

Response to Comment B 62-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter B 63

Dist 1

RECEIVED

FEB 14 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The serious risk to our health, our environment, our property values and our peace and quiet. There is already a high incidence of cancer in our county, perhaps due to previous mining. As a cancer survivor, I can NOT support this industry.

B 63-1

I am resident of Nevada County and observe that Rise Gold corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Cindy Foxfoot

Name: Cindy Foxfoot

Address: 418 Factory St Nevada City CA 95959

Phone number: 530-559-2009

Email: Cindyfox@gv.net

FORM LETTER B 63: CINDY FOXFOOT

Response to Comment B 63-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Form Letter B 64

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/26/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- I have a thyroid disease, and environmental pollutants and heavy metals that result from mining operations greatly worsen my condition and symptoms. Many autoimmune diseases can be triggered by pollutants as well, and I believe the proposed mitigating actions are not sufficient to prevent damage to the wellbeing of the citizens of Grass Valley.
- The mine will pollute our air and increase lung disease. Clouds of airborne toxic mining dust including asbestos will drift downwind into Grass Valley. Vast amounts diesel exhaust from continuous operation, including the trucking in of explosives. As someone who has struggled with health problems, I do not want to see an epidemic of new medical conditions in the county, especially for my family and friends.
- We have seen long lasting and devastating effects of mining in this town over the decades. One event that sticks in my mind is the sinkholes that collapsed all over the county, including at my old middle school, Union Hill, whose field had a sinkhole for months and they could not use the area. A mining operation would only contribute to more potential calamities such as this in the future. Operations will include blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area.
- The water in the Grass Valley is one of its most precious and greatest commodities for the citizens who live here. Not only is it important to preserve the water table, but preventing contamination of that water is imperative to those who use well water. The mining operations would require removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells. Waste water will be dumped into South Fork Wolf Creek and destroy habitats and stir up existing toxic residues like mercury, cyanide, and lead with disastrous effects for downstream ecosystems - proving that even from decades and decades of time, past mining destruction is still visible today.

B 64-1

RECEIVED
MAR 02 2022
NEVADA COUNTY
PLANNING DEPARTMENT

- This would be on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential). Operations will include crushing 1,500 tons of mine waste every day, all day, using massive machines. Trucks will be hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, piling it higher than a 6-story building at the Centennial site. Homeowners stand to lose an estimated 20% in property values (and more if the well is dry)
- The history and business practices of Rise Gold do not inspire trust. Rise Gold CEO, Ben Mossman has been charged with environmental offenses in B.C. Canada courts. Rise Gold has never opened a hard rock mine and has never made a profit on their business ventures to date. There are many questions as to the financial stability of this company. The costs of allowing this mining operation do not outweigh the minor benefits claimed by the advertising campaign of the company.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,



Name: Courtney Andes-McCullough

Address: 14015 Live Oak Lane, Grass Valley, CA 95945

Phone number: (530) 798-0640

Email: cjam11219@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 64: COURTNEY ANDES-MCCULLOUGH

Response to Comment B 64-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Please see Master Response 29 – Near Surface Workings, regarding sink hole concerns. Regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Finally, regarding concerns about water quality and contaminated discharge into South Fork Wolf Creek, please see Master Response 35.

Form Letter B 65

Dist 1

RECEIVED
MAR 17 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/21/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- I have a thyroid disease, and environmental pollutants and heavy metals that result from mining operations greatly worsen my condition and symptoms. Many autoimmune diseases can be triggered by pollutants as well, and I believe the proposed mitigating actions are not sufficient to prevent damage to the wellbeing of the citizens of Grass Valley.
- The mine will pollute our air and increase lung disease. Clouds of airborne toxic mining dust including asbestos will drift downwind into Grass Valley. Vast amounts diesel exhaust from continuous operation, including the trucking in of explosives. As someone who has struggled with health problems, I do not want to see an epidemic of new medical conditions in the county, especially for my family and friends.
- We have seen long lasting and devastating effects of mining in this town over the decades. One event that sticks in my mind is the sinkholes that collapsed all over the county, including at my old middle school, Union Hill, whose field had a sinkhole for months and they could not use the area. A mining operation would only contribute to more potential calamities such as this in the future. Operations will include blasting 7 days a week in the tunnels under 2,585 acres of the Grass Valley area.
- The water in the Grass Valley is one of its most precious and greatest commodities for the citizens who live here. Not only is it important to preserve the water table, but preventing contamination of that water is imperative to those who use well water. The mining operations would require removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells. Waste water will be dumped into South Fork Wolf Creek and destroy habitats and stir up existing toxic residues like mercury, cyanide, and

B 65-1

lead with disastrous effects for downstream ecosystems - proving that even from decades and decades of time, past mining destruction is still visible today.

- This would be on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential). Operations will include crushing 1,500 tons of mine waste every day, all day, using massive machines. Trucks will be hauling 1,000 tons of waste rock, 100 trips every day, down Brunswick Road, piling it higher than a 6-story building at the Centennial site. Homeowners stand to lose an estimated 20% in property values (and more if the well is dry)
- The history and business practices of Rise Gold do not inspire trust. Rise Gold CEO, Ben Mossman has been charged with environmental offenses in B.C. Canada courts. Rise Gold has never opened a hard rock mine and has never made a profit on their business ventures to date. There are many questions as to the financial stability of this company. The costs of allowing this mining operation do not outweigh the minor benefits claimed by the advertising campaign of the company.

I am a resident of Nevada County and observe that Rise Gold corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Courtney Andes-McCullough

Address: 14015 Live Oak Lane, Grass Valley, CA 95945

Phone number: (530) 798-0640

Email: cjam11219@gmail.com

FORM LETTER B 65: COURTNEY ANDES-MCCULLOUGH

Response to Comment B 65-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Please see Master Response 29 – Near Surface Workings, regarding sink hole concerns. Regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Finally, regarding concerns about water quality and contaminated discharge into South Fork Wolf Creek, please see Master Response 35.

Form Letter B 66

RECEIVED
FEB 10 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/5/22

Dist 1

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- An estimated 85% of vendor spending will not be local
- Rise Gold CEO, Ben Mossman, has been charged with environmental violations in B.C. Canada.
- The relatively few theoretical jobs gained will not offset the harm done.
- Underground blasting is planned for 7 days a week and will be felt by those living above. **B 66-1**
- While Rise Gold shareholders profit, the local community gets little revenue.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: CRAIG WEAVER

Address: 14143 Raccoon Mountain Rd

Phone number: (530) 802-1132

Email: quality.carpentry@sbcglobal.net

FORM LETTER B 66: CRAIG WEAVER

Response to Comment B 66-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Economic concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Vibration associated with blasting, as well as noise impacts related to the proposed project operations, is addressed in Chapter 4.10, Noise and Vibration, of the DEIR.

Form Letter B 67

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1-27-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Pollution to our air, water and environment.

B 67-1



I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

CBailey

Name: Cynthia K. Bailey

Address: 137 Boulder St. Apt. F Nevada City, CA 95959

Phone number: 530-559-3369

Email: sindee bee@yahoo.com

FORM LETTER B 67: CYNTHIA BAILEY

Response to Comment B 67-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 68

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2-19-22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I agree and know of the negative impacts. Tax money is not worth it to the Common Citizens who will lose wells, homes, and the environmental impact is obvious.

B 68-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Cynthia Keck
Address: 10217 Kenwood Dr. GV, CA 95949
Phone number: 530-277-7112
Email: CynthiaK456@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 25 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 68: CYNTHIA KOCH

Response to Comment B 68-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 69

RECEIVED
FEB 07 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/3/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 69-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, David Lindsey

Name: David Lindsey

Address: 12268 Brem Ln, Nevada city, CA. 95959

Phone number: 530-559-2050

Email:

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 69: DAVID LINDSEY

Response to Comment B 69-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 70

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Feb 10, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 70-1 our water shed and water ways continue to be negatively impacted ~~by~~ already. DO NOT continue the destructive process. Our way of life deserves better treatment and consideration, DO NOT allow this travesty to degrade our natural resources any further.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Deanna Bloom

Address: 800 Freeman Ln #308

Phone number: [redacted] No TEXT or phone calls please

Email: deannabloom2@comcast.net

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 14 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 70: DEANNA BLOOM

Response to Comment B 70-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 71

Dist 3

RECEIVED
FEB 14 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Feb 10, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 71-1

our waterways & watershed are already in severe distress, in great part because of mining, even though it was long ago.

Opening this mine will not bring an enhanced way of life to Nevada County residents

DO NOT allow this travesty to continue to degrade our natural resources any further.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Deanna Bloom
Address: 800 Freeman Ln. #308
Phone number: ~~text~~ NO text or phone calls please
Email: deannabloom2@comcast.NET

FORM LETTER B 71: DEANNA BLOOM

Response to Comment B 71-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 72

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2-6-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 72-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: DEANNA M. RONNINGEN

Address: 17139 CLOVER RD PENN VALLEY CA 95946

Phone number: 530 9134342

Email: kdronningen@aol.com

RECEIVED
FEB 11 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 72: DEANNA RONNINGEN

Response to Comment B 72-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 73

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

A major gold mining operation in a residential neighborhood is terrible planning.

B 73-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Deborah Bridges

Name: Deborah Bridges

Address: 11225 Vista Ave, G.V.

Phone number: 530 274-7889

Email: deborah@studiobridges.com

RECEIVED
FEB 09 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 73: DEBORAH BRIDGES

Response to Comment B 73-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 74

RECEIVED
FEB 10 2022
NEVADA COUNTY
BOARD OF SUPERVISORS
Dist 3

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

a ~~very~~ major and intense industrial use in a residential neighborhood is very destructive and should not be approved.

B 74-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Deborah Bridges

Name: Deborah Bridges

Address: 11225 Vista Ave. Grass Valley, CA 95945

Phone number: 530 274 7889

Email: Deborah@studiobridges.com

FORM LETTER B 74: DEBORAH BRIDGES

Response to Comment B 74-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 75

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/22/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 75-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Denis Hill

Address: 11963 Banner Ct, Nevada City, CA, 95959

Phone number: 925-323-2005

Email: denis.colin.hill@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 07 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 75: DENIS HILL

Response to Comment B 75-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 76

Dist 3

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 3.1.22

RECEIVED
MAR 17 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 76-1

please don't approve it for the money, in the long run it won't be worth it! (You know this)

Thanks, and please do the right thing!

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Denise Martin

Name: DENISE MARTIN

Address: 113 LIDSTER AVE. G.V. CA 95945

Phone number: (530) 802.1617 call or txt.

Email:

FORM LETTER B 76: DENISE MARTIN

Response to Comment B 76-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 77

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 3.1.22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Please do the right thing, and don't approve the mine for the money!

B 77-1

You know deep down that it won't be worth it in the long run

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Denise Martin

Name: DENISE MARTIN

Address: 113 Lidster ave. Grass Valley CA 95945

Phone number: 530) 802.1617

Email:

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 77: DENISE MARTIN

Response to Comment B 77-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 78

Dist 2

RECEIVED
Date: FEB 07 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 78-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Dennis Geare
Address: 10470 Sky Circle, Grass Valley 95949
Phone number: 530. 263. 1648
Email: ~~dgeare~~ dgeare@gmail.com

Dennis Geare

FORM LETTER B 78: DENNIS GEARE

Response to Comment B 78-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 79

Dist 4

RECEIVED

MAR 23 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 3/21/2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 79-1

Environmentally, this is a very BAD move. Please protect our natural environment from being destroyed – Water usage, waste water, heavy loud machinery, Trucks (Air quality + noise) Mining dust (+ what's in it that's detrimental to the health). None of this is positive. The amount of jobs provided isn't worth the long term damage this will cause. Please Vote NO on reopening the mine!

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Dominica Mottarella

Name: Dominica Mottarella

Address: PO Box 923 NSJ CA 95960

Phone number: 530 292 0176

Email: indianenticabile1@yahoo.com

FORM LETTER B 79: DOMINICA MOTTARELLA

Response to Comment B 79-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 80

Not a county resident

RECEIVED
JAN 24 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
2022
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 19 Jan

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

B 80-1

There are many reasons this mine should NOT be reopened. Personally, I feel that it is inconsistent with the values of the community that we share with our family and friends in Nevada County.

Donna Burke

Donna Burke, 2201 Hillcrest Dr. Ventura CA 93001

805 798 5808

ddsburke2201@gmail.com

FORM LETTER B 80: DONNA BURKE

Response to Comment B 80-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 81

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 19 Jan 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

B 81-1

There are many reasons this mine should NOT be reopened. Personally, I feel that it is inconsistent with the values of the community that we share with our family and friends in Nevada County.

Donna Burke

Donna Burke, 2201 Hillcrest Dr. Ventura CA 93001

ddsburke2201@gmail.com

805 798 5808

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 81: DONNA BURKE

Response to Comment B 81-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 82

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Feb. 14, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 82-1

a distrust of Rise Gold to adhere to their promises leaving our county to clean up the mess that the mine will surely cause. With all the cons to this mine I cannot believe that our Planning Commission would put our county at risk to all the downside of opening up this mine.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Dorothy K Stone

Name: DOROTHY K STONE

Address: 195 CYPRESS HILL DR.
GRASS VALLEY CA 95945

Phone number: 530-272-1666

Email: _____

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 18 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 82: DOROTHY STONE

Response to Comment B 82-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 83

Dist 3

RECEIVED

FEB 18 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Feb 14, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

a distrust of Rise Gold to adhere to their promises leaving our County to clean up the mess that the mine will surly cause. With all the cons to this mine I cannot believe that our Supervisors would put our County at risk to all the downside of opening up this mine.

B 83-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Dorothy K Stone

Name: DOROTHY K STONE

Address: 195 CYPRESS HILL DR.
GRASS VALLEY, CA 95945

Phone number: 530 - 272 - 1666

Email: ———

FORM LETTER B 83: DOROTHY STONE

Response to Comment B 83-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 84

RECEIVED

MAR 23 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Dist 4

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 3/22/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 84-1

My studio/shop is located on Loma Rica near the airport and I'm concerded the impact of this mine will be immediately felt by myself and my neighbors. The traffic conditions are currently tolerable, however with the additional traffic it would become unacceptable and very problematic and unaccomidating.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Douglas NORE

Address: 12354 Loma Rica

Phone number: 520 395 7995

Email: dugo_arts@mac.com

FORM LETTER B 84: DOUGLAS NORE

Response to Comment B 84-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding concerns about increased traffic resulting from the proposed project, please refer to Chapter 4.12, Transportation, of the DEIR.

Form Letter B 85

Dist 1

RECEIVED
2022 Date: 1/21/22
COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The EIR report is bare minimum requirements for projects.
- We live in an area where wells are often impacted by water levels that vary where mine shafts exist - this was our case living on Banner Mtn.
- This company is not fiscally reputable. See attached article, written by a bankruptcy judge.

B 85-1

- We have seen the devastation of mining projects still trying to heal. Why do this to our community again?

** This corporation will never be solvent enough to cover their disasters. That cost will fall on the county.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Eileen Blodgett

Name: Eileen Blodgett

Address: 11225 Golden Oaks Ct
Nevada City CA 95959

Phone number: 530 277 9919

Email: eileen@eileenblodgett.com

FORM LETTER B 85: EILEEN BLODGETT

Response to Comment B 85-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 86

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/21/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The EIR report is bare minimum requirements for projects.
- We live in an area where wells are often impacted by ground water levels - and can vary where mine shafts exist - this was our case living on Banner Mtn.
- This company is not reputable. See attached article.

B 86-1

- We have seen the devastation of mining projects still trying to heal. Why do this to our community again?

** This corporation will never be solvent enough to cover their disasters. That cost will fall to the county.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Eileen Blodgett

Name: Eileen Blodgett

Address: 11225 Golden Oak Ct
Nevada City CA 95959

Phone number: 530 277-9919

Email: eileen@eileenblodgett.com

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

Thar's gold in promises?

OTHER VOICES
Randall J. Newsome

Of all the lofty promises Rise Gold has churned out over the preceding months, none has been more ballyhooed than the number of jobs the mine would create, and the $94,000 average annual wage they'll pay. Before anyone runs to get in line for one of these dream jobs, let's take a closer look.

First, it appears to require a considerable amount of magical thinking to believe the company will ever create a single job. According to its most recent SEC 10-Q report, Rise had less than $400,000 in the bank as of Oct. 31, 2021. By its own reckoning, it needs to plow $100 million into the facility before it can mine its first ounce of gold. It is grossly undercapitalized, to put it mildly, and teetering on the brink of insolvency.

Second, the $94,000 number is totally misleading. According to its March 2021 economic impact report, Rise estimates that it will employ "312 people in Nevada County at full operating levels." Note that it may take years before "full operating levels" are reached.

Putting that aside, the company says that its annual payroll (not including benefits) for these 312 employees will be $29,220,000. It provides no explanation for how it arrived at this number. Rise then provides a list of job categories and an estimate of employees per category.

What it doesn't provide is detail as to the average pay for each employee in each category. Only 213 of the potential 312 employees would be local hires, and of that 213, 162 of them would be "local trainees." Does anyone really think that Rise is going to pay a trainee $94,000 a year?

According to Comparably.com and other sources, the average wage for underground gold miners in the United States is less than $50,000. Even after these 213 local hires are fully trained, does anyone really think Rise will pay almost twice that national average?

So how did they arrive at the $94,000 number? Simple — if you take 312 and divide it into their made-up annual payroll of $29,220,000, you'll come up with just under $94,000.

By lumping together the salaries of managers (all of which are listed as "non-local hires"), engineers, geologists and other highly paid jobs with the lower-paid miners and mineral processors, the company has provided what I consider a false representation of what someone who lives in our community might actually expect to earn at Rise.

There is a great deal more in the Rise economic impact report that is of questionable validity. That's why the Board of Supervisors was right to commission its own economic impact report. But all the board or anyone else needs to know about the Rise report is found in italics on the second page:

Mineral resources that are not mineral reserves do not have demonstrated economic viability. Rise Grass Valley has not established mineral reserves supported by a feasibility study.

Rise Grass Valley has not completed a feasibility study to establish mineral reserves, and therefore has not demonstrated economic viability of the Idaho-Maryland Mine.

In other words, the Rise business model appears to be built on sheer speculation, which begs the following question: Why is the county continuing to spend valuable time and money on this project?

The only explanation I've heard is that the board has to follow the legal process. Does that mean that every time a carload of people comes to town with an undercapitalized, half-baked, potentially dangerous business scheme and starts throwing around empty promises, the board is required to take it all seriously?

Due process only requires whatever process that's due under the circumstances, not a seemingly endless process in pursuit of a fantasy. Isn't it time for this particular fantasy to end?

Randall J. Newsome lives in Nevada City.

* Randall Newsome is a retired bankruptcy judge.

Letters to the editor

Goodwill amid the storm

We live on Ball Road in Alta Sierra in the region hit with the worst of the worst storm devastation. From Highway 49 the corridor, Alta Sierra Drive, Ball Road, Francis to Dog Bar Road, roughly 75% of the power poles and power lines were downed by falling trees.

We want to express our thanks to the tree cutters who allowed us to drive to town, to PG&E who called in all the troops to get lines and power poles replaced, and especial-

vaccine exemption offered, in addition to 15% of staff.

My question: Where is the survey of how many parents and staff would pull their students or refuse to work, for their own safety, if a vaccine exemption is offered?

Let's look at both sides before coming to a decision on this thorny issue.

Charles Lanau
Nevada City

A time of introspection

This is a note of gratitude for PG&E, which

I can fully wonder how our forebears met these conditions.

Marsha Ostrom
Nevada City

Single-payer better for business

If Fran Freedle's letter to the editor in Saturday's Union frightened you about new taxes proposed to fund single-payer health care, please read this perspective on those numbers. How much are you paying in health insurance now?

Consider premiums,

proposed new excise tax of 2.3% of gross receipts only applies to the amount over $2 million, most of our local businesses would be exempt.

In the proposed payroll tax, the employer share is 1.25% on employers with more than 50 employees. Most Californians get their health coverage through their jobs, so those employers are providing health insurance.

A 1.25% tax should be a bargain compared to paying for their employees' insurance. Employees making over $49,900

FORM LETTER B 86: EILEEN BLODGETT

Response to Comment B 86-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 87

RECEIVED
FEB 07 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1 February 2022

Dist 3

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am fervently opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation.

I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons I believe this mine should NOT be reopened. My foremost personal reasons are:

Based on past behavior, I believe we can very confidently predict that this company will not keep its promises. That is the overriding consideration, it seems to me, and I don't think anything else needs to be discussed. This is a company whose CEO was the CEO of another company that went bankrupt rather than keep its promises. This is a deal-breaker. This is what indicates to me whether a contract or a promise from this company is worth anything at all. I cannot imagine how we could agree to entrust our environment to this company.

If, in light of the CEO's track record, other reasons are needed, it is my personal feeling that cleanup or restoration, under the best circumstances, can never restore our beautiful and complex living web of land, trees, streams, and all the creatures and organisms that live in and on it to anywhere near their original wholeness.

B 87-1

And, for one more in a myriad of objections, I cannot imagine how the dewatering of the mine would not lower the water table. Water flows downward; when space is made for it, by dewatering the mine, more will flow downward, draining groundwater. Besides the drying up of wells – which, to my mind, would not be adequately compensated for by supplying bottled water or treated water – it seems to me that it could cause further stress to our trees, and thus worsen the danger of fire. Stressed trees and fire danger are already big problems – we don't need more of this.

I am a resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Eileen Adele Hale

Name: Eileen Adele Hale

Address: 10833 Pine Hill Drive, Grass Valley, California 95945

Phone number: (530)273-1351

Email: eileenmice@eileenadelehale.com

FORM LETTER B 87: EILEEN HALE

Response to Comment B 87-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

With respect to concerns regarding groundwater, please see Chapter 4.8 of the DEIR, Master Response 14 - Adequacy of Groundwater Model, and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Impacts related to fire risks are addressed in Chapter 4.13, Wildfire, of the DEIR.

Form Letter B 88

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2-23-2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I live on Marion Canyon Rd, off of Greenhorn. 2 neighbors and myself felt the vibrations when Rise Gold Corp. were doing demolitions last year. At first none of us knew what it was and "assumed" it was earthquake tremors, until we found out what it was. If we can feel what they were doing underground, how many more residents felt it also. I'm planning to sell my home this year and am wondering if I should disclose this info to my estate agent?

B 88-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,
Elizabeth McGuire

Name:

Address: 13104 Marion Cyn. G.V. 95945

Phone number:

Email: eandmmcguire@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
MAR 03 2022

FORM LETTER B 88: ELIZABETH MCGUIRE

Response to Comment B 88-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 89

RECEIVED

MAR 0 3 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Dist 1

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2-23-2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

I live on Marion Canyon Rd, off Greenhorn.
2 neighbors and myself felt the vibrations when Rise Gold Corp. were doing demolitions last year. At first none of us knew what it was and "assumed" it was earthquake tremors until we found out what it was. One neighbor felt them all night long. If we can feel what they were doing underground, how many more residents felt it also. I'm planning to sell my home this year, am I required to disclose this information to my estate agent?

B 89-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Elizabeth McGuire

Name:

Address: 13104 Marion Cyn Rd G.V. 95945

Phone number:

Email: eandrmcguire@gmail.com

FORM LETTER B 89: ELIZABETH MCGUIRE

Response to Comment B 89-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 90

10157

RECEIVED

JAN 24 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 90-1

the effect on the environment is too great - negative effect. The pollution - noise, air, water are all way to great to consider this. It would not ~~going to~~ bring anything positive to the community - yes some jobs - but the cost to the environment is too great

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Francesca Erickson

Name: FRANCESCA ERICKSON

Address: 144 Success Mine Loop, Grass Valley 95945

Phone number: (530) 205-9751

Email: frannyerickson@hotmail.com

FORM LETTER B 90: FRANCESCA ERICKSON

Response to Comment B 90-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 91

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 91-1

The deleterious affect on the environment - air, water, noise, road damage - is way too big to consider this project. How is it that people cannot see that our planet needs to be the 1st consideration. I've never heard of anything positive to come of this. A few jobs cannot compensate for the losses.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Sincerely,

Francesca Erickson

Name: FRANCESCA ERICKSON

Address: 144 Success Mine Loop, Grass Valley 95945

Phone number:

Email:

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 91: FRANCESCA ERICKSON

Response to Comment B 91-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 92

Nevada County Planning Commission
950 Maidu Ave, Suite 170
Nevada City, CA 95959

February 28, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato, and William Greeno

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have read the Rise Gold Mine postcards they sent recently. The information is misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project at the detriment of our community.

B 92-1

Gold mining is the world's worst business. It's capital-intensive. It's labor-intensive. Gold miners are ultra-sensitive to movements in the price of gold. When gold moves higher a gold mining company can get capital. When it moves lower, and the investors had enough with the industry they leave and find another opportunity. The 2013-2019 downturn in gold prices was the final straw for many investors. And companies like Rise Gold had little ability to raise money to run the business. Rise Gold is a bit player in the industry. They won't be around when gold plunges. They won't be around to clean up the toxic waste. They will go bankrupt and leave California and go back to Canada where they are well protected.

I have been a Nevada County resident since 2005 and see that Rise Gold wants to risk our environment and the people who live here for their profit. I am confident that you will value my input and comments and the comments from thousands of other residents. I hope all of you will be on the right side of history and protect our community from fraudsters like Rise Gold Mine.

Thank you,
Francis Murphy

11202 Oak Canyon Drive
Penn Valley, CA 95946
916-397-5441

RECEIVED
MAR 03 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 92: FRANCIS MURPHY

Response to Comment B 92-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 93

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2-10-22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

Keep our ENVIRONMENT healthy!

B 93-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Fred Slikker
Vickie Tobey

Name: Fred Slikker Vickie Tobey

Address: P.O. Box 1404 NC 95959

Phone number:

Email:

RECEIVED
FEB 14 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 93: FRED SLIKKER AND VICKIE TOBEY

Response to Comment B 93-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 94

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/23/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- the mine will pollute our air & increase lung disease
- There is serious risk to our health, our environment, our property value, and our peace and quiet.
- removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of well

B 94-1

- Blasting 7 days a week in the tonnels undre 2,585 acres of the Grass Valley area

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Gabrielle Neal

Name: Gabrielle Neal

Address: ~~xcrunnergirl277@gmail.com~~ 122 Berriman loop, 95949 Grass Valley CA

Phone number: (231) 715-8082

Email: xcrunnergirl277@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 94: GABRIELLE NEAL

Response to Comment B 94-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 95

Date: 3/23/22

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:



B 95-1 I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us. I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Gary ~~+ Pam~~ Kisor
Address: 12579 Lakeshore North
Phone number: 6266221615
Email: ~~Pamkisor~~ @ gmail.com
G E Kisor

[Please copy to: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington]

FORM LETTER B 95: GARY KISOR

Response to Comment B 95-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 96

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 3/23/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:



B 96-1

I am a member of the local faith-based organization, the Unitarian Universalist Community of the Mountains. Our values call us to use our human, spiritual and financial resources to make a difference in our local community and the world. Rise Gold has demonstrated disrespect for the environment and the people of Grass Valley, for example, their unrepresentative survey. Stopping Rise Gold would make a huge difference for all of us.

I hope you will be among those who will be known to have stood against the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Gary Kisor
Address: 12579 Lake Shore North
Phone number: 626 622 1614
Email: GKKisor@Gmail.com

FORM LETTER B 96: GARY KISOR

Response to Comment B 96-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 97

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2/3/22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

We do not need any added risk to our health or our environment.

B 97-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, gayle a costanza

RECEIVED
FEB 07 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Name: GAYLE COSTANZA

Address: 859 FREEMAN LN GRASS VALLEY

Phone number: 925-787-6861

Email: gaylecostanz@comcast.net

FORM LETTER B 97: GAYLE COSTANZA

Response to Comment B 97-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 98

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/29/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 98-1 My fiancée suffers from bronchitis. Much of the reason we moved out of Los Angeles up here in December was in search of better air quality. The pollution caused by the mine will cause us to move again when we just got here.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Geoff Erwin

Address: 10407 S. PONDEROSA WAY, ROUGH & READY, CA 95975

Phone number: 310-403-0909

Email: TreeFallsEnt@Gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 02 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 98: GEOFF ERWIN

Response to Comment B 98-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 99

RECEIVED
FEB 07 2022
NEVADA COUNTY
BOARD OF SUPERVISORS
02-04-2022

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dist 3

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

B 99-1

There are many reasons this mine should NOT be reopened. My reason is simple. The risk (environmental calamities, reduced property values, noise and traffic issues) is not worth the reward (a few new jobs and more gold to be stored in vaults around the world).

I am a resident of Nevada County and believe that Rise Gold corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Geoff Pollard
800 Freeman Lane Apt 301
Grass Valley, VA 95949

925-323-4349
gppollard@gmail.com

FORM LETTER B 99: GEOFF POLLARD

Response to Comment B 99-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 100

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: February 11, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Where will the imported workers live when housing is so limited in our area?
- An estimated 85% of vendor spending will not be local (explosives, chemicals, concrete, steel...).
- The history and business practices of Rise Gold Corp. do not inspire trust.
- Rise Gold Corp. has never opened a hard rock mine and has never made a profit on its business ventures.

B 100-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

Sincerely,

Name: George Dunstan

Address: 19595 Bow Valley Rd, Grass Valley, CA 95945

Phone number: 530-205-8159

Email: gvgeode@gmail.com

RECEIVED
FEB 22 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 100: GEORGE DUNSTAN

Response to Comment B 100-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Electricity consumption is addressed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter B 101

Dist 1

RECEIVED
FEB 18 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: February 11, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Where will the imported workers live when housing is so limited in our area?
- An estimated 85% of vendor spending will not be local (explosives, chemicals, concrete, steel...).
- The history and business practices of Rise Gold Corp. do not inspire trust.
- Rise Gold Corp. has never opened a hard rock mine and has never made a profit on its business ventures.

B 101-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: George Dunstan

Address: 19595 Bow Valley Rd, Grass Valley, CA 95945

Phone number: 530-205-8159

Email: gvgeode@gmail.com

FORM LETTER B 101: GEORGE DUNSTAN

Response to Comment B 101-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Electricity consumption is addressed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR.

Form Letter B 102

Dist 3

RECEIVED
JAN 24 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: January 19, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 102-1 Nevada County should value its scenic beauty for our enjoyment and to attract tourism. We do not need wetland destruction, toxic waste and major traffic and noise increases

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Gillian Blair

Name: Gillian Blair

Address: 12668 Nottingham Lane, GV 95949

Phone number: 831-588-1155

Email: gillianblair@gmail.com

FORM LETTER B 102: GILLIAN BLAIR

Response to Comment B 102-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 103

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: January 19, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 103-1 Nevada County should value its scenic beauty for our enjoyment and to attract tourism. We do not need wetland destruction, toxic waste, and major noise and traffic increases.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Gillian Blair

Name: Gillian Blair
Address: 12668 Nottingham Lane, GV 95949
Phone number: 831-588-1155
Email: gillianbblair@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
JAN 29 2022

FORM LETTER B 103: GILLIAN BLAIR

Response to Comment B 103-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 104

HIST 1

RECEIVED
JAN 2 3 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Jan. 24, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 104-1

We are very concerned about the pollutants that will be unleashed into our community. A few outsiders will profit and our citizens will be left with toxic water, polluted air, obnoxious noise, increased truck traffic, increased health problems into the future. Please consider the mining history of this area and how the gov. is still trying to clean up the environmental mess left behind. Do not repeat this history of destroying our environment.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Gordon Keller, Marika Keller

Name: Gordon and Marika Keller
Address: 118 Ascot Pl, Grass Valley, CA 95949
Phone number: (530) 457-7372
Email: Gordonmarika@aol.com

FORM LETTER B 104: GORDON KELLER AND MARIKA KELLER

Response to Comment B 104-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 105

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan. 24, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

We are very concerned about the environmental impacts on our community. The multitudes of large trucks contributing to air pollution as well as generating obnoxious sounds is disruptive to our Community. The toxic waste from mining will contaminate our beautiful environment & cause more illness in our citizens.

B 105-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, Gordon Keller, Marika Keller

Name: Gordon Keller and Marika Keller

Address: 118 Ascot Pl., Grass Valley, CA 95949

Phone number: (530) 457-7372

Email: Gordonmarika@aol.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington



FORM LETTER B 105: GORDON KELLER AND MARIKA KELLER

Response to Comment B 105-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 106

0575

RECEIVED

JAN 26 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan 22, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 106-1 The clear potential of negative impacts on the enviroment with lack of true economical impact of positive value.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Gregory Clary

Address: 448 Colfax Ave

Phone number: 530. 205. 9337

Email: auriel.aeon@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 106: GREGORY CLARY

Response to Comment B 106-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 107

RECEIVED

FEB 07 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Dist 3

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 2-2-2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 107-1

There is no way the sound, air and water pollution can be effectively mitigated. This changes our way of life and property values in our community. Sound & pressure amplifies in the tunnels. Our homes and senses will be bombarded 24hrs a day. Our emotional health in this community will be at risk. ~~along~~

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Gwendolyn Fissel

Address: 262 Barby Dr, Grass Valley 95945

Phone number: (530) 559-2674

Email: glfissel@yahoo.com

FORM LETTER B 107: GWENDOLYN FISSEL

Response to Comment B 107-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 108

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan, 22 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 108-1

Hard rock mining is the single largest source of toxic waste in the U.S.
Waste water will be dumped into S. Fork Wolf Creek destroying habitat + stir up existing toxic residue
Removal of 1 million - 3million gallons of contaminated water per day for the next 30 years de watering wells

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Hazel Grace Yates

Address: 19693 St Hwy 49, Nevada City CA 95959

Phone number: 970 333 4035

Email: Hazelgraceyates@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

JAN 24
NEVADA COUNTY

FORM LETTER B 108: HAZEL YATES

Response to Comment B 108-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 109

Heather Fleming

RECEIVED
JAN 26 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: Jan 22, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 109-1

Use of over 12% of N.C. electricity, more than all the county biz combined
Waste water will be dumped into S. Fork Wolf Creek destroy habitats + stir up existing toxic residue such as mercury, cyanide + lead w/ disastrous effects for down stream ecosystems
Where will the imported workers live when housing is already limited?

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, Hazel Yates

Name: Hazel Yates

Address: 19693 St Hwy 49, Nevada City CA 95959

Phone number: 970 333 4035

Email: hazelgraceyates@gmail.com

FORM LETTER B 109: HAZEL YATES

Response to Comment B 109-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Electricity consumption is addressed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 110

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: January 28, 2022



Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 110-1

- The mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.
- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.
- Vast amounts of diesel exhaust will be produced from continuous operation.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems.
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Business that depends on tourism will be hurt.
- The relatively few theoretical jobs gained will not offset the harm done.
- The history and business practices of Rise Gold Corp. do not inspire trust.
- Rise Gold Corp. has never opened a hard rock mine and has never made a profit on its business ventures.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be

known to have stood against the well-funded deception that Rise Gold Mine has put forth to weaken and override opposition from the local population.

Sincerely,



Name: Henry Goodman

Address: 10294 Whispering Oaks Lane, Nevada City, CA 95959

Phone number: 530 478-1038
Email: henrygoodman@hotmail.com

Staff Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 110: HENRY GOODMAN

Response to Comment B 110-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 111

RECEIVED
FEB 0 2 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Dist 1

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: January 28, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.
- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.

B 111-1

- Vast amounts of diesel exhaust will be produced from continuous operation.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems.
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Business that depends on tourism will be hurt.
- The relatively few theoretical jobs gained will not offset the harm done.
- The history and business practices of Rise Gold Corp. do not inspire trust.
- Rise Gold Corp. has never opened a hard rock mine and has never made a profit on its business ventures.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Henry Goodman

Name: Henry Goodman

Address: 10294 Whispering Oaks Lane, Nevada City, CA 95959

Phone number: 530 478-1038

Email: henrygoodman@hotmail.com

FORM LETTER B 111: HENRY GOODMAN

Response to Comment B 111-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 112

RECEIVED
FEB 0 2 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Dist 1

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: January 28, 2022

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

- The mine will pollute our air and increase lung disease.
- Clouds of airborne toxic mining dust, including asbestos, will drift downwind into Grass Valley.
- If approved, this mine would operate 24 hours a day, 7 days a week, for up to 80 years.
- There is serious risk to our health, our environment, our property value, and our peace and quiet.
- Vast amounts of diesel exhaust will be produced from continuous operation.
- A large factory on Brunswick Rd. is in the middle of hundreds of family homes (zoned residential).
- Removal of 1 million to 3 million gallons of contaminated water per day for the next 80 years, dewatering hundreds of wells.
- Waste water will be dumped into South Fork Wolf Creek, destroy habitats and stir up existing toxic residues like mercury, cyanide and lead with disastrous effects for downstream ecosystems.
- Use of over 12% of Nevada County's electricity, more than all the County businesses combined
- The Rise Gold CEO already has numerous violations of mining and environmental laws.
- Business that depends on tourism will be hurt.
- The relatively few theoretical jobs gained will not offset the harm done.
- The history and business practices of Rise Gold Corp. do not inspire trust.
- Rise Gold Corp. has never opened a hard rock mine and has never made a profit on its business ventures.

B 112-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Henry Goodman

Name: Henry Goodman

Address: 10294 Whispering Oaks Lane, Nevada City, CA 95959

Phone number: 530 478-1038

Email: henrygoodman@hotmail.com

FORM LETTER B 112: HENRY GOODMAN

Response to Comment B 112-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Response 1. Property values and quality of life concerns are outside the scope of CEQA – Please see Master Response 2. With regard to concerns about the Project Applicant, the commenter is referred to Master Response 3 - Operator Responsibility.

Regarding air pollution, including toxic air contaminants such as asbestos and diesel exhaust, as well as electricity consumption, please refer to Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding toxic waste, please see Master Response 8 - Mine Waste Characterization. With respect to concerns regarding effects on nearby wells, please see Master Response 14 - Adequacy of Groundwater Model and Master Response 15 - Adequacy of Groundwater Monitoring Wells. Regarding effects to Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek and Master Response 36 – Flows in South Fork Wolf Creek.

Form Letter B 113

B1 ST1

RECEIVED
JAN 24 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: 1-19-22

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 113-1 Please do not vote in favor of this mine. Mines have been proposed for Grass Valley for decades, and former government officials have seen the wisdom of barring this toxic, polluting, noisy action from our area. Don't be the officials who close your eyes and minds and allow the destruction of our community.

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Diana Abrell
Address: 12319 Hillcrest Dr., NC
Phone number: 530-273-3095
Email: star_flower@comcast.net

FORM LETTER B 113: ILIANA ABRELL

Response to Comment B 113-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 114

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1-19-22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 114-1 Please do not vote in favor of this mine. Mines have been proposed for Grass Valley for decades, and former government officials have seen the wisdom of barring this toxic, polluting, noisy action from our area. Don't be the officials who close your eyes and minds and allow the destruction of our community.

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Diana Abrell

Address: 12319 Wildcrest Dr., NC

Phone number: 530-273-3095

Email: star_flower@comcast.net

RECEIVED
JAN 29 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 114: ILIANA ABRELL

Response to Comment B 114-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 115

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

It negatively affects all areas of this community from air quality to noise and dust and water and traffic.
And it's not a financially responsible company that's leading this re-opening.

B 115-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Ingegerd Hjord

Address: 10965 BOULDER STREET, NEVADA CITY

Phone number: 530 263 2959

Email: ihjord@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 11 2022

FORM LETTER B 115: INGEGERD HJORD

Response to Comment B 115-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 116

Dist 1

RECEIVED

Date: FEB 14 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

The proposal has issues with air pollution and green house gas emissions, noise, lights, dust, vibration, truck traffic, explosions, extreme power requirements, millions of gallons of water pumped daily and radical changes to the community.

B 116-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Ingegerd Hjord

Address: 10465 BOULDER STREET, NEVADA CITY

Phone number: 530 263 2959

Email: ihjord@gmail.com

FORM LETTER B 116: INGEGERD HJORD

Response to Comment B 116-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 117

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: Jan. 31, 2022

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 117-1 I've been coming here for almost 40 years. I return to visit friends, breathe clean air, view peaceful foothill environment and QUIET. I shop in lovely, small shops, eat in delightful restaurants and walk + hike in the quiet and clean air. My research shows that pollution and ongoing noise from traffic and mining operations would negatively impact all of that. summer + vacation visitors I rent in Grass Valley

I am a Nevada County ~~resident~~ and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

J. Anne Lyon

Name: J. Anne Lyon

Address: 551 Lamont Ct, S Rohnert Park, CA 94928

Phone number: 619-933-1618

Email: mountan b@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 02 2022
NEVADA COUNTY PLANNING DEPARTMENT

FORM LETTER B 117: J. ANNE LYON

Response to Comment B 117-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Form Letter B 118

RECEIVED
FEB 02 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 1/31

Dist 1

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

WE DON'T NEED THE POLLUTION !!!
NOISE!!!

B 118-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

J.E. WILKINSON

Name: J.E. Wilkinson

Address: 12768 BANNER LAVA CAP RD.

Phone number:

Email: NICKIEJIM@GMAIL.COM

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 118: J.E. WILKINSON

Response to Comment B 118-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 119

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date:

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

1) The mine will pollute our air & increase lung diseases.
2) Clouds of airborne toxic mining dust including asbestos, will drift downward into Grass Valley.
3) Waste water will be dumped into South Fork Wolf creek, destroy habitats & stir up historic toxic residues like mercury, cyanide & lead. I enjoy walking on the beautiful, paved wolf creek trail almost daily. Thank you to the City of Grass Valley for the trail!

B 119-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Name: Jacque Bromm

Address: 800 Freeman Lane #102

Phone number: 530-613-3643

Email: jacquebromm@gmail.com

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

RECEIVED
FEB 14 2022
NEVADA COUNTY
PLANNING DEPARTMENT

FORM LETTER B 119: JACQUE BROMM

Response to Comment B 119-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns about water quality and contaminated discharge into South Fork Wolf Creek, please see Master Response 35.

Form Letter B 120

Dist 3 RECEIVED

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date: FEB 14 2022

NEVADA COUNTY
BOARD OF SUPERVISORS

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

1) The mine will pollute our air & increase lung disease
2) Clouds of airborne toxic mining dust, including asbestos, will drift downward into Grass Valley
3) Waste water will be dumped into South Fork Wolf creek, destroy habitat & stir up existing toxic residues like mercury, cyanide & lead. I enjoy walking on the beautiful, paved wolf creek trail almost daily.

Thank you to the city of Grass Valley for the trail!

B 120-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely,

Name: Jaque Bromm
Address: 800 Freeman Ln. #102
Phone number: 530-613-3643
Email: jacquebromm@gmail.com

FORM LETTER B 120: JACQUE BROMM

Response to Comment B 120-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Regarding air pollution, including toxic air contaminants and asbestos, please refer to the discussion within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of the DEIR. Regarding concerns about water quality and contaminated discharge into South Fork Wolf Creek, please see Master Response 35.

Form Letter B 121

Dist 1

RECEIVED
FEB 01 2022
NEVADA COUNTY
BOARD OF SUPERVISORS

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/1/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

WATER TABLE / TRUCK TRAFFIC

B 121-1

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely, James Knott

Name: JAMES KNOTT

Address: 506 BRIDGE ST NC

Phone number: 530 265 6376

Email: JGKNOTT@SBCGLOBAL.NET

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 121: JAMES KNOTT

Response to Comment B 121-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 122

Nevada County Board of Supervisors
950 Maidu Avenue, Suite 200
Nevada City, CA, 95959

Date:

Dear Supervisors Heidi Hall, Ed Scofield, Dan Miller, Susan Hoek, and Hardy Bullock,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Environmental Impact Report and subsequently voting to approve or not approve the project. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

WATER TABLE AND TRUCK TRAFFIC



B 122-1

I am resident of Nevada County and observe that Rise Gold Corporation lacks respect for the impact of their mine project on the environment and the people of Grass Valley. I hope you will be among those who will be known to have opposed the well-funded deception Rise Gold Mine has developed.

Sincerely, James Knott

Name: JAMES KNOTT

Address: 506 BRIDGE ST N/C

Phone number: 530 265 6376

Email: JGKNOTT@SBCGLOBAL.NET

FORM LETTER B 122: JAMES KNOTT

Response to Comment B 122-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 123

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/6/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 123-1

A company called FoxConn moved into my family city of Racine, WI. They promised the state jobs, growth, revenue, etc. They were permitted to take farms and lands that had been in families for generations. After leveling all of this property and creating a small development, they have failed to deliver on their promises. Rise Gold has a reputation for being this same kind of company and will not bring →

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Janet Acklam

Name: JANET ACKLAM
Address: 898 FREEMAN LANE
GRASS VALLEY, CA 95949
Phone number: 925.899.0694
Email: JANET.ACKLAM@GMAIL.COM

RECEIVED
FEB 07 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 123: JANET ACKLAM

Response to Comment B 123-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 124

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/6/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 124-1

A company called FoxConn moved into my family city of Racine, WI. They promised state job growth, revenue, etc. They were permitted to take farms and homes that had been in families for generations. After leveling all of this property and creating a small development, they have failed to deliver on their promises. Rise Gold has a reputation for doing this same kind of company and will not bring

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Janet Acklam

Name: JANET ACKLAM

Address: 898 FREEMAN LANE
GRASS VALLEY, CA 95949

Phone number: 925.899.0694

Email: JANET.ACKLAM@GMAIL.COM

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

FORM LETTER B 124: JANET ACKLAM

Response to Comment B 124-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1 and 3.

Form Letter B 125

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/6/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 125-1

A company called FoxConn moved into my family city of Racine, WI. They promised the state jobs, growth, revenue, etc. They were permitted to take farms and homes that had been in families for generations. After leveling all of this property and creating a small development, they have failed to deliver on their promises. Rise Gold has a reputation for being this same kind of company and will not bring

over

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Janet Acklam

Name: JANET ACKLAM
Address: 898 FREEMAN LANE
GRASS VALLEY, CA 95949
Phone number: 925.899.0694
Email: JANET.ACKLAM@GMAIL.COM

RECEIVED
FEB 07 2022

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

anything good to Grass Valley!
If Rise Gold does mark this mine,
they will destroy the beauty and
tranquility of our community with
blasting of the mine tunnels and
hauling away the waste rock.

Further, the waste water dumped
into the South Fork Wolf Creek will
continue through the section of
Wolf Creek on our property. This section
of the Creek was recently restored
by the efforts of Newmont Mining. The
dumping of this mining water will
take us back many years to the
contaminants previously seen in our
Creek.

Please do not allow this project
to move forward!!

FORM LETTER B 125: JANET ACKLAM

Response to Comment B 125-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Regarding concerns about discharge into South Fork Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek.

Form Letter B 126

Nevada County Planning Commission
950 Maidu Avenue, Suite 170
Nevada City, CA, 95959

Date: 2/6/22

Dear Commissioners Danny Milman, Laura Duncan, Robert Ingram, Mike Mastrodonato and William Greeno,

I, the undersigned, am opposed to the reopening of the Idaho-Maryland Mine by Rise Gold Corporation. I understand that you will be reviewing the Draft Environmental Impact Report and advising Nevada County's Board of Supervisors before they vote on the matter. I have listened to both sides of the argument and find Rise Gold Mine to be inconsistent, misleading and manipulative. They fail to adequately mitigate many significant negative impacts of this large industrial project on my family, friends, neighbors, and businesses.

There are many reasons this mine should NOT be reopened. My personal reasons are:

B 126-1

A Company called FoxConn moved into my family city of Racine, WI. They promised the state jobs, growth, revenue, etc. They were permitted to take farms and homes that had been in families for generations. After leveling all of this property and creating a small development, they have failed to deliver on their promises. Rise Gold has a reputation for being this same kind of company and will not bring

over

I am a Nevada County resident and see that Rise Gold Corporation lacks concern for our environment and the people who live here. I'm confident that you will value my input and comments from thousands of other residents. I hope you will be among those who will be known to have stood against the well-funded deception that Rise Gold Mine has developed.

Sincerely,

Janet Acklam

Name: JANET ACKLAM
Address: 898 FREEMAN LANE
GRASS VALLEY, CA 95949
Phone number: 925.899.0694
Email: JANET.ACKLAM@GMAIL.COM

RECEIVED
FEB 10 2022
NEVADA COUNTY
PLANNING DEPARTMENT

Cc: Director of Planning Brian Foss, Senior Planner Matt Kelley, Principal Planner Tyler Barrington

anything good to Grass Valley!
If Rise Gold does mark this mine,
they will destroy the beauty and
tranquility of our community with
blasting of the mine tunnels and
hauling away the waste rock.

Further, the waste water dumped
into the South Fork Wolf Creek will
continue through the section of
Wolf Creek on our property. This section
of the creek was recently recovered
by the efforts of Newmont Mining. The
dumping of this mining water will
take us back many years to the
contaminants previously seen in our
Creek.

Please do not allow this project
to move forward!!

FORM LETTER B 126: JANET ACKLAM

Response to Comment B 126-1

The commenter expresses general concerns regarding the project but does not specifically address the adequacy of the DEIR. Thus, a detailed response is neither possible nor required. Please see Master Responses 1, 2, and 3.

Regarding concerns about discharge into South Fork Wolf Creek, please see Master Response 35 - Discharge to South Fork Wolf Creek.