December 21, 2021

Mr. Karl Wozniak
Chemical Process Mining Coordinator
Oregon Department of Geology and Mineral Industries
Mineral Land Regulation & Reclamation
229 Broadalbin St SW
Albany, Oregon 97321

RE: Submittal of the Consolidated Permit Application, Grassy Mountain Mine Project

Dear Mr. Wozniak:

This letter accompanies the submission of the Consolidated Permit Application (CPA) for the Grassy Mountain Mine Project dated December 2021 and includes responses to DOGAMI's Completeness Review letter dated February 19, 2020. This letter and the shapefiles were uploaded today to DOGAMI's file transfer site. One hard copy of the CPA will be delivered under separate cover by SLR International Corporation (SLR).

Please note that the CPA includes relative hyperlinks to its appendices. This means the folder structure below is relative to the location of the CPA.

- GMM Documents (folder location of the CPA)
  - 040 Appendices (subfolder for appendices)
    - Baseline Studies
    - Design Reports
    - Management Plans
    - Permit Applications
    - Stand-alone appendix files that do not fit into the subfolders above
  - Additional Files (subfolder)
    - This cover letter, with responses to 2020 comments
    - Shapefiles

Please contact me at (775) 625-3600, glen@paramountnevada.com if you have questions or need clarification.

Sincerely,

Glen van Treek
President
Calico Resources USA Corp./Paramount Gold Nevada Corp.
(775) 625-3600
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Att: Response to Comments

Attachment
Response to Comments

Response to DOGAMI CPA Completeness Review

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
1	DOGAMI-Integral	2	Geochemistry BDR 5.2.3 Report Page 30	Comment: "Two buckets" Why two buckets? What is the bucket capacity? Why only sample one? Is the material in each bucket consistent? Proposed Resolution: Provide additional detail on samples and sample selection.	Two buckets were generated to ensure sufficient solids were available for testing. Additional information has been added to the baseline geochemistry report.
2	DOGAMI-Integral	2	Geochemistry BDR 5.2.3 Report Page 31	Comment: "…the amended tailings samples were submitted for leach testing." Leach testing is vague and used repeatedly through document. Does this mean MWMP or SPLP or Humidity Cells? All are forms of leach tests. In general the term "leach test" should not be used when there are specific leach tests that are already defined and conducted as part of the geochemistry program. Proposed Resolution: Use consistent naming of characterization methods.	The baseline geochemistry report has be modified for clarity throughout.
3	DOGAMI-Integral	2	Geochemistry BDR 5.3 Report Page 31	Comment: "…recommends that data be validated." Why were the data not validated? Proposed Resolution: Provide additional discussion of why recommended action was not performed, or complete the data validation and report it.	Data validation originally described as "A comparison of pH measurements from both McClelland and WetLab will also be carried out to assess data quality." Report modified to indicate that the data validation was completed.
4	DOGAMI-Integral	4	Geochemistry BDR 5.3 Report Page 31	Comment: "A comparison of pH measurements from both McClelland and WetLab was also be carried...." There is a typo in the sentence. Proposed Resolution: Correct typo	Text has been corrected.
5	DOGAMI-Integral	4	Geochemistry BDR 5.4 Report Page 31	Comment: "…using the modified Sobek method (Sobek, 1978)." Was the method used the 1978 version or a later Nevada-modified method? Proposed Resolution: Correct reference.	No action required. The reference is correct and consistent with the work plan.
6	DOGAMI-Integral	2	Geochemistry BDR 5.4 Report Page 31	Comment: "Total Inorganic Carbon Analysis (TIC) by Leco." All other methods identify a method number or reference. Proposed Resolution: Provide additional method information.	There is no method number for TIC analysis using a LECO carbon analyzer. Added "LECO furnace" to the method description.
7	DOGAMI-Integral	2	Geochemistry BDR Table 5.8 Report Page 35	Comment: What is source of these criteria? Proposed Resolution: Provide reference.	Förstner et al. (1993) is the source of the Geochemical Abundance Index and this reference has been added to the baseline geochemistry report.
8	DOGAMI-Integral	2	Geochemistry BDR 5.4.5 Report Page 38	Comment: "SRK selected fourteen core samples representative of waste rock…" Thirteen waste rock samples are listed in the table. Proposed Resolution: Correct number in text or correct table.	Thirteen samples were selected. The text has been corrected in the baseline geochemistry report.
9	DOGAMI-Integral	2	Geochemistry BDR 5.4.5 Report Page 38	Comment: "SRK selected 5 additional core samples that represent…" What are these 5 additional samples Proposed Resolution: Clarify statement in text.	Six ore grade samples were selected that represent the 95th and 50th percentile of sulfide sulfur content for the main material types (i.e., sandstone, siltstone and sinter). The baseline geochemistry report has been modified to add this additional information.
10	DOGAMI-Integral	2	Geochemistry BDR 5.4.5 Report Page 38	Comment: "Samples of breccia were not selected for MWMP or kinetic testing…" Two samples in Table 5-10 are identified as breccia. Proposed Resolution: Correct either statement in text or the table.	The text is referring to development rock. The entries in the table are ore samples (which are described in the second paragraph on this page). No changes necessary The text is referring to development rock. The entries in the table are ore samples which are described in the second paragraph on this page. No changes to text are necessary.
11	DOGAMI-Integral	2	Geochemistry BDR 5.4.5 Report Page 38	Comment: "Although the mudstone…., two samples of this material type were selected" Which is correct, the text or the footnote in Table 5-10, which states "This sample was chosen to replace the two mudstone samples identified in the work plan…"? Proposed Resolution: Clarify text.	Clarified text to be consistent with footnote (1 sample).
12	DOGAMI-Integral	2	Geochemistry BDR 5.4.5 Report Page 44	Comment: "Six out of seven access road cut samples were submitted…" Why 6 of 7? Proposed Resolution: Provide additional detail/rationale.	Not enough sample material was available for the seventh sample. Clarification has been added to the text.
13	DOGAMI-Integral	4	Geochemistry BDR 5.4.6 Report Page 44	Comment: "…to support prediction of leachate chemistry that would likely during through contact of meteoric water with waste rock." There is a typo in the sentence. Proposed Resolution: Correct typo	Text has been corrected.

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14	DOGAMI-Integral	2	Geochemistry BDR 5.4.6 Report Page 45	Comment: “Graphs of total arsenic, antimony and mercury versus sulfide sulfur are provided...” Why only these three? Why are graphs of other metals not provided? Proposed Resolution: Provide additional detail on why these elements were selected.	Text revised to include the following statement "These constituents were selected to be consistent with the 43-101 report (Ausenco, 2020), which notes anomalous arsenic, antimony and mercury in the trace element signature of the deposit."
15	DOGAMI-Integral	2	Geochemistry BDR 5.4.6 Report Page 46	Comment: “During the seven-day cycle….” The HC method description in the text appears to be at odds with the standard HC method. Is the text description wrong or was a modified method used? Proposed Resolution: Provide additional detail.	The text has been revised to be consistent with the ASTM methodology.
16	DOGAMI-Integral	2	Geochemistry BDR 6.1.1 Report Page 48	Comment: “Statistical analysis of the multi-element data…” What statistical analysis was conducted? Where is this analysis presented? What statistical methods were used? The statistical analysis should be provided as an appendix. Proposed Resolution: Provide documentation of statistical analysis.	Statistical analysis/testing was not performed. Text has been revised to clarify that summary statistics were calculated for comparison with criteria (e.g. average, min, max, etc.).
17	DOGAMI-Integral	4	Geochemistry BDR Table 6-2 Report Page 51	Comment: Table footnotes are not consistent with their use in the table. Proposed Resolution: Correct table as needed.	Reference to footnote 3 and 4 has been corrected.
18	DOGAMI-Integral	2	Geochemistry BDR 6.1.2 Report Page 52	Comment: “A comparison of the NP from the modified Sobek method to the NP calculated from the TIC indicates that silicate dissolution does not contribute….” Does this plot show anything other than the fact that TIC is non-detect for all but 2 samples? Proposed Resolution: Discuss impacts of data censoring on conclusions.	Sentence and graph have been removed from the document. As all but two samples have TIC less than the detection limit, the graph does not provide any additional important information. The TIC results confirm the low NP of the material.
19	DOGAMI-Integral	2	Geochemistry BDR 6.1.2 Report Page 53	Comment: “Only 2% of samples tested meet the BLM criteria…” and “Five percent (5%) of samples tested….” In this section of the report there appears to be some confusion as to sample counts versus sample percent. Proposed Resolution: Provide sample number followed by percent at each instance for clarity.	Text has been revised to include the number of samples followed by the percentage of the total.
20	DOGAMI-Integral	2	Geochemistry BDR 6.1.2 Report Page 54	Comment: “The sulfide sulfur results for the ore grade material are comparable to sulfide sulfur results for waste rock samples of the same lithology.” Where is this shown or demonstrated? Proposed Resolution: Provide reference to figure or table where corresponding information can be found.	Text edited to "The sulfide sulfur results for the ore grade material were within the same range as the sulfide sulfur results for waste rock samples of the same lithology (i.e., nearly all the points [representing both ore and waste rock] follow the same trend line in Figure 6-2)."
21	DOGAMI-Integral	4	Geochemistry BDR 6.1.2 Report Page 55	Comment: “neutral to alkaline pH values (pH 6 to 8)” Isn’t pH 6 just as acidic as pH 8 is alkaline? Proposed Resolution: Clarify text.	Texted edited to "paste pH values in the range of pH 6 to 8"
22	DOGAMI-Integral	4	Geochemistry BDR Figure 6-5	Comment: Are the samples on the figure “proposed HCT samples” or actual HCT samples? Figures in this section sometimes identify HCT samples and sometimes they don’t. Proposed Resolution: Edit figures for consistency.	Revised Figure 6-5 to remove series "Proposed HCT samples". All figures are now consistent.
23	DOGAMI-Integral	2	Geochemistry BDR 6.1.4 Report Page 59	Comment: A summary of the erionite results for Waste Rock and Ore should be provided in this section of the document. Proposed Resolution: Provide summary of results in main text.	Sections 6.1.4, 6.2.4, 6.3.4 and 6.4.4 have been revised to include the results of the erionite study.
24	DOGAMI-Integral	2	Geochemistry BDR 6.1.5 Report Page 61	Comment: One MWMP had a pH of 9.4—quite alkaline. Given the pH-dependent mobility of metalloids, this is notable. Also, the report states that pH>7 is neutral, which is not true in all cases (see example above). Proposed Resolution: Expand discussion and use a consistent definition of neutral pH throughout the document.	Figure 6-9 has been revised to include the sample with pH 9.4 and a description was added to the text. Although this sample did have alkaline pH it did not release metals in the MWMP test. This sample was also tested in HCT (HC-8) and, pH conditions around pH 7 and metals were not released above Oregon WQ guidelines (Table 6-7). Instances where 'neutral' was used to describe the pH conditions were modified to state the actual value.
25	DOGAMI-Integral	4	Geochemistry BDR 6.1.5 Report Page 61	Comment: “metal(loid)s” Unclear. Proposed Resolution: Clarify text (e.g., “metals and metalloids”).	Text has been revised to include metal and metalloid.
26	DOGAMI-Integral	4	Geochemistry BDR 6.1.6 Report Page 64	Comment: “The samples selected for kinetic testing are summarized in Table 5-110…” There is a typo in the table number. Proposed Resolution: Correct text.	Text has been corrected.

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27	DOGAMI-Integral	2	Geochemistry BDR 6.1.6 Report Page 64	Comment: “Eight of nine humidity cells developed acidic conditions….The two cells that did not develop acidic conditions” Which one of these statements is correct? Proposed Resolution: Correct text.	Corrected text to "seven of the nine HCTs."
28	DOGAMI-Integral	2	Geochemistry BDR 6.1.6 Report Page 64	Comment: “HC-3 (mudstone) had the greatest number of parameters that exceed the guidelines…” HC-4 and HC-7 have the same number as HC-3. So the description in the text is incomplete. Proposed Resolution: Clarify discussion.	Revised text to "greatest number of measurements."
29	DOGAMI-Integral	4	Geochemistry BDR 6.1.6 Report Page 64	Comment: “Manganese, arsenic, sulfate and TDS were elevated less often in HC-4 when compared to HC-3 Effluent pH was consistently below the minimum guideline for both cells.” Appears to be missing punctuation. Proposed Resolution: Correct text.	Punctuation has been added.
30	DOGAMI-Integral	2	Geochemistry BDR 6.1.6 Report Page 66	Comment: The Table 6-7 shows results for HC-10, but the discussion does not include HC-10. Proposed Resolution: Clarify text—add or reference HC 10 discussion.	HC-10 is a tailings sample. Removed HC-10 from Table 6-7 as it is discussed in Section 6.4.
31	DOGAMI-Integral	2	Geochemistry BDR 6.1.7 Report Page 67	Comment: “Humidity cells with effluent pH values at or above 5 s.u. are considered non-acid generating…” Is this a one-time criterion or an average or some other type of evaluation? Proposed Resolution: Clarify text.	This criterion is applied to any weekly measurement. No changes made to text.
32	DOGAMI-Integral	2	Geochemistry BDR Table 6-8 Report Page 67	Comment: Previous table had HC-10; Table 6-8 doesn’t. Proposed Resolution: Please make figures/tables consistent in data presented.	Removed references to tailings sample (HC-10) in this section as it is discussed in Section 6.4
33	DOGAMI-Integral	2	Geochemistry BDR 6.1.8 Report Page 70	Comment: “The primary exceptions to this include cadmium, cobalt, copper, nickel and zinc that showed a range of mobilization ranging from less than 1% to as much as 80%...” Cd is up to 86%, Co up to 93%, and Ni up to 82%, according to the table. The text needs to be reviewed for accuracy. Do different rock types show different degrees of leaching? Proposed Resolution: Correct text and expand discussion.	Text revised for accuracy and clarity.
34	DOGAMI-Integral	2	Geochemistry BDR Table 6-16 Report Page 70	Comment: Why are head assays back calculated as opposed to being based on measured values? Does this footnote apply to Tables 6-11 through 6-15 as well as 6-16? Proposed Resolution: Provide clarification.	Yes, footnote is applicable to all tables. The sample analyzed for total metals is different from the one in the leach testwork. Therefore, it is necessary to calculate the total element reservoir for the HCT sample. The sum of the mass of metals leached are combined with the total analysis in the residue to determine "total content" in the leached material. Calculating the reconstituted head is a common approach used in metallurgy and geochemistry to address this issue.
35	DOGAMI-Integral	2	Geochemistry BDR 6.2.1 Report Page 74	Comment: “Statistical analysis of the multi-element data…” What statistical analysis was conducted? Where is this analysis presented? What statistical methods were used? The statistical analysis should be provided as an appendix. Proposed Resolution: Provide documentation of statistical analysis.	See response to comment 16.
36	DOGAMI-Integral	2	Geochemistry BDR 6.2.4 Report Page 78	Comment: State the results of erionite sampling here. Proposed Resolution: State results in text or provide in a figure.	See response to comment 23.
37	DOGAMI-Integral	4	Geochemistry BDR 6.2.5 Report Page 79	Comment: Typo: “…in Table 6-20Table6-5 and all…” Proposed Resolution: Correct typo.	Text has been corrected.
38	DOGAMI-Integral	2	Geochemistry BDR 6.3.1 Report Page 81	Comment: “Statistical analysis of the multi-element data…” What statistical analysis was conducted? Where is this analysis presented? What statistical methods were used? The statistical analysis should be provided as an appendix. Proposed Resolution: Provide documentation of statistical analysis.	See response to comment 16.
39	DOGAMI-Integral	2	Geochemistry BDR 6.3.1 Report Page 81	Comment: “Single elevated values of arsenic and cadmium also occurred.” Sentence is unclear. Proposed Resolution: Rewrite sentence to indicate that one sample is elevated for each element, and that the magnitude is large (6-12 times).	Revised text to "Elevated values of arsenic and cadmium also occurred in sample #6 and #2, respectively."

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40	DOGAMI-Integral	2	Geochemistry BDR 6.3.4 Report Page 84	Comment: State the results of erionite sampling here. Proposed Resolution: State results in text or provide in a figure.	See response to comment 23.
41	DOGAMI-Integral	2	Geochemistry BDR 6.3.5 Report Page 85	Comment: "MWMP leach tests were conducted on a total of seven access road samples…" Six samples are presented in Figure 6-12 and Table 6-24. Proposed Resolution: Correct text or table.	Text corrected to six. There was insufficient material to test one of the seven samples for MWMP.
42	DOGAMI-Integral	2	Geochemistry BDR 6.3.5 Report Page 85	Comment: "…were classified as "near-neutral, low-metal waters" based on pH values between 6.5 and 8…" Definition or range of neutral pH in this document is unclear based on multiple usages. Proposed Resolution: Provide definition of neutral pH in document and use this consistently throughout.	Text has been revised to clarify that the use of near-neutral is based on the graphical classification. In addition, the text has been revised to include the consistent use of 'neutral' throughout.
43	DOGAMI-Integral	2	Geochemistry BDR Table 6-25 Report Page 87	Comment: What does "(1 of 2)" indicate—is that the buckets? Proposed Resolution: Provide additional detail.	The designation "(1 of 2)" has been removed from the tables. The tailings samples included in the analysis are described in Section 5.2.3.
44	DOGAMI-Integral	2	Geochemistry BDR 6.4.3 Report Page 88	Comment: State the results of erionite sampling here. Proposed Resolution: State results in text or provide in figure	See response to comment 23.
45	DOGAMI-Integral	2	Geochemistry BDR 6.4.3 Report Page 88	Comment: Why was only the 2015 sample sent for mineralogy? Proposed Resolution: Provide additional explanation.	Mineralogy was conducted on samples included in the HCT program. Because the 2018 tailings samples were not included in the HCT program, mineralogical analysis was not conducted on these samples.
46	DOGAMI-Integral	4	Geochemistry BDR 6.4.5 Report Page 91	Comment: "Leach test results are summarized in Table 6-20." Incorrect table reference. Proposed Resolution: Correct error.	Corrected table reference.
47	DOGAMI-Integral	2	Geochemistry BDR Table 6-30 Report Page 91	Comment: The table does not identify high pH exceedances of leachates outside of OGWQG guidelines. Proposed Resolution: Correct error.	Added shading to the table (now Table 6-31) and description in the text.
48	DOGAMI-Integral	2, 3	Geochemistry BDR 6.4.5 Report Page 91	Comment: A discussion of the use of lime vs. limestone (or other options) as a buffering agent would be useful. The use of limestone would likely not drive pH to such high levels in excess of OGWQG guidelines. The lower pH of limestone may ameliorate selenium mobilization as well. Proposed Resolution: Discuss high pH and potential impacts. Add this item to the data gap summary at the conclusion of the document.	Lime has been selected for neutralization effort, rather than limestone due to the ease of application and availability of lime that will be used in the process. The pH conditions are likely to be higher in the short term because the tailings will be amended to meet a criteria that assumes complete oxidation of the sulfide within the material, which will take place over time. Although the mobilization of some constituents may increase under the high pH conditions, the mobilization of other constituents will decrease (e.g., copper). The tailings will be placed in a lined impoundment and will be a zero discharge facility during operations and closure. In addition, the tailings will be covered with a geosynthetic liner at closure. Therefore, the only risks to the environment are related to water that collects on the surface of the impoundment (supernatant pond) or the reclaim pond. A geochemical model has been developed that predicts the operational tailings pond chemistry using SPLP results representative of the amended tailings. The results of this modeling effort are provided under separate cover and demonstrate that there are no ecological risks associated with the tailings reclaim pond and supernatant pond.
49	DOGAMI-Integral	4	Geochemistry BDR 6.4.7 Report Page 92	Comment: Add reference to Table 6-31 Proposed Resolution: Add reference.	Reference has been added.
50	DOGAMI-Integral	4	Geochemistry BDR Table 6-31 Report Page 93	Comment: The (1/2) and (2/2) notation is not defined. Proposed Resolution: Add footnote identifying the meaning of this notation.	See response to comment 43.

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51	DOGAMI-Integral	4	Geochemistry BDR 7.1 Report Page 94	Comment: There is a long list of constituents with exceedances of various criteria. Is it possible to identify a shorter list of constituents of concern—perhaps based on frequency and magnitude of occurrence or exceedance of the OGWQG guidelines? Proposed Resolution: Add discussion of constituents of concern to summary.	Based on the leach testing, constituents that are most likely to be released to the environment from mine waste include arsenic, iron, fluoride, manganese, selenium and sulfate. However, geochemical modeling is being performed (as part of impacts analysis) to evaluate the potential for these constituents to impact groundwater. Section 7.1 has been modified to include a discussion of the potential for waste rock and ore material to degrade groundwater.
52	DOGAMI-Integral	2	Geochemistry BDR 7.1 Report Page 94	Comment: The first sentence of paragraph 1, "…wide range of sulfide content and acid generation potential" seems to contradict paragraph 2. The second paragraph seems to indicate that the vast majority of samples are "uncertain," having low AP and NP. Proposed Resolution: Clarify text.	Section 7.1 has been modified to make the discussion more clear.
53	DOGAMI-Integral	2	Geochemistry BDR 7.1 Report Page 95	Comment: "Eight of nine humidity cells developed acidic conditions….The two cells that did not develop acidic conditions". Which of these statements is correct? Proposed Resolution: Correct statement.	See response to comment 27
54	DOGAMI-Integral	3	Geochemistry BDR 7.3 Report page 95	Comment: Add discussion of high pH of lime amendment, and potential use of limestone or other suitable amendment as an alternative. Proposed Resolution: Add discussion as part of requested data gaps section in summary.	See response to comment 48.
55	DOGAMI-Integral	2	Geochemistry BDR	Comment: Borrow and Road Cut Samples - The report includes sampling of borrow and road cut materials. However, only limited sample information is provided—for example, the borrow pit samples are identified only by latitude, longitude, and elevation. No information regarding sampling methods, sample depth, sample selection, or a map of the borrow pit sample locations is provided. In the absence of this information, Integral cannot assess the suitability and representativeness of these samples. Proposed Resolution: The sampling methods, sample depths, sample selection criteria, and other pertinent sample information should be added to the report.	A map has been added to the baseline geochemical characterization report showing the sample locations. Samples collected represent intervals throughout the full depth of drilling (0-170 ft).
56	DOGAMI-Integral	2,3	Geochemistry BDR	Comment: The report identifies the use of waste rock in cemented rock fill (CRF) as an issue and indicates that no characterization of this material has been completed to-date. It is unclear, based on conflicting statements in the report, whether this material will be placed only above the water table or below the water table following testing. Proposed Resolution: The report should be revised to clearly identify the path forward for characterization of this material and resolve conflicting statements regarding the potential uses of such material.	The CRF geochemical characterization program is ongoing and will be provided under separate cover. References and details on the management of CRF have been removed from this document.
57	DOGAMI-Integral	2	Geochemistry BDR	Comment: Vague and Incomplete Descriptions of Technical Analyses - In several parts of the document, assertions regarding the data and descriptions of the path forward are vague and incomplete. For example, p. 48 of the report states the following: "Statistical analysis of the multi-element data indicates that many environmentally significant elements are below or close to their relative natural abundance in the samples." However, the completed statistical analysis is not described or provided. Another example is on p. 54: "The sulfide sulfur results for the ore grade material are comparable to sulfide sulfur results for waste rock samples of the same lithology." The report, however, does not indicate how this conclusion was reached or where in the document this comparison is demonstrated. Proposed Resolution: Provide additional clarification to resolve incomplete descriptions and data presentation per Table 1 comments.	See responses to comments 16 and 20.

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58	DOGAMI-Integral	3	Geochemistry BDR	Comment: Data Gaps and Remaining Tasks - The report identifies a number of remaining tasks (e.g., characterization of basalt or tuff samples in the future, characterization of cemented rock fill, a tailings management plan) and indicates that there are spatial data gaps in the geochemical data set. Some of these items are identified through the text but not summarized at the end of the report. In addition, the schedule for completion of these tasks or the identification of the spatial data gaps is not detailed. Proposed Resolution: The report should include an additional section that compiles and summarizes identified data gaps and/or incomplete tasks and indicates a path forward for resolving each of these issues.	Basalt and tuff comprise less than one percent of the material that will be mined and characterization of this material within the underground workings is not required. Samples of basalt from the proposed borrow area have been collected and are described in Section 5.2.2. Additional samples from the decline or underground workings are not proposed at this time. Characterization of the CRF is ongoing and will be provided under separate cover and not as part of the baseline characterization. Therefore, the baseline characterization program is considered complete and the text has been modified to remove references to additional characterization tasks to support the baseline study.
59	DOGAMI-Integral	3	Geochemistry BDR	Comment: Amendment of Tailings- SRK correctly interpreted and implemented OAR 340-043-0130 regarding the amendment of tailings to ameliorate the potential for acid generation. For this amendment, it selected lime (CaOH2) as the material to provide the acid neutralization capacity. However, the excess of lime required to meet OAR 340-043-0130 results in very high tailings pH (~12). These elevated pH values are above Oregon water quality criteria and present concerns regarding the mobility of elements such as arsenic and selenium. These concerns are not identified or discussed in the report. Proposed Resolution: The report should be revised to identify and discuss the high pH values and the potential concern for highly alkaline water and arsenic and selenium generation. In addition, the report should discuss the potential use of alternative neutralization agents, such as crushed limestone or dolomite. An appropriate document to address these issues would be the tailings management plan.	See response to comment 48.
60	DOGAMI-Integral	4	Geochemistry BDR	Comment: Constituents of Concern - Multiple lines of evidence (i.e., elemental composition, static testing, kinetic testing) are available that identify constituents that are present at enriched levels or anticipated to be mobilized from mined materials. However, the report does not contain a synthesis or summary of primary constituents of concern. Such a list would be useful for users and readers of this document to identify the primary concerns. Proposed Resolution: Provide a summary table and text identifying the primary constituents of concern and the criteria used to identify them.	See response to comment 51.
61	DOGAMI-Integral	4	Geochemistry BDR	Comment: Typos and Errors- The intention of Integral's review was to focus on the suitability of the geochemical characterization. However, a number of obvious errors (e.g., incorrect figure references, incorrect sample counts) and typographical mistakes were found. Proposed Resolution: The identified issues should be corrected and the entire document reviewed.	Noted and the text has been reviewed and corrected.
62	DOGAMI	4	Geochemistry BDR	Comment: General Document Usability - As noted in previous reviews (Integral 2018), accessibility and usability of the current report is difficult. In its current form, the document is a PDF with 2,162 unindexed pages, and data and analyses are difficult to locate, especially in the appendices. For example, the erionite analyses are not presented in the main text of the report and the reader must manually scroll through more than 400 pages to find the results. This challenge could be circumvented by providing document with PDF bookmarks. This basic level of organization is needed to make this a more readily usable and transparent document. This document may also eventually be a part of a larger National Environmental Policy Act effort, where Federal Section 508 accessibility standards may apply. These standards allow people with disabilities to more easily access public documents (see https://www.section508.gov/manage/laws-and-policies). These standards point to the need to for documents to be bookmarked, linked, and tagged at the table of contents level, and indicate that appendices should be individual PDF files. The U.S. Environmental Protection Agency and many other federal agencies, as well as the Adobe Corporation, have developed electronic document guidance. Proposed Resolution: Regenerate the document as a PDF compliant with Section 508 standards.	Federal Section 508 accessibility standards have been considered. The document has been updated to include navigational bookmarks and table of contents.

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63	DOGAMI-Integral	4	Geochemistry BDR 2.1 Report Page 3	Comment: Figure 1-1 is referenced, but is not present in the document. Proposed Resolution: Correct reference.	Figure reference has been corrected.
64	DOGAMI-Integral	4	Geochemistry BDR Figure 2-3 Report Page 7	Comment: This figure is not referenced in the document. Proposed Resolution: Correct reference.	Figure reference has been corrected.
65	DOGAMI-Integral	4	Geochemistry BDR 3.2.1 Report Page 8	Comment: Reference to Figure 3-4 appears to be incorrect; should it be Figure 3-3? Proposed Resolution: Correct reference.	Figure reference has been corrected.
66	DOGAMI-Integral	4	Geochemistry BDR Figure 3-4 Report Page 15	Comment: Legend and much of the smaller text is illegible. Proposed Resolution: Improve figure resolution or increase figure size.	Figure has been enlarged to improve readability.
67	DOGAMI-Integral	4	Geochemistry BDR 3.2.2 Report Page 17	Comment: "The general direction of groundwater flow in 2013 (SPF)…" Reference is not provided in reference list. Proposed Resolution: Add reference.	Reference has been added.
68	DOGAMI-Integral	4	Geochemistry BDR 4 Report Page 19	Comment: "The boiling water produced brecciation, alteration of county rock…" Should be "country rock." Proposed Resolution: Correct typo.	Text has been corrected.
69	DOGAMI-Integral	3	Geochemistry BDR 4 Report Page 19	Comment: "The operation would employ an industry standard tailings management technology…" What is this technology? A description would be useful. Proposed Resolution: Provide additional detail or reference applicable document or report.	Text has been modified to remove the reference to 'industry standard tailings management technology.' A discussion of the tailings management is not within the scope of this document.
70	DOGAMI-Integral	3	Geochemistry BDR 4 Report Page 20	Comment: "Samples representative of CRF with waste rock will need to undergo geochemical characterization…" Is this an identified data gap? Proposed Resolution: Provide additional detail regarding timeline for this characterization work. Add data gaps/work remaining to report summary.	See response to comment 56.
71	DOGAMI-Integral	2	Geochemistry BDR 4 Report Page 20/21	Comment: "…prior to placing CRF with waste rock below the estimated groundwater table." The preceding sentence indicates that CRF with waste rock "will only be placed above the saturated zone." Which statement is accurate? Proposed Resolution: Clarify statements in document for consistency.	See response to comment 56.
72	DOGAMI-Integral	3, 4	Geochemistry BDR Table 4-1 Report Page 22	Comment: (a) LOM is not defined anywhere in document. (b) Footnote identifies additional task to be completed; it would be helpful to summarize these in the conclusions. Proposed Resolution: (a) Define acronym. (b) Provide discussion of remaining tasks in document summary/conclusions	Text revised to spell out LOM. A work plan for CRF characterization has been prepared. This additional characterization data is not considered 'baseline data' and will be provided under separate cover. The baseline characterization program is considered complete and the conclusions section does not include a description of ongoing work.
73	DOGAMI-Integral	2	Geochemistry BDR 5.2.1 Report Page 24	Comment: "SRK collected a total of 105 samples….This included 68 samples from exploration drill core and 36 pulp" 68+36=104 Proposed Resolution: Correct error.	Corrected sample number to 104.
74	DOGAMI-Integral	2	Geochemistry BDR 5.2.1 Report Page 25	Comment: "Based on the current mine plan, approximately 2 Mt of waste rock will be generated…" On page 4, it says 0.2 Mt of waste rock Proposed Resolution: Correct the value that is in error.	Corrected to 0.2 Mt throughout document.
75	DOGAMI-Integral	2	Geochemistry BDR 5.2.1	Comment: "Multi-element and total sulfur data was not available for the exploration dataset…" What is the exploration dataset? This term is not noted or referenced elsewhere in document. Proposed Resolution: Clarify statement and identify referenced dataset.	Multi-element data was not collected as part of the past exploration programs. The text has been modified to clarify this point.
76	DOGAMI-Integral	3	Geochemistry BDR 5.2.1 Report Page 26	Comment: "However, some spatial gaps will need to be addressed in the future…" Where are these spatial gaps? How do they affect the conclusions of this report? Proposed Resolution: Provide additional discussion and/or figure as needed	See response to comment 58.

Response to DOGAMI CPA Completeness Review

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
77	DOGAMI-Integral	4	Geochemistry BDR 5.2.1 Report Page 26	Comment: "need to be addressed in the future when_drilling…" Unnecessary underscore in the sentence. Proposed Resolution: Remove underscore	Text has been corrected.
78	DOGAMI-Integral	3	Geochemistry BDR 5.2.1 Report Page 26	Comment: "Calico will develop and implement a sampling and testing program…" Information is lacking on the program detail. Proposed Resolution: Provide additional detail regarding the development of this program.	Testing program is to certify and confirm the rock units in these areas are geochemically similar to the waste rock in the baseline study. This implies that, if Calico mines the additional lithology, a program similar to the geochemical baseline study would be performed. The purpose of the confirmation testing program would be to confirm the rock units in the areas with limited data are geochemically similar to the waste rock in the baseline study. This work would be done as part of the pre-mining planning process using the same methods as the geochemical baseline study to produce comparable results.
79	DOGAMI-Integral	2	Geochemistry BDR 5.2.2 Report Page 28	Comment: Limited information on borrow material samples has been provided. For example, no map of boring locations, no boring depths, no sampled intervals, no information on how samples were selected from borings, and no information on representativeness of these samples is provided. Proposed Resolution: Provide relevant documentation of samples and methods.	See response to comment 55.
80	DOGAMI-Integral	2	Geochemistry BDR Table 5-5 Report Page 28	Comment: An inconsistent number of samples is selected for various analytical methods. No explanation or justification is provided for the how or why of the sample numbers (i.e., comparing vesicular basalt [3 of 4 for mineralogy] versus andesitic basalt [1 of 7 for mineralogy]). Proposed Resolution: Add discussion of criteria for selection of sample characterization methods.	The sampling program is designed with guidance documents described in Section 5.2.1 as a starting point in addition to professional judgement. Often, samples are targeted for mineralogy to help answer specific questions/uncertainties following collection of static and kinetic testing.
81	DOGAMI-Integral	2	Geochemistry BDR 5.2.2 Report Page 28	Comment: For road cut samples, no explanation of sampling rationale or sample numbers is provided. How were the samples collected? Provide information on why the samples were collected in this section of the report. Proposed Resolution: Add discussion of sample characterization and selection criteria.	Text modified to provide additional detail.
82	DOGAMI-Integral	4	Geochemistry BDR Figure 5-2	Comment: The figure does not have a legend. Please identify whether the "erionite" samples on the figure are the same as the "road cut samples" described in the report text. Proposed Resolution: Text and figure should consistently name samples.	Legend was added to figure.
83	DOGAMI	1	Cultural Resources Baseline Data Report	Comment: The Oregon State Historic Preservation Office (SHPO) is coordinating with the United States Bureau of Land Management (BLM) to review cultural resource survey information for the project area. As of February 12, 2020, during the Project Coordinating Committee (PCC) meeting in Ontario, Oregon, that information was not yet provided to SHPO by the BLM. Proposed Resolution: Continue coordination efforts with BLM and Oregon SHPO. Provide Oregon SHPO with a Cultural Resources Baseline Data Report to review for completeness as part of a revised CPA.	The TRT will need to formally approve the Cultural Resources Baseline Data Report. SHPO, BLM are coordinating with DOGAMI to present review comments as to submit to the TRT.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
84	ODFW	1	Baseline Data Review, Appendix B	Comment: The wildlife baseline data has not been concurred with by Technical Review Team. ODFW previously submitted recommendations that the baseline data report submission include all referenced files and appendices, and that all digitally submitted files or attachments are appropriately named. The baseline report needs to include all the relevant data the reviewer needs to determine compliance with the approved baseline study work plan, in such that a reviewer with no previous history of the project could take the approved work plan and the baseline data report and complete the review. For transparency in evaluating the data and understanding the validity of sage-grouse surveys conducted for the project, the wildlife baseline report should provide figures illustrating survey areas and routes for each type of sage-grouse survey. Figures of survey areas and tracks for each type of sage-grouse survey should be included in the revised submittal for TRT concurrence. In addition, it is not suitable to conclude that sage-grouse do not use the habitat within the survey area because no evidence of use was determined. Surveys can be used to determine sage-grouse presence at the time surveys were conducted. The lack of evidence of sage-grouse habitat use within the survey area does not mean sage-grouse were not present; it just indicates there was no evidence detected to prove presence (see page 31, Section 5.7.1.1). Proposed Resolution: The revised baseline report needs concurrence by the Technical Review Team.	The TRT approved the BDR Ver. 4 (October 2020) as complete at their 02/02/2021 meeting.
85	USFWS	2	Wildlife Baseline Report	Comment: A table should be provided to document how and where previous comments have been addressed in the current version of the baseline report. Proposed Resolution: Provide comment table as soon as possible	The TRT approved the BDR Ver. 4 (October 2020) as complete at their 02/02/2021 meeting.
86	USFWS	1	Wildlife Baseline Report pg. 31	Comment: This comment was originally submitted as part of the November 2018 review. It does not appear to have been addressed in Version 3 of the Wildlife Resources Baseline Report, revised January 2019. Rather than addressing this comment, the authors of the Baseline Report appear to have simply removed information. The study work plan indicates that GOEA nest surveys "will be collected at two separate periods at least 30 days apart during the nesting season". The work plan does not indicate if these surveys are to occur within the same year, but it is assumed that the intent was to have a minimum of two surveys per year during the nesting season. In Version 2 of the Baseline report, it was stated that nest surveys occurred only once in 2014 (4/27/14) and no replicate survey occurred during the same year at least 30 days from the initial survey. Four nest surveys occurred in April 2017, with no replicate 30 days apart from any of the April 2017 surveys. Some ground monitoring occurred in June 2017 (but outside of the survey window stated in the study work plan (surveys occurred June 21-23, stated window is April 15-June 15). Only one survey was conducted in 2018 (2/6/18) and this was outside of the nesting season (April 15-June 15). The Baseline Report V3 indicates that aerial nest surveys occurred 4/21/17 and 4/28/17. A ground survey of known eagle nest, OR GE 1327, occurred on 5/27/17. No eagles were observed and no follow-up survey occurred to meet the requirement of the study work plan. In 2018, this nest (OR GE 1327) was observed twice from the air, but the survey dates (1/24/18 and 2/6/18) are outside of the nesting season (April 15-June 15). Two additional eagle nests observed near Sagebrush Gulch were also observed on 1/24/18 and 2/6/18, but they were not surveyed during the nesting season. Proposed Resolution: The golden eagle nests should be surveyed in accordance with the work plan, during the nesting season, to determine if they are active.	The TRT approved the BDR Ver. 4 (October 2020) as complete at their 02/02/2021 meeting.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
87	USFWS	4	Wildlife Baseline Report, Table 6, Page 21; Section 5.3.4 page 23	Comment: The habitat described in Table 6 and in the text (starting on page 23) include three overarching types: (1) developed, (2) grassland, (3) shrub-steppe. Shrub-steppe is described as having >20% shrub cover (Wyoming big sagebrush and/or yellow rabbitbrush) while grasslands are described as having an "inconspicuous" shrub cover. The use of 20% shrub cover as a threshold to delineate shrub-steppe from a grassland is too high, as even 10-15% shrub cover would not be "inconspicuous". Further, from a wildlife perspective, shrub cover >5-10% is considered a threshold to distinguish habitat value for sage-grouse. The aforementioned 20% shrub cover threshold is presented in Table 6, yet this does not agree with the threshold presented in the text on page 23 (where 15% is reported). Sage-grouse should be included in the list of species known to use perennial grasslands and sagebrush shrub-steppe (see Table 6 or the related text). Proposed Resolution: We recommend reclassifying the land cover and habitat types within the permit area; ensuring shrub cover values are consistent; and including sage-grouse in the list of species included in the list of species known to use perennial grasslands and sagebrush shrub-steppe.	The TRT approved the BDR Ver. 4 (October 2020) as complete at their 02/02/2021 meeting.
88	USFWS	2, 4	Wildlife Baseline Report, Section 4.2.5.1, page 13	Comment: Additional information to describe how brood rearing survey locations were selected is necessary to understand how adequate their survey effort was. For instance, how did they select the meadow/riparian habitats to survey? Did they survey all possible brood rearing habitat or just a selection? Based on the most recently available sage-grouse habitat and sagebrush cover products available from the SageCon Data Explorer, it is not clear if their efforts were focused in areas most likely to support sage-grouse. Proposed Resolution: Provide additional information on how brood rearing survey locations were selected.	The TRT approved the BDR Ver. 4 (October 2020) as complete at their 02/02/2021 meeting.
89	USFWS	2, 4	Wildlife Baseline Report, Section 4.2.5.2, page 13	Comment: Additional information to describe how winter use ground survey locations were selected is necessary to understand how adequate their survey effort was. Based on the most recently available sage-grouse habitat and sagebrush cover products available from the SageCon Data Explorer, it is not clear if their efforts were focused in areas most likely to support sage-grouse. Proposed Resolution: Provide additional information on how winter use ground survey locations were selected.	The TRT approved the BDR Ver. 4 (October 2020) as complete at their 02/02/2021 meeting.
90	DEQ	2	Geochemistry Baseline Geochemistry Section 7.4	Comment: Baseline Geochemistry Section 7.4 Cemented Rock Fill (CRF) – as determined by the geochemical testing results at section 000.000, a majority of the waste rock has potential to generate acid and leach metals. This section of the Geochemistry Baseline report proposes that 5% cement be added to waste rock to be used as backfill in the mine. However, Calico specifies 7% cement in CRF in 3.3.5.1 of the Consolidated Permit Application. There is no apparent resolution of this conflict and no geochemical assessment of it. Indeed, the does not seem to be any geochemical characterization of CRF as proposed. These conflicts cloud the assessment of existing conditions. This section also states that CRF made from waste rock would be placed only in locations above the water table. How will pH in the underground workings (inclusive of material in situ and all backfill materials) be best managed to prevent acid generation and the mobilization of metals? In Section 3.3.5 of the Consolidated Application it is stated that waste rock would be used as backfill "to extent possible". In Section 4.6.2 of the Consolidated Application it is stated that "all 0.2 million tons of waste rock" would be added to the TSF. These contradictions need to be resolved – the proposed volumetric range of the TSF is 1.76 to 3.2 million tons, and the TSF volume is dedicated to the Grassy Mountain project. Does reconciling of the above mean that there is a total of 200,000 tons, only, of waste rock? Due to the potential for acid generation and leaching of metals, none of the waste rock should be placed in underground workings. These conflicts cloud the assessment of existing conditions. Proposed Resolution: (a) Determine if 5% or 7% cement will be added to waste rock, and make consistent in the CPA and the BDR. (b) Explain how pH in the underground workings will be best managed to prevent acid generation and the mobilization of metals. (c) Clarify how waste rock will be disposed of, and make consistent throughout the CPA.	See response to comment 56.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
91	DEQ	2	Geochemistry	Comment: Section 3.2.1 of the Geochemistry Baseline Work Plan (contained within the Environmental Baseline Study Work Plans, dated 09/22/2017) states the following: "Mineralogy of development rock and tailings will be assessed using x-ray diffraction (XRD), scanning electron microscopy (SEM), and optical mineralogy to identify the minerals in the development rock, ore, and tailings. The objective of the mineralogical assessment is to determine bulk mineral composition as well as mineral associations and grain boundary conditions (mineral occlusion) that might restrict the reactivity of any acid-producing or acid-consuming phases. Optical and SEM work will also be used to assess, to the extent possible, the variation of sulfide minerals present to provide a basis to revise AP calculations to exclude any sulfide minerals unlikely to produce acidity." Similarly, Section 3.2.4.2.3.6 of this document states the following: "Mineralogical examination of HCT samples will be conducted to aid in interpretation of leachate chemistry from these tests. The analysis will be determined using XRD (Rietveld refinement) analysis, SEM, and optical microscopy. Existing Calico data may provide an important component of this analysis and will be incorporated as applicable. Assessment will be focused on mineral grain boundary issues (e.g., potential inclusion of sulfide minerals within unreactive matrices) that could affect weathering behavior, and potential variability of sulfide mineral composition that could affect calculation of ABA and assessment of acid potential." The October 2019 Baseline Geochemical Characterization Report appears to have used the ERD, SEM and optical mineralogy examinations primarily as part of the erionite investigation with very little to no discussion of how mineral associations and grain boundary conditions might restrict the reactivity of any acid-producing or acid-consuming phases or affect weathering behavior and potential variability of sulfide mineral composition. Proposed Resolution: Discuss how mineral associations and grain boundary conditions might restrict the reactivity of any acid-producing or acid-consuming phases or affect weathering behavior and potential variability of sulfide mineral composition.	The XRD, SEM and optical mineralogy testing is useful when the reactivity of the rock is uncertain. The results of the static and kinetic testing clearly demonstrated that the ore, waste rock and tailings were reactive and would generate acid. Therefore, XRD, SEM and optical mineralogy testing would not change the overall conclusions of the baseline study and is therefore not considered necessary.
92	DEQ	1	Geochemistry Section 2.2 (Mine Plan), Page 4, 10th Bullet Item	Comment: Section 2.2 (Mine Plan), Page 4, 10th Bullet Item. This ancillary facilities list includes a landfill. However, there is no mention of a facility landfill in the main body of the Consolidated Permit Application. This conflict clouds the assessment of existing conditions. Proposed Resolution: If there is a facility landfill proposed, include a description in the CPA, and apply for an Industrial Solid Waste Permit.	No landfill is proposed for the site.
93	DEQ	3	Geochemistry Section 5.4.5 (Short Term Leach Tests (MWMP and SPLP), Page 35, Last Paragraph	Comment: Section 5.4.5 (Short Term Leach Tests (MWMP and SPLP), Page 35, Last Paragraph. This section states the following: "Leachate chemistry data collected during the MWMP and SPLP tests have been compared to the OGWQG (OAR 340-40-020) to determine which constituents could potentially be leached at concentrations above these values. However, due to differences in the liquid to solid ratio used in the test compared to typical site conditions, the MWMP and SPLP test results only provide a qualitative estimate of elemental concentrations in the resulting leachates and are not considered conclusive or to represent actual predictions of water quality." Note that this or a very similar statement recurs in the following sections of the report: Section 5.4.6 (Long Term Leach Tests (HCT), Page 46, Last Paragraph; Section 6.1.5 (Meteoric Water Mobility Procedure), Page 61, Last Paragraph; Table 6-7, Page 66; and Section 6.4.5 (Meteoric Water Mobility Procedure and Modified SPLP), Page 91, Second Paragraph. Proposed Resolution: The Applicant should describe the steps and procedures that will be taken to obtain conclusive and actual leachate elemental concentrations and describe how the tailings treatment and storage may be modified, based upon actual information.	The comparison of leach test results to water quality standards is to allow focus of the evaluation on the constituents and parameters that have the greatest potential to impact the environment. The results of the leach tests can be used to develop source term chemistry for geochemical modeling that will be done to evaluate the potential for the underground workings and CRF to impact groundwater. The tailings will be amended with lime and placed in a zero discharge facility. No changes to the tailings treatment and storage are anticipated as a result of the geochemical characterization program.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
94	DEQ	2	Geochemistry Section 6.4.6 (Kinetic Test Results), Page 92	Comment: Lack of total cyanide and WAD cyanide analyses on leachate samples: Table 5-9, referenced in Section 5.4.5 (Short Term Leach Tests (MWMP and SPLP), Page 36 indicates that total cyanide and WAD cyanide analyses will be included for the tailings samples. However, total and WAD cyanide results are not provided on Table 6-30 as referenced in Section 6.4.5 (Page 91). This conflict clouds the assessment of existing conditions. Text in Section 6.4.6 (Kinetic Test Results), Page 92: The text in this section discusses WAD cyanide results from the humidity cell testing, but total cyanide is not discussed. These results should be discussed in more detail. Table 6-31 and Section 6.4.7 also fail to indicate any total and/or WAD cyanide results from the decant/supernatant liquid (after bench scale cyanide destruction process). Based upon the description in the text of the report, it appears that this liquid would most closely imitate the water quality discharged with the tailings solids to the tailings storage facility. The total and WAD cyanide concentrations from this liquid would seem very helpful to determine leachate slurry quality as well as to show the effectiveness of the cyanide destruction process. The Applicant should provide these data if available or provide information as to why these analyses were not performed when they were expected in the Work Plans. Proposed Resolution: Provide total cyanide and WAD cyanide concentration data if available, or provide information as to why these analyses were not performed when they were expected in the Work Plans.	Total and WAD cyanide analyses were included for SPLP leachate and decant solution from tailings samples and the data are in Appendix G. These results have been incorporated into Section 6.4.6, Section 6.4.8, Table 6-31 and Table 6-32 of the Geochem Baseline Report.
95	DEQ	2	Geochemistry	Comment: General Leachate Quality Conclusions: The leachate testing results appear to vary considerably from one test to another and the Applicant does not provide any interpretation as to which results are most likely to simulate actual site conditions or why. For instance, Table 6-30 indicates that copper, iron, manganese, selenium, and sulfate leach from the sample designated as “Calico Leach Res. After CN Destruct.” at concentrations above the Oregon Groundwater Quality Guidelines, under acidic conditions (pH 4.5). Table 6-30 also indicates that leaching was significantly reduced after enough lime was added to the leachate samples to bring the pH above 12. Under these highly alkaline conditions, chromium, selenium, and sulfate still leached at concentrations above the Oregon Groundwater Quality Guidelines. The metallurgical test decant (supernatant) solution discussed briefly in Section 6.4.7 and summarized in Table 6-31 indicated that arsenic mercury selenium, and sulfate leached from this liquid with a pH of about 8. Proposed Resolution: Determine which of these test results most closely represent the leachate during mine operation and how that data will be used to guide tailings treatment and storage.	The SPLP tests on tailings sampled amended with lime are the most representative of water that will be entrained in the tailings. The sample designated as “Calico Leach Res. After CN Destruct" and the decant solution are from a metallurgical test that did not include the addition of lime. As such, the SPLP data from the “Calico Leach Res. After CN Destruct” sample is not representative of tailings produced using the current tailings treatment approach. A geochemical model has been developed that predicts the operational tailings supernatant pond chemistry. The results of this modeling effort are provided under separate cover.
96	DEQ	3	Geochemistry	Comment: Assumptions that cement will encapsulate the potentially toxic and acidic waste rock. The cement in the CRF may buffer acidic nature of rock, but there should be explicit analysis of this in a “pH, Waste Rock and Tailings Facility Management Plan” to guarantee, not assume that Acid Generation is effectively mitigated. This Plan must also consider and incorporate pertinent DEQ Solid Waste Program requirements relative to CRF and basalt aggregate rock fill (RF) and CRF as backfill at all levels of the mine. Proposed Resolution: Provide a pH, Waste Rock and Tailings Facility Management Plan, including an analysis on how effectively cement would encapsulate the potentially toxic and acidic waste rock. Incorporate pertinent DEQ Solid Waste Program requirements relative to CRF and basalt aggregate rock fill (RF) and CRF as backfill at all levels of the mine	Related to comment 56 (about testing cemented waste rock) and 48 (about managing high pH of treated tailings). Geochemical baseline study results have been used in the engineering of the mine to develop management strategies that are proven effective for acid generating mine wastes. Monitoring and adaptive management plans will further inform during operations. See response comment 56.
97	DEQ	2	Geochemistry	Comment: Is the estimate of 0.2 million tons of waste rock accurate? It seems low but may be reasonable if the applicant plans to process most of material from decline and mine workings. Proposed Resolution: Confirm how much waste rock is estimated to be generated, and ensure this number is consistent throughout the CPA.	The estimated volume of waste rock is 0.2 million tons, with the TWRSF designed for 0.27 million tons. See response to comment 74.
98	DEQ	2	Geochemistry	Comment: Page 25, first paragraph of Geochemistry Baseline Data Report states that there will be 2 million tons of waste rock – should this be 0.2 million tons as stated elsewhere? This conflict clouds the assessment of existing conditions. Proposed Resolution: Confirm how much waste rock is estimated to be generated, and ensure this number is consistent throughout the CPA.	See response to comment 74.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
99	DEQ	2	Geochemistry	Comment: Lime amendment is proposed for the tailings and waste rock going to the TSF, but only one sample of amended tailings was subject to geochemical testing. Proposed Resolution: Provide additional geochemical test results of amended tailings to ensure amendments are adequate to prevent acid generation within the TSF.	The purpose of the SPLP testing was to evaluate the change in metal mobility under high pH conditions resulting from the addition of lime. This was done for the three different tailings types. See response to Comment 48 for a discussion on the representativeness of the tailings samples.
100	DEQ	2	Geochemistry	Comment: The Pre-feasibility Study (July 2018) includes, but the current geochemistry BDR does not, SRK data from lab testing of processed tailings to show that a WAD-cyanide (WAD-CN) concentration in tailings of 0.1 milligrams per liter (mg/L) is achievable. Why does the revised BDR not discuss this potentiality? Proposed Resolution: Include lab test results in the BDR that show a WAD-CN concentration in tailings of 0.1 mg/L upon discharge is achievable.	Performance of the cyanide destruction circuit is not part of the scope of the Geochemical Baseline Study. CN destruction and concentrations in the tailings pond are described in other areas of the CPA. Performance of the cyanide destruction circuit is not part of the scope of the geochemical baseline study.
101	DEQ	3	Groundwater	Comment: The baseline study is nearing completion but it should be noted that the groundwater monitoring network for the site is not complete. Additional wells will be required to adequately monitor the site during development and post-closure. Proposed Resolution: No action, this will be addressed during the draft permitting phase.	None
102	DEQ	2	Groundwater	Comment: The theoretical groundwater inflow rates into the mine workings were estimated through both analytical and numerical models. The steady state analytical models presented three scenarios and varied the recharge rate from 0.5 inches to 0.07 inches of recharge. However, the range of recharge presented in the reports were estimated to range from 1.0 inches to 0.25 inches with an average value of 0.5 inches. The lower end of recharge used in the steady state calculations were significantly lower than range of recharge presented in the report. The steady state calculations should revised to calculate values using the range 1.0 inches to 0.25 inches. This conflict clouds the assessment of existing baseline conditions. The numerical model constructed to evaluate drawdowns at the site was only able to simulate calculated heads measurements to ±45 feet. The numerical model must be revised to produce more accurate predictions of water levels. This conflict clouds the assessment of existing baseline conditions. Proposed Resolution: Recalculate steady state values using the range 1.0 inches to 0.25 inches. Revise the numerical model to simulate more precise predictions of drawdown.	Total basin spring discharge rates indicate low annual recharge rates. Section 3.2 Vol 3. Best results from the model were with a recharge 0.5 in/year. Section 4.1.1 of Volume 3 updated to include recharge of 1 in/year. While simulated heads are ±45 feet, the purpose of the model is to capture the aggregate, overall behavior of groundwater flow and hydraulic gradients, not to represent the exact conditions at a single location. See updated Lorax Dewatering report. (Vol 3, Appendix E)
103	DEQ	2	Groundwater	Comment: The report discusses the presence of two different piezometric surfaces near and within the Grassy Mountain Mine, but suggest data support a single aquifer system. This conflict clouds the assessment of existing baseline conditions. While some data may support the combination, not all data do. In part, this conclusion was based on a strong downward vertical gradient near the mine. However, not all of the well pairs near the mine showed a downward potential. Well pair 59763/59764 shows an upward vertical potential, as does the water level hydrographs from Vibrating Wire Piezometer well pair GM17-D and GM17-I. This conflict should be resolved. Proposed Resolution: Provide further clarification and information to support the conclusion of two different piezometric surfaces near and within the project area.	See updated Figure 29 of Volume 2. A single potentiometric surface is presented based on information collected in 2017 and 2018. The conceptual model is that, regionally (i.e., over the hydrologic basin addressed by the study), there is a single aquifer system that is heterogenous with zones separated by partial barriers such as faults and transitions of lithologic facies. Within the "regional" aquifer, the silicified zone where the mine is located has very little groundwater that is highly compartmentalized due to silicification and faults that act as barriers to flow. The text has been revised to more clearly describe this conceptual model.

Response to DOGAMI CPA Completeness Review

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
104	DEQ	3	Groundwater	Comment: Throughout the report, it indicates that data from the site appear to show there are heterogeneous, compartmentalized, discrete water bearing zones in the general mine vicinity. The water bearing zones are likely discontinuous and have lower permeability than surrounding areas. The report attributes these to discontinuities to sedimentary facies changes, silicification and impermeable boundaries at faults. In the discussion of horizontal gradients, the faults are one of the factors attributed to limiting permeability, but it is also stated that in some areas the faults have no obvious effect on the horizontal gradient. The report also suggests that some faults act as conduits for flow into lower zones. While all of these types of impacts are possible at fault boundaries, it would appear much of this is speculation and there is little data to confirm all of these conditions. Such speculation clouds the assessment of existing baseline conditions. For example, the water level contour maps do not appear to reflect any of these conditions at the site. The faults may be contributing to some of these effects, but it would appear further investigation is needed to support where the faults are impeding or enhancing groundwater flow. Proposed Resolution: Provide further information or investigation to support conclusions regarding the contribution of faults to observed effects, including acting as conduits for flow into lower groundwater zones.	In most cases, there is not enough data to characterize individual faults acting as either conduits or barriers. However, the report has been revised to identify specific examples where known faults appear to act as conduits or barriers to flow. In particular, see updated description in Section 6, updated contour maps and cross sections in Volume 2. Additional evidence of the influence of faults is based on pumping test results; see Section 4.8 of Volume 2.
105	DEQ	2	Groundwater	Comment: Evaluation of the pump tests estimated transmissivity for the aquifer at the wells. Transmissivity is a function of aquifer thickness and hydraulic conductivity. In Volume II, page 61 of the groundwater report it states that previous work estimated the aquifer thickness between 200 and 300 feet thick. It appears that 200 feet was used to calculate the hydraulic conductivities in the report. Based on the wells in the vicinity of the mine, it would appear that 300 feet might be a closer approximation to the thickness if it is considered to be one continuous aquifer. The use of 200 feet must be justified for acceptance of the calculated hydraulic conductivities. Proposed Resolution: Justify the use of 200 feet to calculate hydraulic conductivities.	The difference in K values using 200 vs 300 feet at 59762 result difference of less than 0.01 ft/day. Using a smaller thickness results in a higher K. The report has been revised to be more clear on what assumptions were made regarding aquifer thickness and the sensitivity of the results to those assumptions. Further, in discussions of transmissivity of the silicified zone where the ore deposit is located and there is no "aquifer" per se, the results have been qualified as highly uncertain (transmissivity estimates were required, but the concept doesn't really apply to the silicified zone).
106	DEQ	3	Groundwater Section 3.3.9.1 of Volume III	Comment: Section 3.3.9.1 of Volume III of groundwater baseline (Dewatering) – Springs within 2 miles (or more) may be affected by pumping of production wells. There is no mention of additional effects from the construction and dewatering of underground workings. The report also states that there is a large amount of uncertainty regarding drawdown impacts. How will these impacts be mitigated? Impacts from drawdown effects must be analyzed and assigned. This absence of a more thorough analysis of aquifer sensitivity to drawdown effects clouds the assessment of existing baseline conditions. Proposed Resolution: Analyze the drawdown impacts from construction and dewatering of underground workings, and describe how the impacts will be managed and mitigated.	Appendix E of Volume III of the Groundwater Baseline Study Report presents a preliminary assessment of the effects of mine dewatering on groundwater levels. The effects are limited to the immediate area of the mine because of the low hydraulic conductivity in the silicified zone. The drawdown from dewatering will be further evaluated during permitting and for evaluation of impacts as part of obtaining environmental approvals.
107	DEQ	3	Groundwater	Comment: The application indicates the decline will be constructed immediately outside the ore body. The location of the decline will be outside the most silicified zones of the ore body and will likely produce more water than the ore body. The ore body will be connected to the decline, but there does not appear to be any predictions of how much water the decline will contribute to the mine workings. Proposed Resolution: Calculate how much water the decline will contribute to the mine workings.	Include qualitative discussion of water in the decline in the BDR and CPA. The decline is outside of the target ore area, but it is not outside the silicified zone. The decline may contribute as much dewatering influence as the ramps and development tunnels in the mine.
108	DEQ	2	Groundwater	Comment: No facility is proposed to provide water storage generated during pumping of wells and dewatering of mine. Where will the water go when not needed for production? (such as when decline is being constructed) Discharge will not be allowed without a discharge permit. The TSF facility is not a water storage facility. Proposed Resolution: Explain how water generated during pumping of well and dewatering of the mine will be managed and stored. If excess water is anticipated and water discharge is planned, apply for appropriate discharge permit, e.g., NPDES.	The discussion of water management systems in the CPA has been revised to be consistent with the information in the September 2020 Feasibility Study. The TSF stores tailings water. Please see Section 3.6.4.5 for details regarding water management.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
109	DEQ	2	Groundwater	Comment: A number of typographical errors were noted in the report. In Volume II of the report the following errors were noted. A number of figures were improperly referenced. On page 48 a reference to Figure 24 should have referenced Figure 26. On the same page, the reference to Figure 25 should have referenced Figure 27. On page 52 the reference to Figure 26 should have referred to Figure 28. On page 62 the reference to Figure 20 should have been to Figure 31. Volume ii, page 25, 2nd paragraph of the report summarizes possible declines in water levels at well 59762. The report state that the log for this well indicated the well was dry at the time of installation. The log for this well actually indicates that that there was a static water level of 626 feet at the time of installation (10/29/1993). These conflicting reporting elements cloud the assessment of existing baseline conditions. Water level declines over time at this well were attributed to either slow leakage from the screened interval downward because of vertical gradient or due to evaporation from the well exceeding infiltration. The depth to water at this well is approximately 620 feet below ground surface and it is highly unlikely that evaporations is causing water level declines at that depth. Leakage due to a downward gradient is possible, but it seems unlikely that an increase in the rate of decline that was reported on November 1, 2018 would be to the vertical gradient that exists at the well. In addition, it does not appear that a vertical gradient calculated for this well. Proposed Resolution: Resolve typographical errors noted above. Provide definitive explanation of the dynamics observed at well 59762.	The errors have been corrected in the revised BDR and CPA.
110	DEQ	2	Appendix J (starts on pdf page 1739)	Comment: The total estimated amount for remediation does not include all the elements required under OAR 340-043-0025. Examples: 1.there is no mention of a "credible accident" or costs to address this, 2. The cost for reclaiming (capping) the tailings disposal facility is estimated to be $1.331 million (pdf page 1749). According to section 4.7.1 (main portion of application), capping elements include a liner bedding layer, geomembrane, a drainage layer (12-18 inches), and a growth medium layer (12-24 inches). The Appendix J cost estimate includes $423,174 for regrading and $575,963 for "cover and growth media" consisting of 159,397 cubic yards. This cover and growth media volume over a 99-acre TSF comes out to a 1-foot thick cover layer. The other components, including the geomembrane, are not clearly included. Also, EPA guidance referred to in Div 43 rules requires a composite cap, consisting of a flexible membrane liner and a low-permeability soil liner. The proposed design does not include a composite cap. The cost estimate does not include post-closure groundwater monitoring and other site maintenance activities, which likely will be required for a minimum of 30 years or more following closure. This underestimate of reclamation costs would result in underfunding of the required financial assurance. Proposed Resolution: Provide a comprehensive cost estimate, including all items, with unit costs and quantities for each item.	The Reclamation Plan has been significantly updated. This includes all elements required. The bonding for credible accidents is not included in the Reclamation Plan and will be addressed during the permitting process. Units, unit rates, etc. have all been updated and are detailed in the Reclamation Plan, notably the SRCE model. The closure of the TSF is a composite cap and costs are detailed in the Reclamation Plan. Post-closure monitoring is detailed in the Reclamation Plan including costs for 30 years.
111	DEQ	3	Appendix L (entirety); Section 1 Div. 37 Permit Application; Appendix J (starts on pdf page 1739)	Comment: OAR 340-043-0025 requires that those persons or entities who control the permittee assume liability for environmental injuries, remediation expenses, and penalties. Instituting such liabilities are to assure continuing accountability. Proposed Resolution: Provide a comprehensive response to the entirety of OAR 340-043-0025 satisfactory to the Environmental Quality Commission.	The Reclamation and Closure Plan is incorporated with the submittal.
112	DEQ	2	Appendix J (Reclamation Plan)	Comment: The reclamation cost estimate does not include certain elements (e.g., a credible accident, most of the TSF cap components, post-closure groundwater monitoring). Proposed Resolution: Provide a comprehensive cost estimate, including all items, with unit costs and quantities for each item.	See response to comment 110.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
113	DEQ	1	Appendix C, Sections 6.9.2, p. 26; 6.9.3, p. 27 "dissipation aprons"	Comment: OAR 340-043-0090(1) requires restoration of the natural drainage network to the maximum extent practicable, upon facility closure. There is insufficient detail to assess the adequacy of natural drainage restoration and reconnection. Proposed Resolution: Provide more detail, beyond an outwash apron, on the natural drainage channel reconnections and restoration, in description, maps and sections, including restoration planting plans.	Closure and reclamation of the mine facilities includes restoration of drainage to existing natural channels to the maximum extent practicable. The dissipation aprons are erosion protection measures to prevent excessive scour at the transition from permanent drainage features that protect long-term landforms (e.g., the TSF and Quarry) after reclamation to the natural drainage channels. See, for example, Appendix G and the Design Drawings of the TSF Design Report. The Reclamation Plan covers the restoration details.
114	DEQ	2	Appendix J (Reclamation Cost estimate)/pdf pgs 1741 and 1789	Comment: Although OAR 340-043-0160 says DEQ may continue its permit for 30 years, we point out that OAR 340-095-0080(2) specifies a post-closure period of 30 years. Alternatively, ORS 517.987 stipulates that reclamation bonding required to cover the actual costs of reclamation shall not be limited. Section 4.3 of the permit application states that the applicant anticipates that groundwater monitoring will be conducted for only five years. The closure and post-closure cost estimate in Appendix J lists "reclamation monitoring" costs and "ground and surface water monitoring" costs on pdf page 1741. The "ground and surface water monitoring" costs is shown as $0. "Reclamation monitoring" is broken down on pdf page 1789. Water quality monitoring is a line item, but the cost is again shown as $0. Proposed Resolution: Revise application to include this information.	30 years of post-closure monitoring are included in the Reclamation Plan including costs.
115	DEQ	2	Appendix J (starts on pdf page 1739)	Comment: - The cost for reclaiming (capping) the tailings disposal facility is estimated to be $1.331 million (pdf page 1749). According to section 4.7.1 (main portion of application), capping elements include a liner bedding layer, geomembrane, a drainage layer (12-18 inches), and a growth medium layer (12-24 inches). The Appendix J cost estimate includes $423,174 for regrading and $575,963 for "cover and growth media" consisting of 159,397 cubic yards. This volume over a 99-acre TSF comes out to a 1-foot thick cover layer. The other components, including the geomembrane, are not included. The EPA guidance document (EPA/530-SW-89-047) recommends that the final cover include a composite that includes a flexible membrane liner and a low-permeability soil cover. The cover proposed in the application includes a geomembrane but not a low-permeability soil layer. As discussed above, this guidance is referred to in OAR 340-043-0150(5). This underestimate of reclamation costs would result in underfunding of the required financial assurance. More detail is needed in the post-closure cost estimate in Appendix J, before we can evaluate the cost estimates properly. Proposed Resolution: Modify the design and cost estimate to include: - a composite cap, in accordance with EPA guidance ((EPA/530-SW-89-047), - 30 years of post-closure groundwater monitoring, Provide a comprehensive cost estimate, including all items, with unit costs and quantities for each item.	See response to comment 110.
116	DOGAMI	2	4.2	Comment: Plan for revegetation does not address requirement to establish self-sustaining ecosystem Proposed Resolution: Show how planned revegetation will achieve self-sustaining ecosystem (sufficient for DOGAMI to evaluate reclamation costs associated with this task).	The Reclamation Plan has been updated and states the success criteria for the revegetation.
117	DOGAMI	1		Comment: OAR requires procedures for decommissioning ore storage sites Proposed Resolution: Provide detailed plan for decommissioning/reclaiming ore storage site.	Ore storage sites, one small temporary storage area at the Process Plant, will not be present at the time of reclamation.
118	DOGAMI	2	4.7.3	Comment: Plan for removal of process chemicals is very general Proposed Resolution: Provide detailed plan for removal of process chemicals (sufficient for DOGAMI to evaluate reclamation costs associated with this task)	The disposal of chemicals at closure is detailed in the Reclamation Plan including costs based on the full storage capacity as directed by DOGAMI and DEQ.
119	DOGAMI	2	4.7.3	Comment: Plan for isolation or removal of waste is very general Proposed Resolution: Provide detailed plan for isolation or removal of waste (sufficient for DOGAMI to evaluate reclamation costs associated with this task)	See Response to comment 118.

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Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
120	DOGAMI	2	4.7.3	Comment: Plan for monitoring systems by which the success of the proposed reclamation plan can be measured for bond release are very general. Proposed Resolution: Provide detailed monitoring plan with milestones toward completion of reclamation for bond release.	Detail has been added to the Reclamation Plan for measuring success of revegetation.
121	DOGAMI	2	Appendix J	Comment: Reclamation cost estimate does not provide sufficient information linking reclamation plan tasks with cost estimates. Proposed Resolution: Provide detailed list of reclamation plan tasks with detailed explanation of how costs in appendix J are associated with each task	The Reclamation Plan has been significantly updated. This includes the cost estimate. The figures, GIS shapefiles, and SRCE Model in excel have been included in the Reclamation Plan.
122	DOGAMI	2	4.11	Comment: Plan proposes a phased bonding approach but provides no detail on what reclamation tasks and costs would be associated with the proposed phases. Proposed Resolution: Provide detailed breakdown of reclamation costs associated with each phase of bonding and separate cost estimate for each phase, with detailed explanation of how costs in Appendix J are associated with each task.	The bonding is based on the entirety of the reclamation activities and are presented as such in the Reclamation Plan. The costs of reclamation by year are provided in the SRCE model.
123	DOGAMI	1	5	Comment: OAR requires alternatives analysis for reclamation procedures. Proposed Resolution: Provide comprehensive alternatives analysis for required elements with documentation	The Alternatives Analysis has been significantly updated based on multiple coordination meetings with DOGAMI and DEQ. This include alternative reclamation for post-closure land use.
124	DOGAMI	1		Comment: OAR requires written evidence that the surface and mineral estate owners concur with the proposed reclamation plan and that they will allow the Department access to complete reclamation within the permit area if the permittee fails to comply with the approved reclamation plan. Or, for Federal lands, written documentation from Federal land manager that the land is open for mineral development. Proposed Resolution: Provide written evidence as required by rule.	The land owners are the BLM and Calico (patented claims and leased claims). This proof has been addressed.
125	DOGAMI	1	4.7.2, pg. 232	Comment: It states: “Non-movable physical aspects such as the plant site itself will be contoured to match the original site topography and revegetated”. It is not clear how reclamation objectives under OAR 632-070-037 can be achieved if part or all of the mill is left in place. Proposed Resolution: Clarify or further explain how this will be achieved.	The entirety of the Mill will be removed. The footprint of the Process Plant area will be regraded, covered with growth media, and revegetated.
126	DOGAMI	2	4.7.6, pg. 234	Comment: There is a reference to “disturbed areas” to be covered with 12” of growth medium. There needs to be a reference or discussion to all mining related disturbance (outside the TSF) will be ripped to promote decompaction and infiltration. Proposed Resolution: Fully detail the decompaction measures to be taken within the permit boundary.	This reference has been removed.
127	DOGAMI	2	3.5.3.3, pg. 211	Comment: It states 551,759 bcy of growth media will be salvaged which conflicts with the amount to be salvaged (673,890) and listed in Table 88 on pg. 223. Proposed Resolution: This inconsistency needs to be reconciled.	This discrepancy has been resolved.
128	DOGAMI	2	Appendix V; Section 4c; pdf pg 15	Comment: According to Figure 4/5 (pdf pg 26)37, reclamation will include cut slopes but Section 4c (pg 15) states final excavated slopes will not be constructed, nor a continuous slope constructed. Proposed Resolution: Check “yes” on final excavated slopes and constructed continuous slope in 4c. Fill out the average dimensions of the benching to match 1.5	The Aggregate Application has been updated. Reclamation of the slopes will not occur.
129	DOGAMI	3	Appendix V, Section 4e; pdf pg 16	Comment: Quarry floor is not proposed to be decompacted Proposed Resolution: Propose quarry floor decompaction to promote revegetation	The Quarry floor will be ripped prior to growth media placement and revegetation. This is detailed in the Reclamation Plan.
130	DOGAMI	2	Appendix V, Section 4f and 4i; pdf pg 16 and 18	Comment: Imported materials are not proposed for reclamation purposes but only 6 inches of topsoil is proposed to be salvaged (Section 3g). A total of 12 inches of topsoil is proposed to be spread across the quarry floor (Section 4i), without importing material, where is this 6 inches of material coming from? Proposed Resolution: Either check “yes” to importing material or provide an explanation of where the extra material to be spread is coming from.	The Aggregate Application has been updated to accurately reflect the reclamation of the Quarry. This is detailed in the Reclamation Plan.

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Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
131	DOGAMI	3	Appendix V, Section 4i; pdf pg 18	Comment: Are the continuous excavated slopes proposed to have soils spread and be revegetated? Proposed Resolution: Plan to revegetate the continuous excavated slopes	The Aggregate Application has been updated. The benches will not be revegetated. The floor of the quarry will be covered and revegetated. This is detailed in the Reclamation Plan.
132	DOGAMI	2	Appendix V, Section 4j; pdf pg 18	Comment: Plans for revegetation include using a "BLM approved seed mix" is insufficient Proposed Resolution: Fully detail the proposed seed mixture species types	The seed mix is detailed in the Reclamation Plan.
133	DOGAMI	2	Appendix V, Section 4k; pdf pg 18	Comment: The plan to revegetate with a BLM-approved seed mixture and planted in the fall or per BLM recommendations is insufficient Proposed Resolution: Fully detail planned planting methods	The seed mix is detailed in the Reclamation Plan and the application references the baseline study.
134	DOGAMI	2	Appendix V, Section 4k; pdf pg 18	Comment: The plan to revegetate with a BLM-approved seed mixture without providing rates in lbs/acre and species type is insufficient Proposed Resolution: Fully detail planned seeding rates and provide a map showing which areas will be seeded with which species, and methods.	The Aggregate Application has been updated and includes lbs./acre. This is detailed in the Reclamation Plan.
135	DOGAMI	1	Appendix V, Section 4k; pdf pg 18	Comment: No planting/seeding techniques were checked off in Section 4k Proposed Resolution: Please check off which seeding techniques will be applied in reclamation	The Aggregate Application has been updated including technique. This is detailed in the Reclamation Plan.
136	DOGAMI	3	Appendix V; Conceptual Quarry Reclamation Plan (Figures 3/6); pdf pg 25	Comment: Only patches of the quarry floor are proposed to be revegetated Proposed Resolution: Expand the revegetation to the entirety of the quarry floor or provide justification why entirety of the quarry floor won't be revegetated	The entirety of the Quarry floor is proposed to be revegetated. This is detailed in the Reclamation Plan.
137	DOGAMI	1	Appendix J, Page 1	Comment: DOGAMI needs the "3671I.GrassyMtn Plan.RCE.V1.xlsm" Excel File. Per 517.987(3) & 632-037-0135(2) DOGAMI is obligated to review the reclamation security calculations. The SRCE pdf did not appear to be complete as footnotes and some tables appeared to be cut off and not shown in their entirety. Proposed Resolution: Submit Excel File	The SRCE model has been significantly updated and provided in Excel in the Reclamation Plan.
138	DOGAMI	1	Appendix J, Page 1	Comment: DOGAMI needs the "SRCE_Cost_Data_File_1_12_Std_2019.xlsm" Excel File. Per 517.987(3) & 632-037-0135(2) DOGAMI is obligated to review the reclamation security calculations including the cost data file. The cost data file will need to include the nearest source (location and distance from the mine site location) for purchasing and/or renting all equipment and materials needed for reclamation should the State of Oregon need to procure the equipment and materials to conduct the reclamation of the site. Proposed Resolution: Submit complete supporting documentation on sourcing of equipment, labor and materials for all aspects of reclamation.	See Response to Comment 137.
139	DOGAMI	1	Appendix J, CAP and associated appendices.	Comment: The SRCE reclamation security calculations cannot be cross referenced with the plans in the CPA and associated appendices, and those plans do not detail reclamation tasks. The SRCE Excel spread sheets need to include specific references to the CPA and associated appendices to ensure the data use in the SRCE reclamation estimate is accurate and consistent with plans as they are described in the application documents. For example, Appendix J pages 44-47 should include a foot note referencing Appendix AD (Well Field Design Report) and any or documents that identify wells (exploration, production, and/or monitoring) that will need to be reclaimed. Proposed Resolution: Include references in the SRCE Excel spread sheets that allow the details of those calculations to be cross referenced with the plans in the CPA and associated appendices.	See Response to Comment 137.

Response to DOGAMI CPA Completeness Review

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
140	DOGAMI	1	Section 4, Appendix J	Comment: The reclamation plan does not include sufficient detail to allow DOGAMI to determine reclamation steps and tasks in the event of default by the operator. DOGAMI needs to be able to assess the costs associated with decommissioning the entire facility starting from a fully operating state. Proposed Resolution: Include a detailed plan listing steps required to decommission all mine facilities from operating conditions and associated costs with clear cross referencing between task lists and cost spreadsheet. wastes and equipment present on site during normal operations"	The Reclamation Plan has been significantly updated including the SRCE model which provides costs by activity and facility.
141	DOGAMI	1	Unknown	Comment: Per OAR 632-037-0135(6)(p): DOGAMI needs to consider Liability insurance in the review of the reclamation security. No documentation or information related to liability insurance was provided. Proposed Resolution: Provide proof or documentation of Liability Insurance	Proof of documentation of Liability Insurance is provided in Appendix G of the CPA.
142	DOGAMI	43832	Appendix J, Page 2	Comment: The SRCE reclamation security estimate will need to include reclaiming the Waste Rock Dump should the Company fail to conduct that reclamation. It will also need to include revegetation/stabilization. Proposed Resolution: Include waste rock dump reclamation in SRCE calculations.	Modify text to clearly state that the cost estimate is based on the proposed mine operation and the financial security will be updated based on inspections. This was addressed during the 12-10-20 meeting.
143	DOGAMI	43832	Appendix J, Page 2	Comment: The SRCE reclamation security estimate will need to include removing underground pipe should the Company fail to conduct that reclamation. Pipe is generally not considered clean fill and cannot be left buried in the ground without written authorization from DEQ. Proposed Resolution: Include removal of buried pipe in SRCE calculations.	The water line from the production wellfield to the Process Plant area will remain as agreed upon with DOGAMI and DEQ. The pipe within the underground will be removed during operations and at reclamation if necessary.
144	DOGAMI	2	Appendix J, Page 2 & 44-47	Comment: Reclamation security calculations need to include all wells, including water supply and monitoring wells. SRCE well abandonment calculations only appear to include 4 wells. Proposed Resolution: In ALL wells in SRCE Calculations	All production wells and new groundwater monitoring wells are included in the Reclamation Plan.
145	DOGAMI	2	CPA Sec. 4.1, Page 222--223	Comment: Growth media accounting appears to show an excess of 140,629 cubic yards of growth media yet growth media is not proposed to be used in reclaiming all facilities. Note the 100% of the disturbed ground will need to be reclaimed with a minimum depth of growth media to achieve the reclamation required goals. If there is excess growth media after 100% of disturbed ground is covered during reclamation where will that excess materials be placed? Proposed Resolution: A more detailed accounting of salvaged growth media will need to be submitted demonstrating 100% cover of disturbed areas utilizing 100% of the available materials.	See Response to Comment 127.
146	DOGAMI	1	Appendix J	Comment: The costs of implementing the noxious weed and invasive plant control measures do not appear to be included in the reclamation cost estimate. Proposed Resolution: Include the costs of implementing the noxious weed and invasive plant control plan in the reclamation cost estimate.	O&M Cost including minor repairs and other controls such as noxious weeds are included in the SRCE model.
147	DOGAMI	1	Appendix A, Page 2	Comment: The post reclamation topographic map does not include roads, the growth media stockpile, water tower, and numerous other facilities and/or their former footprints or locations. Most if not all of the facilities associated with this project will need to be reclaimed and as such, they need to be shown on one or more post reclamation topographic map(s). Any facilities, such as access roads, settling basins, etc., that are not proposed to be reclaimed will need to be specifically identified on the post reclamation map(s). Proposed Resolution: Provide post reclamation map(s) showing ALL of facilities and their locations as they are proposed to be reclaimed.	The Reclamation Plan has been significantly updated including figures.
148	DOGAMI	2	Appendix J, Page 51	Comment: Only 10% of the 298 acres proposed to be disturbed are included in the SRCE reclamation cost estimate for revegetation. More than 10% of the site will need to reclaimed and revegetated. Proposed Resolution: Revise the SRCE reclamation cost estimate to include the cost of seeding and revegetating ALL areas that are proposed to be reclaimed. Include the cost of all equipment to be used.	See Response to Comment 137.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
149	DOGAMI	2	Appendix J	Comment: In the SRCE reclamation security estimate all facility descriptions should include the ID Code in parenthesis if there is not a separate ID Code column in the relevant table. This allows facility line items to be cross referenced with facilities show on SRCE maps. If a line item captures multiple facilities, then all of the facility ID Codes captured under line item should be acknowledged in the parenthesis following the facility description. Proposed Resolution: In SRCE, include ID codes in parenthesis for all facility descriptions for which there is no ID Code column.	See Response to Comment 137.
150	DOGAMI	2	Appendix J	Comment: The SRCE reclamation security estimate includes exploration but exploration sites are not shown on the SRCE reclamation security estimate figures and maps. Presumably this is included based on the potential need to conduct additional exploration activities and the need and location for that exploration are unknown at this point. More information is needed regarding the potential for additional exploration and that information should be cross referenced to the exploration line items in the SRCE reclamation security estimate. Proposed Resolution: Include references in the SRCE reclamation security estimate that cross reference to sources that provide more information on any potential future exploration activities.	Future exploration cannot be shown on maps, but it is included in the SRCE model and Reclamation Plan.
151	DOGAMI	2	Appendix K	Comment: Temporary closure plans are required by OAR. The plan provided is very general, particularly with regards to monitoring and wildlife. Proposed Resolution: Provide a fully-detailed plan that addresses each of the elements required under OAR 632-037-0060	The IMP has been updated.
152	ODFW	1	Reclamation Plan page 221; Section 4, Facility Reclamation	Comment: There is no evaluation of compliance with OAR 635-420-0110 or OAR 632-037-0070 and -0130 for certification of a self- sustaining ecosystem. These standards need to be complied with and demonstrated prior to release of a financial security. Proposed Resolution: Compliance with Division 420 and Division 37. Revise reclamation plan to address standards to achieve a self- sustaining ecosystem.	The detailed post-closure monitoring plan including detailed measures of success to release the bond will be defined prior to reclamation. This is stated in the Reclamation Plan.
153	ODFW	1	Reclamation Plan page 224; Section 4.3; Page 235; Section 4.9	Comment: The application does not provide justification or data that reclamation can be achieved in three years. Specifically, regarding the compliance with a self-sustaining ecosystem. Proposed Resolution: Compliance with Division 420 and Division 37. Revise reclamation plan to address standards to achieve a self- sustaining ecosystem.	The Reclamation Plan has been significantly updated and revegetation monitoring has been planned for 5 years.
154	ODFW	2	Reclamation Plan page 231; Section 4.7.1.4	Comment: The CPA references revegetation in the heading, however the text does not elaborate if the TSF will be seeded. Proposed Resolution: Revise text to elaborate on the revegetation.	The TSF will be closed with a composite cap including growth media and revegetated.
155	DEQ	2	Appendix C TSF Design Report Section 3.3.4 Waste Rock Storage, pg. 139	Comment: A temporary waste rock storage area and a run of mine ore stockpile area are identified in the application. These facilities are subject to the same liner design requirements as the TSF. Proposed Resolution: Provide designs that meet the liner requirements defined in Oregon Solid Waste Disposal rules and these Division 43 rules.	Addressed during 12-10-2020 meeting. Current design meets requirements with a secondary liner beneath the primary drainage pipes
156	DEQ	2	Consolidated Permit Application, Section 3.3.13, pg. 182-196	Comment: The valley dam design is subject to overtopping by flood waters. The concrete drainage diversion structure is subject to failure with time, allowing the watershed's drainage to run through the TSF. Siting of the TSF in a valley may not be as protective of the environment as other design alternatives because of the increased chance of failure from stormwater events over the extremely long post-closure period. Proposed Resolution: Provide additional comment on the consideration of alternative sites for the TSF, including a previous location sited on private land, for review by DOGAMI per OAR 632-037-0075.	Focus on the robust design of the diversion channel including storm event sizing, design and CQA that will mitigate this risk. TSF siting alternatives were provided and will be provided in the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
157	DEQ	3	Consolidated Permit Application	Comment: Acid water accumulation must be prevented. Proposed Resolution: See comment in 340-043-0140.	Characterization of acid-producing and metals-release potential of waste rock, ore, and other mined materials using acid/base accounting and other appropriate static and dynamic laboratory tests has been performed by Calico. The methods and results are presented in the Geochemical Baseline Study Report (SRK, 2021). The results indicate that all the waste rock, ore, and tailings have the potential to generate acid and a limited potential to leach metals. The basalt from the quarry (construction material) and road cut material are not acid generating or metals leaching. Based on these results, the project includes engineered mine waste management units (i.e., the TSF and the TWRSF) that are suitable for the permanent disposal of acid generating tailings and waste rock. Further, mine waste management plans are outlined in the CPA and its appendices. Note that the waste management plans include adding lime to the tailings to neutralize the acid generation potential as required by OAR 340-043-0140. The plans also describe how waste rock will be temporarily stored in the TWRSF and will be used as cemented rock fill (CRF) in the underground workings if ongoing testing and evaluation indicate this will be safe for the environment (the 5-7% cement added to waste rock CRF appears to be sufficient to neutralize the acid generation potential of waste rock based on review of relevant literature). Leachate from the TSF and TWRSF will be recirculated into the process. Closure plans for the TSF describe how this unit will be covered and drained. The cover isolates the tailings from oxygen and water, which are key components of the reactions to form acidic drainage, although the neutralization with lime during deposition will also prevent acid formation in the long term. The TWRSF will be removed at closure. Run-of-Mine (ROM) ore is stockpiled briefly in the plant area before crushing, grinding and beneficiation. The brief period of storage (on the order of less than one week) does not allow formation of acid (the reactions typically require more than a year to generate acid). In any case, contact water from the ROM stockpile area will be collected with other industrial stormwater and routed into the ore processing circuit. Similarly, any water brought to the surface from the underground workings will be circulated into the ore processing circuit. In the manner described above, acid water accumulation is prevented.
158	DEQ	3	Consolidated Permit Application	Comment: Surface impoundment liner system requires same liner system as required for the TSF. Proposed Resolution: See comment in 340-043-0130.	Addressed during 11-12-2020 meeting with DEQ. They are not the same liner systems, but the impoundment liner system is a true double lined system with leak detection/collection. Clearly state in CPA
159	DEQ	3	Appendix C, Section, 6.9.3, p. 27	Comment: OAR 340-043-0090(1) and (2) is concerned with designs and controls that will be needed to prevent endangerment of the Tailings Storage Facility from run-on and run-off surface waters. As a “water balance” facility intended to exist on the landscape in perpetuity, it is questionable that constructed, concrete stormwater diversion channels, though shaped and sized for significant storm events, will last forever. Subsection two (2) of the rule requires all placed mined materials be protected from surface water and precipitation events that will cause erosion and sedimentation of the TSF growth media cap. The comment here is that the soil cap, though planted, rests atop the required impervious geomembrane sheet cover. Erosion potential here is real. There is no numeric here expressed in rule: the growth media cap cannot be eroded. Proposed Resolution: Suggest design reassessment or analysis of: stormwater system functional permanency that will protect the TSF from water incursion; protectiveness of closure cap and prevention of erosion/sedimentation.	The growth media cap will not be eroded. The slope is less than 5%.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
160	DEQ	1	Consolidated Permit Application, Section 3.3.13.3	Comment: The supernatant pool and reclaim pond must be covered in accordance with OAR 340-043-0110(1) to positively exclude wildlife. If residual cyanide levels and acid-water concentrations are low enough not to pose a threat to wildlife, Calico may seek a waiver of the positive exclusion requirements from ODFW. Cross-reference here is to ODFW's OAR 635-420-0040 which provides details on TSF covers and exclusions. Proposed Resolution: Provide plan for achieving compliance with requirements stated in comment.	The Wildlife Protection Plan incorporates the section, Wastewater Accessible to Wildlife. The plan demonstrates that the chemical compositions will not be harmful to wildlife and provides alternative protection measures to the cover.
161	DEQ	3	Appendix C (Tailings Design Report)/Drawings C- 15, C-16, D-2	Comment: The proposed "leak detection system" consists of leachate detection pipes beneath the main leachate collection pipe headers. The composite liner is separated at these locations so that the top (plastic) liner can underlie the collection pipe while the bottom (clay) liner can underlie the detection pipe. There is therefore no composite liner at these critical locations. Proposed Resolution: Revise the design to include a true leak detection system beneath the entire primary liner, and line this detection system with a secondary liner.	Addressed during 11-12-2020 meeting with DEQ. The liner system associated with the leakage detection system has been modified to provide a composite liner system beneath the collection pipes.
162	DEQ	3	Appendix C	Comment: The TSF requires double liner, including a composite liner. The environment begins at the bottom liner. Conveyances require secondary containment and leak detection. The applicant proposes a composite liner with leak detection under that. If there's no liner under the leak detection, then any leachate reaching that level is deemed to have escaped the contained system and will enter waters of the state (groundwater). This would lead to violation notices and penalties. This is why the rule specifically requires a double liner – to prevent impacts to the environment. Proposed Resolution: Revise the TSF to appropriate address liner requirements.	Addressed during 11-12-2020 meeting with DEQ. The liner system associated with the leakage detection system has been modified to provide a composite liner system beneath the collection pipes.
163	DEQ	1	Section 3.1, page 106, Section 3.3.2, page 132, Section 3.3.4, page 139 and 140, Appendix C, Section 2.3, page 7, and Section 7, page 27	Comment: Waste rock volume and storage issues. Throughout much of the CPA, the waste rock volume appears to be consistently estimated to be 200,000 tons and the Waste Rock Dump (WRD) is designed to hold that volume. However, Appendix S of the CPA (Stability Analysis of the Portal Design) states that "The portal will have a waste rock excavation volume of 2,283,146 tons." Proposed Resolution: Applicant should provide information regarding this apparent large discrepancy in waste rock volume and the effect on the waste rock dump size and volume. Applicant should provide information showing how the waste rock volume was calculated. Applicant should provide information concerning where and how the additional 2,000,000 tons of waste rock material be stored, how it will be treated to preclude acid generation and metals leaching, and the ultimate disposition of the material.	There is an error with former Appendix S that was corrected for the submittal of the CPA.
164	DEQ	2	Section 2.5, page 42, Section 3.3.5, page 141	Comment: Rock Fill (RF) and Cemented Rock Fill (CRF) issues. Section 2.5 states that RF will include only basalt borrow material and that CRF could include waste rock if placed above the saturated zone. However, Section 3.3.5 states that CRF will be used to backfill primary drifts and that RF will be used to backfill secondary drifts, apparently, regardless of saturated conditions. This section further states that "To the extent possible, the waste rock from underground operations will be used for CRF and rock from the borrow pit will be used for RF." Proposed Resolution: These sections contradict each other and should be further elucidated by the Applicant. CRF with waste rock should not be placed below saturated conditions. Applicant should provide details regarding how the metals leaching conditions and the effectiveness of the cement buffering will be monitored after placement of RF and CRF and that acid generation and metals leaching does not occur. Applicant should also provide information concerning the steps that will be taken to preclude the preferential saturation of the backfill material versus the tighter native material.	The CPA has been revised to address this comment. Briefly: nearly all backfill will be CRF, with RF being used in a few select places where using CRF is impracticable or infeasible. Further, basalt from the quarry will be the primary source of aggregate for CRF (and only source of RF), but it may be supplemented with waste rock if the results of ongoing evaluations indicate that use of waste rock in CRF is safe for the environment. Finally, further evaluations will be performed to determine if CRF made with waste rock should be placed above or below the water table. The cement in CRF (whether it is made with basalt or waste rock) provides considerable neutralization capacity to neutralize acids that may be geochemically generated underground, but further measures such as placing waste rock CRF below the water table isolates the CRF from oxygen, which is one of the key reactants for the acid generation reactions.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
165	DEQ	1	Section 3.3.5.1, page 141, Section 2.5, page 42 RESPEC	Comment: Backfill Plant issues. Section 3.3.5.1 states the following: "A plant to produce the CRF will be built as part of the Project infrastructure. The backfill plant will be located near the underground mine portal and will produce the CRF. No test work has been done for CRF at this time, so a standard mix with seven percent cement will be used pending further study." Section 2.5 states that "an estimated mix of five percent cement will be added to neutralize the waste rock material." Proposed Resolution: The Applicant should at a minimum include details concerning the further testing that will occur to determine the mixture needed to eliminate acid generation and metals leaching from the CRF and impacting the environment. The Applicant should provide at a minimum the conceptual design and operation of the Backfill Plant. The current CPA does not include any information concerning this facility. The Applicant should be consistent in the cement mix percentage in the CPA and explain the existing contradiction in the cement percentages. The Applicant should provide the information and justification for the assumed cement mix percentage.	The CPA will revised to be consistent with the current plans and data regarding the CRF. See subsections in 3.1.2 of the CPA.
166	DEQ	2	Entire CPA RESPEC	Comment: Material Volume Balance issues. Proposed Resolution: The Applicant should at a minimum provide calculations to show the volume of material to be obtained from the borrow pit to show that an adequate volume of basalt will be available for use as RF, CRF, embankment material for the Tailings Storage Facility (TSF), and all other proposed borrow material uses.	A total of approximately 4.87 Mcy of material is available in the borrow pit. By comparison, approximately 1.23 Mcy of materials are expected to be needed to construct the tailings storage facility, in addition to 1.17 Mcy for reclamation backfill. Therefore, the borrow pit contains sufficient volume of material. In addition, grading activities are expected to generate additional materials that will be used for construction purposes.
167	DEQ	2	Consolidated Permit Application, Sections 3.3.5, pg. 141 and 4.6.2, pg. 227 RESPEC	Comment: Acid generating waste rock must be stored in a lined cell. Cemented rock fill (CRF) is subject to cracking and degradation through erosion, therefore is not a viable option for backfilling in the mine shafts. [340-043-0140] Section 3.3.5 of the consolidated application states that waste rock will be used to backfill the mine to "extent possible." Section 4.6.2 of the same application states "All 0.2 million tons of waste rock will be removed from the waste rock storage area and placed on the TSF." Most of the waste rock from the mine is expected to be acid generating and should be placed in a secure surface location and not be used as mine backfill. Proposed Resolution: Correct conflicting statements in consolidated Application. Prepare Tailings and Waste rock management plan during permitting phase.	The Temporary Waste Rock Storage Facility is a lined cell. The design of the liner system and leachate controls is the same as the TSF. Geochemical testing of CRF made with waste rock is underway and will help to determine if waste rock CRF can be used as mine backfill in an environmentally safe manner. The cement used to make CRF provides considerable neutralization potential, so it is anticipated that waste rock CRF would be net-neutralizing (i.e., non acid generating).
168	DEQ	3	Section 4.7.1/pdf page 245	Comment: The EPA guidance document (EPA/530-SW-89-047) recommends that the final cover include a composite that includes a flexible membrane liner and a low-permeability soil cover. The cover proposed in the application includes a geomembrane but not a low-permeability soil layer. Proposed Resolution: Revise the cap design to include a composite cover.	The TSF is getting a composite cap.
169	DOGAMI	2	3.6.8	Comment: Procedures for salvage storage and replacement of growth media general, no detailed discussion of erosion control measures. Proposed Resolution: Provide fully detailed plan including specific erosion control measures.	The Reclamation Plan has been updated including growth media management and erosion protection.
170	DOGAMI	1	3.3.12.11.1, pg. 179	Comment: There is a reference to "treated tails" but no description of metals testing to be done on the tailings prior to deposition in the TSF. Proposed Resolution: Provide detailed plans for the sampling and analysis for metals testing of the tailings prior to their deposition in the TSF.	The geochemical baseline report includes results of metals testing on the tailings. The supernatant and reclaim water ponds will be monitored for water quality. There is no need to monitor metals content of the tailings with the existing data and plans, so none is proposed.
171	DOGAMI	2	3.3.13.1, pg. 184 Appendix C, pg. 24	Comment: Inconsistency between leak detection systems described in Table 82 of CPA and Appendix C. CPA indicates leak detection by monitoring wells where TSF Design Rpt. implies leak detection between containment layers. Proposed Resolution: Table 82 should include leak detection system described in TSF Design Rpt. Application should clearly describe the entire planned TSF leak detection system in one location in text.	Table 82 has been replaced with Table 37 in the CPA. The language is consistent between the TSF Design Report.

Response to DOGAMI CPA Completeness Review

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
172	DOGAMI	1	3.3.13.3, pb. 188	Comment: It states: "Tailings are thickened in the mill after metals extraction. However, there is no description of this step. Proposed Resolution: Clarify that this step refers to gold and silver extraction, not contaminant metals in the tailings and describe how the tailings will be thickened and tested for residual metals.	The water management and process descriptions have been updated to reflect the most current processes that are described in the September 2020 Feasibility Study. There is no thickener in the current process. Thickening is a physical process where the tailings slurry is allowed to partially settle and overflow water is returned to the process circuit. A tailings chemistry monitoring plan has been prepared to monitor the pH, WAD CN, and acid generating potential of the tailings before the tailings are deposited in the TSF. Residual metals will not be monitored.
173	DOGAMI	2	3.3.13.3, pg. 190	Comment: It states: "The total storage capacity of the reclaim pond is 215,000 while maintaining two feet of freeboard beneath the pond crest. In this scenario, water in the pond would also back up into the portion of the lined underdrain channel for additional emergency storage above the minimum required. Units are not provided for storage capacity. Proposed Resolution: Provide units for the storage capacity.	The unit for storage capacity of the Reclaim Pond is gallons.
174	DOGAMI	2	4.6.2, pg. 227	Comment: It states that 200,000 tons of WR will be placed on the TSF along w/ lime amendment. There needs to be a description of pH testing following amendment and potential for metals leaching prior to placement in the TSF. Proposed Resolution: Provide a fully detailed plan for sampling and analysis of the WR prior to placement in the TSF.	Please see the Tailing Chemical Monitoring Plan provided as Appendix D2.
175	DOGAMI	4	4.7.1.5, pg. 231	Comment: It states: "As part of the design, the converted E-Cell will be covered with six inches of growth media and seeded." Because this is the former reclaim pond which will be double lined how will the pond/E-cell ultimately be reclaimed? Proposed Resolution: Fully detail how the E-Cell will be finally reclaimed.	The E-cell will remain in perpetuity.
176	DOGAMI	1	4.7.2, pg. 233	Comment: It states: "Concrete that may be contaminated through exposure to process reagents will be excavated and disposed of in the TSF." Without characterizing this waste it can't be disposed of in the TSF. Proposed Resolution: Provide the sampling and analysis of concrete to be disposed in the TSF. Additionally, how is all concrete to be characterized as contaminated or non-contaminated.	This has been removed.
177	DOGAMI	1,2	Appendix G	Comment: Operational monitoring plan does not include TSF leak detection. Wildlife monitoring plans are very general. Proposed Resolution: Provide fully detailed monitoring plans for leak detection at TSF, WRD, reclaim and collection ponds. Provide fully detailed wildlife monitoring plan that meets standards required by ODFW.	Leak detection monitoring has been further described in Section 8 of the Monitoring Proposal for Groundwater and Facilities in Appendix D12 of the CPA. In addition, the Wildlife Protection Plan is provided in Appendix D of the CPA.
178	ODFW	1	Consolidated Permit Application Page 42	Comment: The third paragraph recommends a tailings management plan, however, ODFW could not locate this information to evaluate risk to wildlife from the TSF. Proposed Resolution: Provide the tailings management plan and incorporate the tailings composition and hazards to wildlife in the required Wildlife Protection Plan.	A Tailings Chemical Monitoring plan for tailings facilities has been prepared and provided in Appendix D2 of the CPA. The Wildlife Protection Plan is provided in Appendix D of the CPA.
179	ODFW	1	Page 247; Section 5.2	Comment: The alternatives analysis does not adequately evaluate alternatives that could avoid or minimize impacts to wildlife or other environmental impacts and allow ODFW to evaluate the comparative merits of each alternative. For example, the alternatives analysis does not include any evaluation of an alternative without the tailings facility. This should be evaluated per Division 37 requirement. Proposed Resolution: Evaluate additional alternatives to avoid or minimize adverse impacts environmental impacts.	The Alternatives Analysis has been significantly updated based on multiple coordination meetings with DOGAMI and DEQ.
180	DEQ	3	Groundwater Quality Protection: Section 3.3.9, pg. 146	Comment: The Groundwater Baseline study is nearing completion and the permitting application process is underway. However, the groundwater monitoring network will need to be further developed as the site activities increase. Additional wells will be required to adequately monitor the site during development and post-closure. Proposed Resolution: Develop groundwater monitoring plan during permitting and adapt it throughout project phases.	A groundwater monitoring plan will be developed during permitting for the WPCF.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
181	DEQ	1	Groundwater Quality Protection: Section 3.3.6 Mine Drainage, pg. 142	Comment: The size and design of the water collection pond are not specified. It needs to be large enough to store the water generated from mine dewatering when demands for processing water are low or none, such as when the decline is being constructed and ore processing has not started. Design specifications are needed. Proposed Resolution: Provide design for collection pond.	The discussion of water management systems in the CPA has been updated to be consistent with the information in the September 2020 Feasibility Study. The design and size of the water collection pond are described in Section 3.2.11.
182	DEQ	3	Groundwater Quality Protection: Section 2.8 Groundwater Volume I Consolidated Permit Application, Conclusions, pg. 59	Comment: The conclusions listed in CPA indicate the pattern of groundwater flow shows local variations attributed to the presence of faults, fractures, lithologic facies changes, vertical gradients, or some combination of these influences. While it is likely that each of these factors influence the groundwater flow direction, it is not apparent in the groundwater elevation contour maps (Volume 1, Appendix E). Contours appear to cut across faults and topography without influence. Proposed Resolution: Address during permitting phase.	The CPA and BDR has been revised to be more clear on the conceptual model: single aquifer system, somewhat compartmentalized vicinally and very compartmentalized in the silicified zone where the deposit is located.
183	DEQ	3	Groundwater Quality Protection 2.8 Groundwater, Volume II, page 66	Comment: The CPA indicates that the potentiometric surface maps reflect influence from the presence of faults, fractures, lithologic facies changes, vertical gradients or some combination of these influences. As in previous comment, the elevation contour maps do not appear to show influence from faulting or topography. Proposed Resolution: Address during permitting phase.	The CPA and BDR has been revised to be more clear on the conceptual model: single aquifer system, somewhat compartmentalized vicinally and very compartmentalized in the silicified zone where the deposit is located.
184	DEQ	3	Groundwater Quality Protection 2.8 Groundwater, Volume II, page 66	Comment: The CPA indicates that low hydraulic conductivity in the vicinity of the project is anticipated to significantly restrict groundwater flow into the mine workings. There is no discussion indication of how the decline, which is likely outside the highly silicified zone, will contribute water to the mine workings. Proposed Resolution: Address during permitting phase.	See response to comment 107. Address during permitting phase.
185	DEQ	2	Groundwater Quality Protection 2.8 Groundwater, Volume II, Table 37, Page 71	Comment: Table 37 summarizes steady-state groundwater inflow and presents recharge values ranging from 0.07" to 0.5". However, on page 68 recharge at the site is estimated to range from 0.25" to 1.0" Proposed Resolution: Correct conflicting range of recharge	See response to comment 102. The CPA and BDR have been revised to use consistent recharge rates/ranges.
186	DEQ	3	Groundwater Quality Protection 2.8 Groundwater, Volume II, Page 74	Comment: CPA states that "Layer 3 does not contain head calibration targets; therefore, the overall degree to which model heads represent actual conditions could not be evaluated. However, the model does not simulate the observed heads in the deep wells and VWP units. In general, the model typically simulated measured heads within ± 45 feet, with some outliers with more of less associated error." These statements indicate a very low degree of accuracy from the numeric modeling and predicted drawdowns from the model are highly suspect, particularly in the deeper zones near the mine. Proposed Resolution: Calibration of numerical model used to predict drawdowns needs to be further addressed.	Total basin spring discharge rates indicate low annual recharge rates. Section 3.2 Vol 3. Best results from the model were with a recharge 0.5 in/year. Section 4.1.1 of Volume 3 updated to include recharge of 1 in/year While simulated heads are ±45 feet, the purpose of the model is to capture the aggregate, overall behavior of groundwater flow and hydraulic gradients. Not to represent the exact conditions at a single location. See updated Lorax Dewatering report. (Vol 3, Appendix E)
187	DEQ	2	Groundwater Quality Protection 2.8 Groundwater, Volume II, page 77	Comment: CPA states that estimated analytical steady-state bulk dewatering rates on the order of 20 gpm, with the potential to intercept up to 500 gpm on a short-duration basis (i.e., days to weeks), are anticipated based on the analytical approach. The analytical model estimated long-term groundwater flow to be in the range of 20 gpm to 100 gpm. The CPA always refers to a dewatering rate of 20 gpm for the area of the mine workings, but a more conservative approach would be to estimate the upper end or 100 gpm. Proposed Resolution: Correct conflicting pumping rate for dewatering in the vicinity of the mine.	No changes to the baseline study. Using 20 gpm as a dewatering rate is conservative as it results in a higher makeup demand for the mine (from groundwater pumping). The preliminary dewatering analysis does not address baseline groundwater conditions. However, the analysis initiates the development of dewatering estimates that will be refined as part of the assessment of impacts and their potential mitigation.
188	DEQ	3	Appendix Y SWPCP pg. 3; 1.2	Comment: Concerns about permitting the basalt quarry stormwater discharge under the 1200-Z or Site-wide surface water management plan. Proposed Resolution: Eliminate stormwater discharge from the basalt quarry floor.	Basalt quarry is designed for zero-discharge, therefore, is not part of the 1200Z permit area. See Section 2.2 of the SWPCP in Appendix D4 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
189	DEQ	4	Appendix Y SWPCP pg. 6; 1.2.3.	Comment: Non-contact water runoff. Does this refer to non-contact stormwater runoff? Proposed Resolution: Likely this is referring to non-contact stormwater, but if there is other non-contact water discharging it is not an authorized non-stormwater discharge under the 1200-Z.	Clarified non-contact stormwater in Section 1.2.3 of the SWPCP in Appendix D4 of the CPA.
190	DEQ	4	Appendix Y SWPCP pg. 9; 2.1.1	Comment: Remove reference to sanitary sewer. Proposed Resolution: Confirm wash water is authorized to discharge into septic system.	Sanitary sewer reference deleted from SWPCP in Appendix D4 of the CPA.
191	DEQ	2	Groundwater Quality Protection 3.3.9 Hydrology Analysis, page 147	Comment: The CPA indicates a saturated zone occurs with the Project at an elevation ranging from 3,300 feet to 3,100 feet. While wells installed in the ore deposit fit this conclusion, there were borings that produced water within the deposit that are outside this range. There were borings within the deposit that produced water as high as 3,500 feet and as low as 2,800 feet. The bottom of the mine is anticipated to extend to approximately 3,050 feet; therefore, the expected saturated zone for the mine should extend from approximately 3,500 feet to the bottom of the mine. Proposed Resolution: Correct conflicting estimates of potential saturation zones at the mine.	The baseline report identifies the range of water levels in the mine area, but the model is based on upgradient water level measurements which puts the water table at 3600 feet. Dewatering based on conservative saturation elevation of 3,600 ft. Also, see the Responses to Comments 186 and 187.
192	DEQ	3	Appendix Y SWPCP pg. 11; 2.2	Comment: May need a 1200-A for this stormwater discharge. The 1200-Z covers active mining area related to mining sector, not SIC category 14, aggregate mining which is covered in OR under the 1200-A. Cannot include 1200-A conditions in a 1200-Z permit. Proposed Resolution: Consult with DOGAMI; if it is a zero-discharge area then coverage under the 1200-A for basalt mining may not be required. DEQ will consider if the basalt mining operation may be covered under the 1200-Z, by consulting with EPA.	Basalt Quarry area is designed for zero-discharge. See Section 2.2 of the SWPCP in Appendix D4 of the CPA.
193	DEQ	2	Appendix Y SWPCP pg.12; 2.3.1	Comment: The 1200-Z covers construction related earth-disturbing activities for the purpose of mine site preparation, including right-of-way and staging areas for buildings and roads. Proposed Resolution: Concerned about the borrow basalt pit stormwater discharge. Resolutions suggested in earlier comments.	Basalt quarry is not part of the 1200Z permit area. See Section 2.2 of the SWPCP in Appendix D4 of the CPA.
194	DEQ	3	Appendix Y SWPCP pg. 13; 2.3.2	Comment: Soil and sediment stockpiles does not match required language in Schedule E.G Proposed Resolution: Temporary covers must be used and plan must be prescriptive about what type. Stormwater run-on must be diverted, not just minimized	Language adjusted in SWPCP Section 2.3.2 in Appendix D4 of the CPA.
195	DEQ	3	Appendix Y SWPCP pg. 13; 2.3.2	Comment: Dust suppressants must be approved prior to use. Temporary stabilization must state 14 days. Final stabilization must expand to requirement in permit. Proposed Resolution: Include specifics on any intended use of dust suppressants other than groundwater. Temporary stabilization language revised to meet Schedule E.G.4.1.9, with caveats for arid climate. The language pertaining to final stabilization must be expanded too.	Only water will be used for dust suppression, as mentioned in the SWPCP Sections 1.3.4, 2.1.6, 2.1.11 and 2.3.2 in Appendix D4 of the CPA.
196	DEQ	3	Appendix Y SWPCP pg. 13; 2.3.3	Comment: Conveyance channels must be designed to avoid unstabilized areas and reduce erosion. Proposed Resolution: Provide specifics on stormwater conveyance control measures to be used in roadside ditches and staging areas.	Clarification of stormwater conveyance control measures provided in the SWPCP Section 2.3.3 with reference to the Operating and Reclamation Plan (SWPCP is in Appendix D4 of the CPA).
197	DEQ	3	Appendix Y SWPCP pg. 15; 2.3.5	Comment: The SWPCP must specify inspection frequency. Proposed Resolution: Schedule E.G.4.4.1 requires the SWPCP specify an inspection frequency of either once every 7 days or once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or more; If you choose to inspect once every 14 days, you must have a method for measuring rainfall amount on site (either rain gauge or representative weather station).	Rain gauge will be provided onsite to allow for once every 14 calendar days and within 24 hours of storm event per the SWPCP Section 2.3.5 in Appendix D4 of the CPA.
198	DEQ	4	Appendix Y SWPCP pg. 18; 3.1	Comment: Clarify statement: “All discharge points will be sampled inspected monthly.” Proposed Resolution: Thinking this should read: “All discharge points will be sampled inspected monthly.”	Language adjusted in Section 3.1 of the SWPCP in Appendix D4 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
199	DEQ	3	Appendix Y SWPCP pg. 19; Table 7	Comment: Sector specific monitoring applies to stormwater which is in contact with waste rock and overburden piles. DEQ may require additional monitoring. Proposed Resolution: Allow the permit assignment letter to identify monitoring requirements and do not include these specifics in the plan.	Removed monitoring specifics from the SWPCP and reference to the DEQ assignment letter is provided in Section 4.2 in Appendix D4 of the CPA.
200	DEQ	3	Appendix Y SWPCP pg. 20; 3.3	Comment: Impairments will likely be based on 2018/2020 Integrated Report. Proposed Resolution: Let the 1200-Z assignment letter identify impairment monitoring requirements and do not include these specifics in the plan.	Removed monitoring specifics from the SWPCP and reference to the general assignments is provided in Section 3.0 in Appendix D4 of the CPA.
201	DEQ	2	Groundwater Quality Protection 3.3.9.1 Dewatering, page 149	Comment: The CPA states "2. Estimated analytical steady-state bulk dewatering rates on the order of 20 gpm, with the potential to intercept up to 500 gpm on a short-duration basis (i.e., days to weeks) anticipated based on the analytical approach." The CPA continues to use the lowest end of estimates to predict dewatering needs. The analytical steady-state model predicts rates of 20-100 gpm on the low to moderate end of hydraulic conductivity and more than 500 gpm on the high end of hydraulic conductivity. All of these rates were developed using recharge rates from 0.5 to 0.07 inches when the recharge range was estimated to be 0.25-1.0 inches. The steady-state dewatering rates should be recalculated for the estimated recharge rates for the site. Prediction of dewatering rates in the vicinity of the mine should be adjusted upward to the moderate dewatering rates to produce a more conservative estimate of water that will be produced. Proposed Resolution: Correct conflicting recharge rates to adjust the steady-state model and utilize more moderate dewatering calculations for estimating the amount of water that will be removed from mine.	See responses to comments 187 and 107.
202	DEQ	4	Appendix Y SWPCP pg. 22; 3.8.2	Comment: Monitoring referred to as Table 5. This is a correct reference to the permit not to the SWPCP, which includes Table 7 for monitoring parameters. Proposed Resolution: Be clear on reference of Table and associated documents.	Removed sampling table from SWPCP. Reference to assignment letter in Section 4.2 in Appendix D4 of the CPA.
203	DEQ	4	Appendix Y SWPCP pg. 23; 4.1	Comment: Plan incorrectly identifies annual submission of discharge monitoring reports. Proposed Resolution: Discharge monitoring reports are due quarterly.	See Table 8 of the SWPCP for the Discharge Monitoring Report frequency and due dates in Appendix D4 of the CPA.
204	DEQ	2	Appendix Y SWPCP figures and site maps	Comment: Lack all BMPs required during construction and do not contain required elements which must be included on site maps per 1200-Z Proposed Resolution: See Schedule A.7.b.i for site map requirements for industrial activity. Other maps must show construction controls during land disturbance similar to what would be submitted for a 1200-C. An erosion and sediment control plan.	SWPCP Figures 1 and 2 adjusted to include proposed locations of BMPs (culverts, sediment basins) for erosion control. Figure 3 provides details for Construction entrance, sediment basin, sediment fence, wattles, matting slope and channel installations, plastic sheeting, check dam rock and outlet protection stilling basin. See SWPCP in Appendix D4 of the CPA
205	DEQ	1	Groundwater Quality Protection 3.3.9.1 Dewatering, page 150	Comment: The discussion of dewatering estimates from the 3-dimensional numeric model estimate dewatering from 4 wells pumping 5 gpm for a total of 20 gpm in the steady-state model. And in the transient model by placing 4 wells around the perimeter and one well in the center of the project pumping at 480 gpm for 70 days and 57.5 gpm for the remaining lifetime of the mine. Regardless of the accuracy of the model, the facility must be able to contain and/or utilize all of the water being removed. The CPA does not appear to address specifics about containment of water that will be removed when the decline is being built. The CPA must provide specifications for the containment pond that will be needed when water cannot be utilized in processing. Proposed Resolution: Provide design for collection pond.	Water from mine dewatering, regardless of the phase of operations, will be utilized by the plant, stored, or used for other purposes such as dust control. Storage will occur in onsite basins or tanks that will be built for the plant water system, or in sumps within the underground mine workings. Additional collection ponds beyond what is described in the CPA are not anticipated. See the Mill Design Plan provided in Appendix C for details of the Collection Pond.
206	DEQ	3	Groundwater Quality Protection 3.3.9.1 Dewatering, pg. 148	Comment: There appears to be a large amount of uncertainty regarding the amount of groundwater draw down and its possible effects on surface water springs in the proposed mine area. A plan for monitoring impacts to spring flow and minimizing/mitigating these impacts is needed. Proposed Resolution:	See response to comment 180. The monitoring program developed during permitting can address spring flows as well as water quality. The assessment of impacts and mitigation will be performed as part of obtaining environmental approvals (e.g., NEPA).

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
207	DEQ	1	Appendix C TSF Design Section 3.3.13.3, pg. 188	Comment: The application documents discuss reuse of supernatant and water collected in the reclaim pond, but no discussion was made of the treatment or water quality standards that may be needed for this reuse or what applications would utilize reuse water. Proposed Resolution: Provide a discussion of each application that will utilize reclaimed water and the water quality standards needed for each intended use of these waste streams and identify the treatment methods anticipated to meet these standards.	The supernatant and reclaim pond water is recycled to the mill as process water to slurry ground ore prior to beneficiation. In other words, the water goes back to the head of the process stream that produces tailings. No changes necessary.
208	DEQ	1	Appendix C TSF Design Section 3.3.12.11.4, pg. 180	Comment: The application document identifies a truck wash station but does not identify how the wastewater will be treated or managed. Proposed Resolution: Provide documentation of the treatment and management for all truck wash wastewater.	The FS NI 43-101 indicates that the truck wash will have a fluid collection sump and oil water separator. Sediment settles in the sump and the water is recirculated to the wash system. Hydrocarbons recovered in the O/W separator will be shipped off-site for disposal.
209	DEQ	1	Appendix C TSF Design Section 3.3.13.3, pg. 188	Comment: The application discusses piping reuse water back to the plant but no discussion of how these reuse pipes will be identified. Proposed Resolution: Provide documentation of how pipes carrying reused water will be recognized and how the facility will ensure no cross connections with potable water lines during construction and operation/maintenance of the facility.	The reclaim water pipes are part of a closed circuit isolated from all other water service systems. As indicated in the water balance for the TSF, the flow of reclaim water back to the mill is substantial and dedicated pipes will be used.
210	DEQ	1	Appendix D, Page 2	Comment: Application indicates a graywater reuse system, but no reference was found in the supporting documentation. Proposed Resolution: Provide details of the graywater collection system, where and how the graywater will be reused.	There is no graywater system planned for the Project.
211	DEQ	3	Appendix E, Section 4.4/5.6, pp. 8 and 11	Comment: It is unclear whether or not SPCC rules would apply and require a site specific SPCC plan. Several of the petroleum storage tanks exceed the 1,320 gallon requirements. Proposed Resolution: Revise plan and provide clarity on volumes. Submit site specific SPCC, as necessary.	The Project will need to comply with 40 CFR 112, by developing a professional engineer-stamped SPCC Plan prior to storage of oil-basted product at the Project. Section 6.4 of the ERP provided in Appendix D6 to the CPA notes that an SPCC Plan will be authored in the future to comply with 40 CFR 112.
212	DEQ	3	Consolidated Permit Application, Section 4.9, pg. 235	Comment: The application identifies groundwater monitoring for 5 years post closure. Due to the slow groundwater recharge in this area and the fluctuation of the groundwater elevations 5 years is not sufficient time to verify the presence or absence of adverse effects to the area's groundwater Proposed Resolution: Assume that groundwater monitoring will be carried out for a minimum of 30 years or more after closure.	The water monitoring plan has been significantly updated and includes 30 years of post-closure monitoring for groundwater.
213	DEQ	2	Consolidated Permit Application, Section 2.19; Appendix B	Comment: Section 2.19 of the CPA refers to wetland delineation in Appendix B. Proposed Resolution: Refer to agency comments on the baseline data report.	The draft Wetland Delineation Report was submitted to DSL on 3/1/18 and DSL concurrence was received on 5/3/18. On 7/24/18 the TRT accepted DSL concurrence as conforming to Baseline Study Work Plans. The report was finalized and is included in Appendix B of the CPA.
214	DEQ	1	Consolidated Permit Application	Comment: Floodplains are not addressed in the application. Proposed Resolution: Provide explicit data and comment as to the facility siting relative to functional and regulated floodplains.	Section 1.2.1, Land Status, includes the following statement: "The facility is not sited in the 100-year floodplains or wetlands. Map 6 depicts the floodplains hazard area from the Federal Emergency Management Agency's (FEMA) 2017 and 1984 flood mitigation assessment, last updated April 27, 2021 (FEMA, 2017)."
215	DEQ	3	Drawing SW4	Comment: Culverts for roadways crossing the stormwater diversion are identified as 24". For a permanent structure, these are small and easily blocked by sluffing sediment, sage brush and other debris and blowing debris, thereby reducing the design protectivity of the TSF and increasing maintenance requirements. Proposed Resolution: Oversize the culverts, provide a maintenance schedule, or provide a redundant flow structure to ensure stormwater does not escape the diversion structure and erode the protective cover of the TSF cap and closure system.	Addressed in the SWPCP Section 1.2.3 - temporary conveyance vs. permanent conveyance channels in Appendix D4 of the CPA.
216	DEQ	3	Drawing SW4	Comment: Culverts for roadways are identified as 24". For a permanent structure, these are small and easily blocked by sluffing sediment, sage brush and other debris. Proposed Resolution: Oversize the culverts, provide a maintenance schedule, or provide a redundant flow structure to ensure stormwater does not erode the protective cover and expose the waste rock.	Addressed in the SWPCP Section 1.2.3 - temporary conveyance vs. permanent conveyance channels in Appendix D4 of the CPA.

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Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
217	DEQ	2	Consolidated Permit Application, Section 2.5, pg. 88	Comment: Floodplains Proposed Resolution: Please provide an explicit comment about siting of the facility relative to floodplains.	See response to Comment 214.
218	DEQ	1	General	Comment: The application under Appendix L, as identified as 3672R appears to be for both a WQ permit and the WQ-onsite permit. It is to be noted that the WPCF onsite application is a separate application from any other required Water Quality WPCF permit application. Proposed Resolution: Submit a complete WPCF-OS permit.	The WPCF-OS permit application has been completed and is submitted as an attachment to the CPA in Appendix E, along with the water and wastewater treatment design by SPF in Appendix C.
219	DEQ	2	General	Comment: The proposed onsite septic system application and associated documents are to be submitted along with the appropriate, associated fees, for onsite septic system activities. The permit fee for this onsite activity is to include (per OAR 340-071 Table 9D and Table 9F): The Application filing fee ($94), Permit processing fee for onsite systems with a design capacity over 1,200 gpd ($3,785); plan review fee with predicted peak flows of 4,320 gpd ($830), Annual compliance fee for a standard septic system $471; and the Department Surcharge of $100. The fees quoted are current fees which can increase. Proposed Resolution: Submit the appropriate fee along with a complete WPCF-OS permit	DOGAMI will calculate appropriate fees and provide instruction as agreed between DOGAMI and Calico. This will not impact the determination of completeness.
220	DEQ	3	Appendix AE - general	Comment: Based on a site evaluation conducted by Malheur County Environmental Health (in accordance with OAR Chapter 340 - Division 71), a standard sewage treatment and disposal system would be approved for the proposed use. DEQ required as part of the application submittal a groundwater and public health assessment to determine if additional treatment would be required. Proposed Resolution: DEQ's hydrologist evaluated the groundwater and public health assessment that was submitted as part of the application to determine if greater treatment was warranted. DEQ has determined that additional treatment is not needed at this site.	Per Comment by agencies, DEQ assessed and determined additional treatment is not required.
221	DEQ	1	Appendix AE Page C003 – Project Design Criteria:	Comment: 4,320 gallons per day. If no pretreatment is needed the system would require 3,600 linear feet of drainline (125 linear feet per 150 gpd); if pretreated effluent is required – 1,440 linear feet (50 linear feet per 150 gpd). Okay Proposed Resolution: The plans will have to show that the repair drainfield area will be entirely on Tax Lot 100, otherwise, a recorded easement will be required.	The property boundary is shown and tax lots labeled. The replacement drainfield is located completely on Tax Lot 100 per Sheet C401 of the Wastewater Design plan in Appendix C.
222	DEQ	N/A	Appendix AE Page C400:	Comment: Several manholes are proposed, 8 inch sanitary sewer lines. Proposed Resolution: Note: DEQ onsite only has authority to review onsite system components (septic tank to the drainfield). Normally, anything prior to the septic tank is under the jurisdiction of the County building department. However, I am unsure who has jurisdiction on federal property as it relates to mining operations.	The collection system design is acceptable to the wastewater system design firm, SPF. The Wastewater Design plan is presented for review by any reviewing agency, in Appendix C6.
223	DEQ	4	Appendix AE Page C401:	Comment: Pressurized drainfield; consisting of 4 zones; 6 laterals per zone; 2 laterals per dose; thirty eight 1/8 inch orifices per lateral (4 foot spacing) – orifices faced downward; 3 foot wide trenches on 12 foot centers by 150 feet long; 5 foot residual head; 2 inch schedule 40 transport, manifold and distribution piping; duplex pumping system – okay Proposed Resolution: Construction Note 1 refers to the contractor having to follow OAR 340-071-0520. This should be stating OAR Chapter 340, Divisions 071 and 073. Please change accordingly.	The construction note on Sheet C401 of the Wastewater Design plan in Appendix C is updated.
224	DEQ	3	Appendix AE Page C506:	Comment: Absorption Trench Cross Section Detail (Item 3) shows minimum 18 inches to maximum 36 inches to the top of the chamber unit. Proposed Resolution: Based on my May 16, 2019 email trench depths are not to exceed 24 inches. The 18 inch minimum depth and 24 inch maximum depth is to the bottom of the trench, not to the top of the chamber. Please adjust the drawings – accordingly. Lacking 2 inch schedule 40 transport piping trench details which is to have minimum 18 gauge tracer wire per OAR 340-071-0275(4)(b)(B). Please provide transport piping details. Note: Air release valve may be needed when a repair is implemented as it relates to Detail 2 of C506. However, it is not necessary that this be addressed in the plans. It is just a note.	For the Wastewater Design Plan in Appendix C: The trench depth dimension is corrected on Sheet C507. The transport pipe trench detail with tracer wire is on Sheet C500 Detail 3. The suggested air valve note is acknowledged. Please see sheet C506 Detail 2.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
225	DEQ	3	Appendix AE Page C508 – Septic Tank and dosing details:	Comment: Two compartment Xerxes fiberglass tank with deadman's; 8,800 gallons first compartment; 1,200 gallons 2nd compartment for dosing – okay. Three 30 inch pvc risers spec'd. One for the inlet sanitary T, one for the sanitary T's between the compartments and one for the pump system – okay. Proposed Resolution: To allow for proper maintenance (pumping of the septic tank), you should have at least one more riser in the septic tank compartment to allow for sludge removal. Pumpers use hard sucker hoses that do not bend. You are limited by the riser height and the downward angle to access the sludge. Please adjust diagram to include an additional riser. Note: Consider removable netting at the septic tank and riser interfaces to prevent someone from falling into the tank and drowning.	The additional riser was added to the details on Sheet C506 Details 1-2 and the callout for safety netting is located on Sheet C506 Details 1-2 of the Wastewater Design plan in Appendix C.
226	DEQ	2	Appendix AE Page C508 – Septic Tank and dosing details:	Comment: PF501012 high head effluent pumps with 2 inch discharge assembly; MVPDAX2 Control and alarm panel; biotube vault PVU953625; splice box outside of riser; 180 gpd dose to two separate 6- way hydrotek valves V6606A; MF4P Float assembly – okay. Pump information: alternating effluent pumps 60 gpm at 60 foot of head; 180 gallons 6 times per day. Proposed Resolution: While Appendix B, System Components Specifications include generic pump curves, they are not specific to the project – please provide pump curve and pump selection with TDH hydraulic calculations. Note: Designer needs to make sure that the splice box is accessible to the soil surface for maintenance. You also want to make sure that the wiring does not interfere with float settings in the chamber; and that maintenance can be easily conducted – ease of pulling out the pump (via unions) and/or vault assembly; etc. Unknown location where alarm panel will be located – please provide – written response to where it will be located is okay. I do not have sheet C2 as referenced in detail 4. Should be located in an area visible to folks.	For the Wastewater Design plan in Appendix C6: The two septic system/pump curves and results are in Appendix D. Calculations were provided by Orenco's proprietary Pump Select software program. SPF was provided guidance on the use of the program by Orenco Engineers. The splice box is shown above finished grade and finished grade callout is added to Detail 2 Sheet C506. The control/alarm panel location is called out on Sheet C401 and a note corrected on Detail 4 Sheet C506.
227	DEQ	3	Appendix AE Page C509 – Distribution and Drainfield Details:	Comment: Profile view of disposal trench shows a long sweep 90 degree angle. 90 degrees is not a long sweep. Additionally, I am unsure why you are going from a 2 inch distribution pipe to a 1.25 inch long sweep cleanout. Isometric View shows incorrect trench depths. Trench depths are not to exceed 24 inches. Please change accordingly. Proposed Resolution: Please change accordingly to match up with existing pipe and clarify 45 degrees – long sweep. Note: Not that this has ever happened before……; but, please make it clear that there will only be one orifice hole every 4 feet where the orifice direction alternates. Otherwise, you may end up with a pipe that has twice as many holes than it should - based on your diagram. Also, make sure that the installer does not cover the orifices with the straps….again, not that this has ever happened before…. Note: To test squirt height during the pump test, one could use a threaded plug for the long sweep elbow with a 1/8 hole drilled in it - moving it around to different laterals. Note: You may want to consider cross bracing to prevent pressure shock on the distribution valves.	For the Wastewater Design Plan in Appendix C: Detail 3 Sheet C507 Profile and Plan View drawing, dimensions and scale were adjusted to address comments. Specifically addressed is the sweep elbow, not covering orifices with straps, orifice spacing clarification and suggested squirt test procedure (temporary cap with 1/8" hole).
228	DOGAMI	2	Appendix G	Comment: Surface water and sediment management plans are very general. Proposed Resolution: Provide fully detailed plan for managing surface runoff and storm water.	Please see the Storm Water Pollution Control Plan provided in Appendix D4 of the CPA regarding management of runoff and storm water.
229	DOGAMI	1	2.8, pg. 79	Comment: Item 5 describes drawdown effects on springs from well field pumping but doesn't provide any length of time parameters when the declines occur. Proposed Resolution: The length of time needs to be provided in order to have a comprehensive understanding of the potential impacts on groundwater resources from water supply extraction.	Figure 16 shows drawdown associated with well field pumping after 10 years. Also, see Response to Comment 106.
230	DOGAMI	2	GW BDR 5.9.1. pgs. 42, 46	Comment: It implies that drawdown in Lowe Spring will be ~12-ft after 10-yrs of well field pumping. This is inconsistent with Fig. 18 which depicts the maximum drawdown (i.e. 11+ ft.) after ~11,000 days (30 yrs.). Proposed Resolution: Clarify this inconsistency.	The report has been revised to address this comment.

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Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
231	DOGAMI	1		Comment: OAR requires "General design assumptions and plan profile, cross sections and capacities for mine facilities including ponds". There is only a general discussion of the proposed design of the collection pond in section 3.3 of Appendix Q (Monitoring well plan). Proposed Resolution: Provide a clear description of the site conditions and proposed design of the collection pond in the application document.	A more complete description of design criteria for the collection pond has been provided in Section 3.2.11 (Surface Contact Water).
232	OHA	1	N/A	Comment: Water quality sample results for regulated Volatile Organic Chemicals (VOCs), Synthetic Organic Chemicals (SOCs) and coliform bacteria are needed from well #3. Proposed Resolution: Water quality samples to be collected, run at an Oregon accredited laboratory, and the results submitted to OHA	Well 3 is not proposed as a source of water supply because OHA staff hydrogeologist did not approve the well for use in a letter dated March 2, 2020.
233	OHA	3	Appendix AE: Water/Wastewater Design, Sheets C105&C106	Comment: Small portions of the setback areas within 100 feet of existing well #3 and proposed well #4 are outside the mine permit boundary. Proposed Resolution: Written documentation to be obtained from the Bureau of Land Management and submitted to OHA confirming that no existing or potential public health hazard are described in OAR 333-061-0050(2)(a)(E) will be allowed within 100 feet of the drinking water well sites.	Email received from Jonathan Westfall at BLM dated May 12, 2021 indicates there are no potential sources of contamination in the area of the mine. The only other activity (other than work and disturbances from GMM) is the Twin Springs Road and the reservoir downgradient of the artesian well.
234	OHA	3	N/A	Comment: Drinking water quality samples must be collected at regular intervals after the drinking water is constructed and the mine begins operations. Proposed Resolution: Mine operator to collect drinking water samples per schedules prescribed by OHA.	Calico will collect drinking water samples per the schedule for Non-Transient Non-Community water systems identified in OAR 333-061-0036
235	WRD	2	Vol. I Multiple Sections, Multiple Pages	Comment: Well nomenclature refers to the names given by various groups, at different times during the project's long history. These names are typically generic, and often utilized by a variety of projects throughout the state ("GW-1", "PW-4", etc.) Proposed Resolution: OWRD would prefer that the official nomenclature is used in the description of each well. This would provide clarity by utilizing a unique ID (ex: "MALH 2275") that is universally distinguishable, and will not change with time.	No Change - Table 2 Vol 2 includes OWRD names along with common names and known aliases to enable the reader to cross-reference. In addition, the wells are referred to in the report in a consistent manner.
236	WRD	2	Appendix B: Groundwater Vol. II, Section 6, Page 78	Comment: Report designates the Grassy Mountain Formation as the productive aquifer, it is then implied that the Kern Basin Tuff is an aquitard, by stating that it underlies the GMF. Later in the conceptual model text, the Kern Basin Tuff is cited to have become more transmissive due to silicification, whereas the arkosic sandstone less, which appears to be a contradiction. Proposed Resolution: If there are not sufficient data to support this statement, list it as an unknown condition and acknowledge that more observations are necessary.	The conclusion is that the lower observed water levels near the mine deposit are due to both silicification and faulting. "Regionally", the KB Tuff appears to act as an aquitard. The effect of silicification and faulting on the underlying tuff is offered as a potential explanation to explain deeper groundwater elevations in the mine area, but there is no evidence to support this.
237	WRD	2	Appendix B: Groundwater Vol. II, Section 6, Page 78	Comment: From report: "This flow direction is evident in both the shallow and deep potentiometric surfaces, a result that also supports a single aquifer system." Is this supported by data from a deeper potentiometric surface, in more than one well? Proposed Resolution: If there are not sufficient data to support this statement, list it as an unknown condition and acknowledge that more observations are necessary.	The baseline report has been revised to address this comment. See updates to section 4.6 and Section 6 of Volume 2.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
238	WRD	2	Appendix B: Groundwater Vol. II, Section 7, Page 83	Comment: In the evaluation of expected drawdown from production wells, it is stated that "Theis analysis results in an unreasonably large area of influence.", citing projected drawdowns of 48-78 feet after one year of pumping. Then it goes on to explain "…the negative boundary shown in the drawdown data indicates compartmentalization of the aquifer.". This argues for a smaller area of influence, which theoretically may limit influence at one mile, but neglects to say that it will increase influences within the same compartment. - The next paragraph then states: "Drawdown within the compartments will induce flow across boundaries from outside of the compartments, resulting in some drawdown outside of the compartments and decreasing drawdown within the compartments.", which appears to contradict the previous assertion that compartmentalization is shrinking the area of influence. Proposed Resolution: In each scenario, the conceptual model must reflect all likely influences of a fault. In the case of a negative boundary, the expected influence across the fault may be diminished, but then (as displayed pumping test data), drawdowns may be more severe within that compartment. If, otherwise a fault does not compartmentalize the aquifer, expected drawdowns near the wells may be less severe, but impacts would be expected across a broader aerial extent.	The text of the report has been revised to be more clear on this point. The conceptual model includes faults and lithologic facies transitions as partial barriers to flow in the single aquifer system. Text has also been included which indicates that restricted flow across the partial barriers will result in greater drawdown within the compartment the well is completed in. Further, the first statement in the comment indicates that the Theis analysis will over-predict the area of influence. This does not imply that there will not be some flow across less permeable boundary.
239	WRD	3	4.2.5 Page 9	Comment: Recommend the ability to measure shut-in artesian pressure for any flowing wells, including MALH 2275. Proposed Resolution: Shut in the wellhead, rather than letting flow.	Noted, but we do not believe this is possible without major well head modifications.
240	WRD	2	4.3.5 Page 12	Comment: It is submitted here that the shallow and deep alluvial aquifers tapped by GW-1 and PW-1 are interconnected, but in later sections it is assumed that the productive aquifer zones are confined. Proposed Resolution: Resolve the inconsistency regarding interconnection of the two wells.	The area is characterized as a single aquifer system. Most productive aquifers are under either semi-confined or confined conditions, becoming more confined with depth. It is speculated that connectivity between PW-1 and less confined zones is due to a poor well seal. Text has been revised for clarification on the nature of the aquifer and the connection between zones (both laterally and vertically).
241	WRD	2	4.4.8 Page 17	Comment: In estimates provided for well to well interference, early-time transmissivity numbers were used. Proposed Resolution: While early-time transmissivity values are appropriate for assessing aquifer properties, they may not be appropriate for this situation. Since affected wells appear to exist within the same compartment, with the same negative boundaries, considering extended pumping durations, the late-time transmissivity should be used in this analysis.	Noted. Further refinement of the well field design will be necessary as the project water demands are further refined and additional testing and data are generated. Needs to be addressed in a revision to the Well Field Design Report (SPF, July 2019) (during permitting)
242	WRD	4	4 Pages 5-19	Comment: Interpreted aquifer properties from pump tests on existing wells are included in the text, but not summarized in a table. Proposed Resolution: I suggest that results are summarized in a table for easy analysis and comparison. This table could include discharge rate, pumping duration, time to negative boundary effects, total drawdown, recovery time, transmissivity, storativity, feet of open interval, productive lithology, distance from ore body, etc.	See updated Table 7 in Volume 2.
243	WRD	2	4.4.9 Page 18	Comment: It is suggested that further development of Well 3 will result in much lower concentrations of harmful constituents for drinking water, possibly to within drinking water standards. Proposed Resolution: This may be a misleading hypothesis, especially considering all of the 15 wells sampled exceeded the MCL for arsenic, according to the Groundwater Baseline Data Report. Repeat this analysis considering the impact of levels above MCL in all wells	Needs to be addressed in a revision to the Well Field Design Report (SPF, July 2019) (during permitting).
244	WRD	2	5.3.2 Page 24	Comment: Plan for well development and testing states "All nearby wells and springs will be monitored during the test…", but no details given. Proposed Resolution: Provide a list of sites, and the schedule and method in which they will be monitored.	Needs to be addressed in a revision to the Well Field Design Report (SPF, July 2019) (during permitting).
245	WRD	4	5.5.7 Page 31	Comment: In the third paragraph, "Well 4" is listed twice, pumping at two different rates. I believe the second instance is meant to be "Well 7". Proposed Resolution: Resolve the inconsistency.	Needs to be addressed in a revision to the Well Field Design Report (SPF, July 2019) (during permitting).

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
246	DEQ	3	Appendix Y SWPCP pg. 9, 2.1.2, 2.1.5	Comment: Oil and Grease must be specific with control measures. Debris Control must be specific with control measures. Proposed Resolution: Narrative technology-based effluent limits must be prescriptive and call out what will be used on-site.	Table 7 of the SWPCP provides greater detail re: BMPs for Oil & Grease, Debris, etc. in Appendix D4 of the CPA.
247	DEQ	1	Appendix Y SWPCP pg. 10; 2.1.7	Comment: It appears the site is required to prepare a Spill Prevention and Countermeasures Plan based on the liquid storage volumes in the Emergency Response Plan. Proposed Resolution: The spill prevention and response procedures are inadequate and an SPCC may be used and referenced to fulfil this section of the SWPCP. This section must include OR. Emergency Response System number and on-site contact.	Emergency response reporting requirements added to ERP (Section 3), provided in Appendix D6 of the CPA.
248	DEQ	1	CPA, Petroleum-contaminated soils management plan: Section 2, pg. 4	Comment: No application or supporting materials received for an industrial solid waste landfill, which is referenced in the CPA documents. 2 PROJECT DESCRIPTION Calico Resources USA Corp. (Calico) plans to construct, operate, reclaim, and close an underground mining and precious metal milling operation. In general, the proposed mining and precious metal processing operations will consist of an underground mine and ore processing facilities, including a conventional mill and tailings storage facility (TSF) and a waste rock storage area (WRSA), as well as other support facilities. The Project will include the following major components: • Ancillary facilities that include the following: haul, secondary, and exploration roads; truck workshop; warehouse; stormwater diversions; sediment control basins; reagent and fuel storage; storage and laydown yards; explosive magazines; fresh water storage; monitoring wells; meteorological station; an administration/security building; borrow areas; growth media stockpiles; a landfill; and solid and hazardous waste management facilities to manage wastes; and Proposed Resolution: Submit a permit application for an industrial solid waste landfill that complies with requirements in OAR 340-093 and 340-095, including: · Permit application · Recommendation from local jurisdiction · Payment of fees · Site characterization report · Detailed plans and specifications · Written closure plan · Evidence of Financial Assurance	No landfill is proposed for the site.
249	DEQ	2 and 3	CPA-General	Comment: It is unclear if the methods described for control of wastes and chemicals have considered all available, practicable and necessary technologies. Proposed Resolution: See specific comments in other sections. In addition to resolving specific findings in other sections, additional discussion and clarification expected to occur during the permitting phase.	Control of wastes produced at the facility is described in the Waste Management Plan and the Petroleum-Contaminated Soils Management Plan. Control of chemicals is described in the Toxic and Hazardous Substances Transportation and Storage Plan and the Cyanide Management Plan.
250	DEQ	3	Appendix E, Table 1, Section 5.5, pg. 10	Comment: The definition of "hazardous materials" given in Section 5.5, while not incorrect, is limited to the characteristic definition; several of the materials listed in Table 1 are themselves listed explicitly as hazardous materials under CERCLA and the various other relevant Federal and state statues. "If the spill is of significant size and/or duration, special cleanup efforts such as those provided by environmental contractors will be used as necessary." Proposed Resolution: Revise Section 5.5 to acknowledge that hazardous materials can be defined via listing as well as characteristic properties, and that an additional column be added to Table 1 to identify whether each material is hazardous, and by which (or both) definitions the material may qualify as such.	ERP updated to include definitions of hazardous materials (Section 5.4) and identification of hazard class for each material proposed for use onsite (Table 3). The ERP is provided in Appendix D6 of the CPA.
251	DEQ	2	Appendix E, Section 5.6, pg. 12, final paragraph	Comment: Vague statement: Proposed Resolution: Please be more specific about what spill response contractors have been identified and can provide services to the project location.	Names and contact info for spill contractors added (Section 5.5) of the ERP, provided in Appendix D6 of the CPA.
252	DEQ	3	Appendix E, Section 6.1, pg.13	Comment: Emergency response procedures appear to be limited hazardous substances only. Proposed Resolution: Please include response to releases of oil.	Response actions for release of oil added to ERP (Section 4.3.3), provided in Appendix D6 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
253	DEQ	4	Appendix E, Section 6.3, pg. 15	Comment: Unclear on the wording and value of this section Proposed Resolution: Please provide additional detail as emergency responses are generally made in response to unplanned events.	Details for response action, incident command, etc. added (Section 4) to the ERP, provided in Appendix D6 of the CPA.
254	DEQ	2	Appendix E, Section 6.3.7, pg. 18	Comment: No specific procedures or guidance for spills or releases of petroleum from vehicles operating on or coming/going from the facility. Proposed Resolution: Please address petroleum releases from vehicles.	ERP covers various release situations, including spills from vehicles (Section 4.3.3), provided in Appendix D6 to the CPA.
255	DEQ	3	Appendix E, Section 6.3.7, pg. 19	Comment: Waste from spills or releases needs incident-by-incident approval prior to stockpiling onsite. Proposed Resolution: Revised and add language that any stockpiling or onsite storage of waste from spills or releases must be coordinated in advance with the SOSC or FOSC.	Mentioned in Section 4.3.3 of the ERP, with disposal addressed in Waste Management Plan (Sections 7.19, 7.24, and 7.30) with Petroleum-Contaminated soil addressed by the Petroleum-Contaminated Soil Management Plan. All three plans are provided in Appendices D6, D3, and D9, respectively, of the CPA.
256	DEQ	2	Appendix E, Section 6.3.13	Comment: The combination of ammonium nitrate and certain hydrocarbons, in the presence and ignition agent or sufficient, can produce an explosive exothermic reaction Proposed Resolution: Revise and explicitly make address this hazard in the plan.	Added response to explosion and fire to ERP, which is provided in Appendix D6 of the CPA.
257	DEQ	3	Appendix E – overall	Comment: The scope of this specific Emergency Response Plan (ERP) appears to be somewhat limited in scope and specifically indicates it that it is in support of a fluid process spill at the mine and the WPCF permit. The ERP may suffice for limited use or application at the facility, however, later sentences indicate its use for hazardous material spills, petroleum releases and natural disasters. It is unclear if there may be additional future or other documents required although it is mentioned in Section 2.1 that this is a preliminary plan. It would appear that there are also other potential emergency response aspects of the mine and processes that an ERP such as this should and would be covered by a more thorough and comprehensive plan. The expectation is that the ERP will outline and provide for the planning and resource identification necessary to provide important and useful guidance in any emergency incident situation. An assumed emergency situation could be mining operations or mining process related and they also could be related to natural disaster events (fire, flood, earthquake, etc.). Such events could occur during routine day to day mining operations, such as transportation of materials, processing facilities, operation of tailings pipeline or the landfill. In addition, other incidents could be wildland fire events, transportation incidents, large reagent/chemical or fuels spillage, large scale tailings spills, explosives accident, and waste rock stockpile or mine infrastructure instability events. It is recognized that while an ERP can be designed to provide guidance for anticipated emergencies it cannot provide all necessary details for all possible emergency situations. Therefore, it is reasonable to expect that appropriate, responsible and trained personnel will be expected to make and execute decision making to address emergency incidents. In the event of emergency situations that could impact workers, the environment, and local populations, the ERP would be intended to be applied in conjunction with the local LEPC plan Proposed Resolution: Please revise plan accordingly in response to this comment.	Various scenarios added to Section 4 of the ERP, including natural disaster response, fire, explosion, tailings storage facility failure, spills, etc., provided in Appendix D6 of the CPA.
258	DEQ	3	Appendix E, Section 2, pg. 4	Comment: In establishment of purpose of the ERP, it indicates “event of a process fluid spill at the mine”. Revise to indicate the ERP is for spill of hazardous substances, which may include hazardous chemicals, petroleum, or natural disasters. Natural disasters and/or mining related incidents are not mentioned in the document and should be included. Some language below is suggested. As far as mining operations go, it is unclear if the ERP is designed to also outline those type of events or they are outlined in other permit documents. Proposed Resolution: Please revise plan accordingly in response to this comment.	ERP adjusted to cover multiple scenarios (Section 4), provided in Appendix D6 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
259	DEQ	3	Appendix E, Section 3.2, pg. 5	Comment: There should be some additional detail on the storage location of the various chemicals and fuel, such as covered storage, indoor facilities with venting, dealing with incompatible or reactive wastes, etc. Proposed Resolution: Revise plan and provide additional detail on the storage locations of various chemicals and fuels.	Information included in Table 3 of ERP. Also provided details in Tables 1 and 2 of the Toxic & Hazardous Substances Transportation & Storage Plan. Both plans are located in Appendices D6 and D7, respectively, of the CPA.
260	DEQ	3	Appendix E, Section 5.4, pg. 10	Comment: Water suppression for fires may be incompatible for some of the stored chemical and hazardous materials. Proposed Resolution: Revise plan and address fire suppression when water may be incompatible.	Appropriate fire-fighting measures for hazardous materials provided in Table 3 of the ERP, provided in Appendix D6 to the CPA.
261	DEQ	2	Appendix E, Section 6.1, pp. 13-14	Comment: These bulleted items are just a high level outline of response activities. Report all spills to land or water to the Oregon Emergency Response System (OERS) at 1-800-452-0311 in accordance with OAR 340-142; federal reporting requirements may also be required to the National Response Center (NRC) at 1-800-424-8802. State requirements require reporting of any releases to waters of the state, above the reportable quantity (RQ) for CERCLA hazardous substances, and any release of petroleum substances above 42 gallons. DEQ encourages the reporting of any release and does not penalize for over reporting. State Spill Requirements: https://www.oregon.gov/deq/Hazards-and-Cleanup/env-cleanup/Pages/How-To-Report-A-Spill.aspx Proposed Resolution: Revise plan and provide more detailed information on response activities.	ERP identifies response and reporting requirements in Section 3, provided in Appendix D6 to the CPA.
262	DEQ	3	Appendix E, Section 6.1/6.2.2/9, pp. 13/14/24	Comment: Plan not explicit on standards that will be followed in an emergency response event. Proposed Resolution: Suggest adding language that all staff operating, training, or responding to emergency response events utilize appropriate safety and health standards according to OSHA, MSHA, HAZWOPER, and/or other applicable and appropriate state and federal standards.	Plan identifies applicable regulations in Section 1 and incident command protocol in Section 4.4 of the ERP, provided in Appendix D6 of the CPA.
263	DEQ	2	Appendix E, Section 7, 1st sentence, pg. 22	Comment: Sentence references that Section 6.1 and 6.2 include internal response procedures. Internal responses can also typically require external response procedures including notification, etc. Proposed Resolution: Revise plan and update accordingly in response to comment.	Response plan notifications identified in Section 3 of the ERP for internal and external reporting. See Appendix D6 of the CPA.
264	DEQ	2	Appendix E, Section 7/8, pp. 22-24	Comment: The plan should incorporate by reference the Malheur County Local Emergency Planning Committee (LEPC) plan. This plan has been developed in accordance with applicable federal, state and local provisions: • (P.L. 99-499) the Emergency Planning and Community Right-to-Know Act (EPCRA) (SARA Title III) of 1986, Title 42 Chapter 116 Subchapter 1 – Emergency Planning and Notification §11003 (a-g). • Title Code of Federal Regulations (CFR), 40 CFR Part 355 Emergency Planning and Notification • Title 40 CFR Part 370 Hazardous Chemical Reporting Regulations • Oregon Revised Statutes (ORS) 401.032, 035, 305, and 309, 453.307 to 505 and 465.101 to 127 • Oregon Administrative Rules (OAR) Chapter 837 Division 85 https://www.malheurco.org/wp-content/uploads/Departments/EmergencyManagement/LEPC-Plan.pdf Proposed Resolution: Revise plan in response to comment.	ERP incorporates local emergency response plan (Sections 1, 3.3) and Table 1. See Appendix D6 of the CPA.
265	DEQ	3	Appendix E, Section 7, Table 3, pg. 23	Comment: Include reference to Oregon Emergency Response System (OERS) and reference to National Response Center (NRC) as outlined in above comments and Section 8. Proposed Resolution: Revise plan in response to comment.	ERP includes both OERS and NRC reporting requirements (Sections 3.1, 3.2, 4.3, Table 1). See Appendix D6 of the CPA.
266	DEQ	3	Appendix E, Section 8, first bullet, pg. 23	Comment: Oregon DEQ, state and other local public safety agencies receive notification through OERS operated by the Oregon Office of Emergency Management at the same number. Proposed Resolution: Revise plan in response to comment.	ERP notes that OERS notification is sufficient for other Oregon agency notification (Section 3.1, Table 1). See Appendix D6 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
267	DEQ	3	Appendix E, Section 8, pg. 24	Comment: Oregon requires immediate reporting of incidents including on weekends to OERS. Above comments are repeated here: Report all spills to land or water to the Oregon Emergency Response System (OERS) at 1-800-452-0311 in accordance with OAR 340-142; federal reporting requirements may also be required to the National Response Center (NRC) at 1-800-424-8802. State requirements require reporting of any releases to waters of the state, above the reportable quantity (RQ) for CERCLA hazardous substances, and any release of petroleum substances above 42 gallons. DEQ encourages the reporting of any release and does not penalize for over reporting. State Spill Requirements: https://www.oregon.gov/deq/Hazards-and-Cleanup/env-cleanup/Pages/How-To-Report-A-Spill.aspx Federal Spill Requirements: https://www.epa.gov/emergency-response/when-are-you-required-report-oil-spill-and-hazardous-substance-release Proposed Resolution: Revise plan in response to comment.	ERP reflects Oregon and federal reporting requirements (Section 3 and Table 1). See Appendix D6 of the CPA.
268	DEQ	3	Appendix E, Section 8, 2nd paragraph, pg. 24	Comment: It is unclear what "special authority" for emergency operations is referring to in this context. It is anticipated that if an incident required significant response that it would be managed under an incident command system (ICS) structure for both internal and external responses. Proposed Resolution: Revise plan in response to comment.	ERP identifies use of an incident command system (Section 4.4). See Appendix D6 of the CPA.
269	DEQ	3	Appendix E, Section 8.1, pg. 24	Comment: Similar to above comment, while site specific forms and checklists would be helpful, it is anticipated that emergency response would be conducted under an ICS response framework and associated documentation. Proposed Resolution: Revise plan in response to comment.	ERP identifies use of an incident command system (Section 4.4). See Appendix D6 of the CPA.
270	DEQ	2	Consolidated Permit Application, Section 3.4.2, Page #199 and 3.6..6, Page #217	Comment: Section 3.4.2 first paragraph, states that the site is expected to be a CESQG (<100kg/month HW generation). Whereas; section 3.6.6 states that the facility anticipates they will be a SQG (>100kg – <1000kg /month of HW generation) Proposed Resolution: Reevaluate the hazardous waste generation and revise either section to state the same. Note that the Bevill Exclusion does not exempt Mineral Processing (significant physical/chemical processes) or waste generated from laboratory or maintenance activities)	The Waste Management Plan identifies small quantity generator and large quantity generator requirements (Section 6). See Appendix D3 of the CPA.
271	DEQ	3	Consolidated Permit Application, Section 3.4.2, Page #199	Comment: This section does not stipulate what parts of RCRA (40 CFR) or State OAR's will be followed. Proposed Resolution: Suggest adding "Calico will adhere to Federal and State hazardous waste regulations (i.e. 40 CFR 260-279 and OAR 340-100 through OAR 340-142 as applicable. For example: Second paragraph should reference "Management of Used Oil" 40 CFR 279 and OAR 340-111.	The Waste Management Plan includes regulatory citations (Section 2). See Appendix D3 of the CPA.
272	DEQ	4	Consolidated Permit Application, Section 3.6.6, Page #217.	Comment: This section can be confusing as it combines disposal and management of both solid and hazardous wastes. Proposed Resolution: Recommend separating disposal and management options. It is important to understand that each waste material has different management and disposal methods that are regulated by both Federal and State. Example: Utilize headers: Non-hazardous waste., (General garbage etc.), Hazardous waste, (Regulated spent solvents, spent acids, waste paints, unpunctured aerosols etc.), Used Oil (Includes used motor oil, hydraulic and cutting fluids undrained oil filters etc.), Universal Waste (Includes fluorescent lamps, mercury containing equipment, NiCd , Li batteries, Lead Acid Batteries, mercury containing thermostats.), Note: Lead Acid batteries may be managed under 40 CFR Subpart G 266.	The Waste Management Plan separates discussion of general waste management (Sections 3 and 4), waste disposal (Section 5), hazardous waste (Section 6), and descriptions of specific waste streams (Section 7). See Appendix D3 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
273	DEQ	3	Consolidated Permit Application, Section 1.3, page, 4, Table 1 and Section 9.3, page 17	Comment: Table 1, indicates that a key design criterion for tailings WAD cyanide removal discharge is not to exceed 30 ppm. Section 9.3 states "The slurry will be reduced from a CNWAD concentration of 100 ppm from the CIL circuit to below the not-to-exceed limit of 30 ppm. The final CN concentration will be monitored by operator titration to ensure compliance with the target discharge limit and the not-to-exceed regulatory limit of 30 ppm." 1. OAR 340-043-0000,2,b requires that the potential for long-term cyanide and toxic metals released from mill tailings should be reduced to the greatest degree practicable through removal, reuse, or destruction of chemical solutions prior to tailings placement in the Tailings Disposal Facility. Tailings WAD cyanide destruction results previously provided by the Applicant in the July 9, 2018 Preliminary Feasibility and Technical Report, page 186 indicate that a WAD cyanide removal to 0.1ppm was achieved. Proposed Resolution: Applicant should provide support for 30 ppm as the greatest practicable cyanide reduction or modify this design criterion.	The CPA has been updated throughout to indicate that the target WAD CN concentration after cyanide destruction is 15 ppm and the maximum will be less than 30 ppm in accordance with the regulations (e.g. Table 31). Laboratory testing of the cyanide destruct circuit performed as part of design indicated concentrations less than 1 ppm can be achieved, so the practicable target of 15 ppm is feasible.
274	DEQ	2	Consolidated Permit Application, Section 3.3, pp. 113-196	Comment: Multiple processes in the milling operation generate precipitates and waste materials, both liquids and solids. The CPA should define the characteristics of these wastes and their disposition. For instance, the carbon-in-leach process includes sulfide precipitation. What are the characteristics of the precipitate and how is it handled and disposed? Similarly, what are the characteristics of the precipitates generated during the cyanide detoxification process and how are they disposed? What are the characteristics of the waste carbon fines generated from the carbon regeneration process that cannot be re-used in the elution process and how are they handled? Proposed Resolution: Applicant should provide details concerning the handling and disposal/ treatment of wastes generated during the chemical mining processes.	These wastes are described in more detail in the Waste Management Plan, provided in Appendix D3 of the CPA.
275	DOGAMI	2	3.4, Appendix D, F, Appendix G 2.3, Appendix E 6p	Comment: List of chemicals to be used and quantities is adequate, but procedures for handling storage and disposal are generalized and appear piecemeal in several sections and appendices. Proposed Resolution: Provide a single comprehensive and detailed list of chemicals and procedures.	List of chemicals and quantities are provided in Section 3.8. The Cyanide Management Plan and the Toxic and Hazardous Substances Transportation and Storage Plan provide details for transportation and storage of hazardous or toxic materials. The Waste Management Plan and Petroleum-Contaminated Soil Management plans provide details for disposal.
275	DOGAMI	2	3.4, Appendix D, F, Appendix G 2.3, Appendix E 6p	Comment: List of chemicals to be used and quantities is adequate, but procedures for handling storage and disposal are generalized and appear piecemeal in several sections and appendices. Proposed Resolution: Provide a single comprehensive and detailed list of chemicals and procedures.	Separate plans developed to address storage and disposal needs. See the Toxic & Hazardous Substances Transportation & Storage Plan for storage and handling and the Waste Management Plan for disposal. Both plans are provided in Appendices D7 and D3, respectively, of the CPA.
275	DOGAMI	2	3.4, Appendix D, F, Appendix G 2.3, Appendix E 6p	Comment: List of chemicals to be used and quantities is adequate, but procedures for handling storage and disposal are generalized and appear piecemeal in several sections and appendices. Proposed Resolution: Provide a single comprehensive and detailed list of chemicals and procedures.	Further details regarding handling, storage, and disposal of hazardous materials and wastes are described in more detail in the Waste Management Plan (in Appendix D3 of the CPA) and the Toxic and Hazardous Substances Transportation and Storage Plan (in Appendix D7 of the CPA).
276	DOGAMI	1	3.4	Comment: OAR require a plan for transportation of toxic chemicals developed according to the standards of the State Fire Marshall. List of chemicals and storage discussion only describe how the chemicals will be packaged on delivery, not how they will be transported. No information is provided to demonstrate that Fire Marshall standards are met. Proposed Resolution: Provide complete and detailed plan for transportation of toxic chemicals that conforms to required standards.	See the Toxic and Hazardous Substances Transportation and Storage Plan, Section 3, found in Appendix D7 of the CPA.
277	DOGAMI	2	3.4.4, 3.6.5	Comment: Transportation of hazardous chemicals is described in very general terms. Storage and handling are more fully described, but still general. Proposed Resolution: Provide complete and detailed plans for transportation and storage of hazardous chemicals.	See the Toxic and Hazardous Substances Transportation and Storage Plan, Section 3, found in Appendix D7 of the CPA.

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Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
278	DEQ	2	Appendix Y SWPCP pg. 9; 2.1.4	Comment: Erosion and sediment control cites OAR. Must include maintenance schedule from Schedule E. Proposed Resolution: Provide OAR specific reference. Include timeframes from Schedule E.G.4.1.2.	Table 7 of the SWPCP provides BMPs and maintenance schedule in Appendix D4 of the CPA.
279	DEQ	2	Appendix Y SWPCP pg. 10; 2.1.6.1	Comment: Housekeeping must include a maintenance schedule. Proposed Resolution: Provide a designated timeframe for outlets maintenance	Table 7 of the SWPCP provides BMPs and maintenance schedule in Appendix D4 of the CPA.
280	DEQ	3	Appendix Y SWPCP pg. 10; 2.1.8	Comment: Section references repair and maintenance of BMPs at all times. Proposed Resolution: Must include reasonable maintenance schedule. Will it be daily to ensure all BMPs are in working order at all times? Must incorporate Schedule E.G.4.1.3, 4, and 6.	Table 7 of the SWPCP provides BMPs and maintenance schedule in Appendix D4 of the CPA.
281	DEQ	3	Appendix E, Section 2, 2nd paragraph, pg. 4	Comment: There is no outline or mention of natural disaster response in the document. Proposed Resolution: Revise plan and address natural disasters.	Explosions are covered in Section 4.3.2 of the ERP. Details of fire protection are provided in Section 5.3. Tailings pond failure is covered, while natural disasters (flood, earthquake) would be handled similarly to tailings failure or fire. See Appendix D6 of the CPA.
282	DEQ	3	Appendix E, Section 4.1, 1st sentence, pg. 7.	Comment: Routine inspection should be clarified as daily/weekly/monthly/etc. requirements. Proposed Resolution: Revise plan and clarify the frequency of “routine” inspections and reporting requirements	ERP identifies frequency of routine inspections in Section 6.4. See Appendix D6 of the CPA.
283	DEQ	3	Appendix E, Section 4.2, pg. 8.	Comment: Reporting requirements of a discharge or release should reflect Section 6.0 requirements. This can be reflective of releases the environment as opposed to releases in a controlled environment (building, concrete pad, etc.). Proposed Resolution: Revise plan and update reporting requirements	ERP identifies release reporting requirements (Section 3 and Table 1). See Appendix D6 of the CPA.
284	DEQ	3	Appendix E Section 9, pg. 24	Comment: Similar to above comments, suggest adding language that all staff operating, training, or responding to emergency response events utilize appropriate safety and health standards according to OSHA, MSHA, HAZWOPER, and/or other applicable and appropriate state and federal standards. Proposed Resolution: Revise plan in response to comment.	Section 7 of the ERP identifies training requirements. See also the Safety Training Plan, Section 3. Both plans are provided in Appendices D6 and D13, respectively, of the CPA.
285	DOGAMI	1	Application	Comment: No description of the design of the ore stockpile and any liner or monitoring systems. Proposed Resolution: Provided detailed description of the design of the proposed ore stockpile.	The ore stockpile is further described in Section 3.9.10 (Stockpiles-Mined Ore Stockpile).
286	DOGAMI	1 or 2	3.3.2.1	Comment: Application asserts that there will be no subsidence “estimated to be without problematic stress conditions”. No calculations provided to support assertion, OAR requires a subsidence control plan if subsidence is expected. Proposed Resolution: Provide data and analysis to support assertion that there will be no subsidence. Provided detailed subsidence management plan if needed.	Further discussion of potential for subsidence is described in Section 3.1.1.
287	DOGAMI	2	Appendix E	Comment: OAR requires employee safety training plan developed in accordance with state and federal law, plan provided is very general. Proposed Resolution: Provide fully detailed safety training plan and show how it conforms to required laws	See Safety Training Plan Sections 3 and 4 and Table 1, provided in Appendix D13 of the CPA.
288	DOGAMI	1	Appendix E	Comment: Spill prevention plan is general, particularly for reporting, lacks required corrective action plan. Proposed Resolution: Provide fully detailed plan with clear and complete notification and corrective action plans.	ERP addresses response to incidents (Section 4) via Incident Command structure. See Appendix D6 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
289	DOGAMI	1,2	3.4.2	Comment: OAR requires characterization and management plan for all wastes, including quantity and quality. Plan provided is very general, with no discussion of quantity or quality. Proposed Resolution: Provide fully detailed plan for all wastes including estimated quantities with supporting documentation.	Quantity and quality of elemental mercury and mercury-contaminated carbon are discussed in Section 7 of the Waste Management Plan (SLR, 2021). Quantities of other solid waste, universal waste and hazardous waste that will be generated onsite are unknown at this time, but will be managed in accordance with the Waste Management Plan (SLR, 2021). Petroleum-contaminated soils, are not anticipated to be routinely generated onsite, but will be managed in accordance with the Petroleum-Contaminated Soils Management Plan (EM Strategies, 2021). Both plans are found in Appendix D9 of the CPA. For waste rock and tailings quantity and quality, see the Geochemical Baseline Report (SRK, 2019) Section 6 "Characterization Program Results" and the Tailings Storage Facility and Temporary Waste Rock Storage Facility Design Report (Golder, 2021) Section 2 "Design Criteria," Section 5 and Appendix D "Tailings Testing and Consolidation Modeling," provided in Appendix C4 of the CPA. For wastewater quantity and quality, see the Wastewater Preliminary Engineering Report (SPF, 2019) Section 5 "Wastewater Characterization" and Appendix C "Water Quality Impact Assessment," provided in Appendix C6 of the CPA. For process water quantity and quality, also see the Mill Design Report (Ausenco, 2021) in Appendix C3 of the CPA.
290	DOGAMI	1, 2	3.1.2, 3.1.4 RESPEC	Comment: OAR requires a proposed start date and schedule. No start date provided, schedule is inconsistent. 3.1.2 says 2 years of preproduction, 9 years production, 3 years closure. Section 3.1.4 says 1 year pre-production and 10 years production. Proposed Resolution: Provide a clear and consistent proposed schedule with a proposed start date.	Further description of the project schedule is provided in Section 3.4.
291	DOGAMI	1	5	Comment: OAR requires alternatives analysis for all mine facilities, not just TSF Proposed Resolution: Provide alternatives analysis for all mine facilities with documentation.	The Alternatives Analysis has been significantly updated based on multiple coordination meetings with DOGAMI and DEQ.
292	DOGAMI	1	5	Comment: OAR requires alternatives analysis for processes, operations and scheduling for all aspects of project. Proposed Resolution: Provide comprehensive alternatives analysis for required elements with documentation.	The Alternatives Analysis has been significantly updated based on multiple coordination meetings with DOGAMI and DEQ.
293	DOGAMI	4	Site Plan Map	Comment: Map resolution is too low, is difficult to read. Proposed Resolution: Provide higher resolution version of map.	Mapping resolutions were updated for CPA to improve clarity.
294	DOGAMI	2	5	Comment: Alternatives analysis must have sufficient detail to allow agencies to evaluate comparative merits. This has only been done for TSF Proposed Resolution: Provide full documentation of all alternatives analyzed.	The Alternatives Analysis has been significantly updated based on multiple coordination meetings with DOGAMI and DEQ.
295	DOGAMI	2	3.4.2, 3.6.6	Comment: Waste disposal systems are described in general terms. 3.6.6 suggests that some wastes may be deposited in the waste rock dump. Proposed Resolution: Provide a fully detailed plan for management of all anticipated wastes.	This has been removed.
296	DEQ	1	Consolidated Permit Application	Comment: CPA contains a wildlife mitigation plan, but does not contain a wildlife protection plan. Proposed Resolution: Please confer with ODFW and prepare a wildlife protection plan that satisfies the requirements of ODFW.	A separate Wildlife Protection Plan that meets the requirements of ODFW is provided in Appendix D14 of the CPA.

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Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
297	DEQ	1	Consolidated Application, Section 3.3.13.3, pg.188	Comment: Insufficient information to determine toxicity and impacts of chemical processing solutions and wastewaters on wildlife Proposed Resolution: Please submit information on chemical toxicity on wildlife, including concentrations, exposure pathways, and other information necessary for ODEQ and ODFW to determine toxicity effects on wildlife.	Ecological risk assessment was completed and is provided in Appendix F of the CPA.
298	DEQ	2	Consolidated Permit Application - overall	Comment: Plans insufficient to determine if engineering controls are adequate to positively exclude wildlife contact with chemical processing solutions and wastewaters. Proposed Resolution: Submit plans that adequately describe controls to positively exclude wildlife.	A Wildlife Protection Plan that meets the requirements of ODFW is provided in Appendix D14 of the CPA. The WPP describes the controls to positively exclude wildlife from exposure to chemical processing solutions and wastewaters.
299	DOGAMI	2	Appendix I	Comment: Fish and wildlife protection and mitigation plan is very general, and no evidence is provided to suggest the it meets ODFW standards. Proposed Resolution: Provide a fully detailed wildlife protection and mitigation plan and demonstrate that it meets the standards adopted by ODFW	The Wildlife Mitigation and Wildlife Protection Plans have been revised to provide details regarding ODFW standards. See Appendix D15 of the CPA for both plans.
300	DOGAMI	1	4.2., pg. 224	Comment: Table 89 lists the species and rates to be applied for revegetation but there is no delineation spatially where they will be planted/broadcast w/in the permit boundary. Proposed Resolution: Provide a map delineating where the species in Table 89 will be revegetated w/in the PB.	The location of revegetation is detailed in the Reclamation Plan and associated figures.
301	DOGAMI	1	Appendix V, Section 4k; pdf pg 18	Comment: No details about noxious weed and invasive plant control measures Proposed Resolution: Please reference Appendix H "Noxious Weed Monitoring and Control Plan"	Section 4K has been updated to address the noxious weed and invasive plant control measures.
302	DOGAMI	1	CAP Section 4, associated appendices, and Appendix J	Comment: Detailed descriptions of the reclamation and the reclamation costs estimates derived from SRCE Excel spread sheets should be included, where appropriate, in the CPA and applicable appendices. For example, Appendix AD (Well Field Design Report) should include a reclamation narrative describing how the wells will be reclaimed and the cost derived from the SRCE Excel spread sheets for doing that reclamation. Proposed Resolution: Include specific descriptions of reclamation and the cost of that reclamation in the CPA and associated appendices that allow the details of those plans to be cross referenced with the SRCE Excel spread sheets.	The SRCE model has been significantly updated and provided in Excel in the Reclamation Plan.
303	ODFW	1	Wildlife Mitigation Plan, Appendix I Pages 10-13, Sections 6,7,8	Comment: Each of these sections are devoid of information specific to sage-grouse and are therefore not compliant with comments above and sage-grouse standards outlined in OAR 660-023-0115 or OAR 635-140-0025. Proposed Resolution: Consult OAR 660-023-0115(10), OAR 635-140- 0025, ODFW's Greater Sage-Grouse Habitat Mitigation Program Operations and Administration Manual, and Sage-Grouse Mitigation Coordinator to meet State sage-grouse mitigation standards and adequately address components within these sections.	Added sage-grouse specific information regarding avoidance and mitigation measures, habitat mitigation actions, and monitoring details demonstrating how the plan is compliant with OAR 660-023-0115 and OAR 635-140-0025 to the Wildlife Mitigation Plan. See Appendix D15 of the CPA.
304	ODFW	1	Wildlife Mitigation Plan, Appendix I Page 13; Sections 7, 8	Comment: Reference to habitat mitigation actions and success criteria-these need to be developed in consultation with ODFW. This section does not comply with the standards in the applicable ODFW mitigation rules. ODFW has not concurred with the evaluation or assessment of habitat categories. Durability needs to be provided for perpetuity, not the life of the project. No discussion of adaptive management. It is not clear what type of mitigation guzzlers may provide? Needs to be evaluated. Reference to annual monitoring-the mitigation goals and conditions need to be developed to comply with the mitigation standards. This quality and quantity, including function of habitat needs to be monitored per an approved wildlife mitigation plan that identifies the appropriate acreage by habitat category. ODFW has not reviewed or concurred with habitat categorization per the ODFW Fish and Wildlife Habitat Mitigation Policy (Division 415) and sage-grouse mitigation rules (Division 140). Reference to only meeting Category 3 is inadequate.	Revised habitat mitigation actions and success criteria that comply with ODFW standards. Revised the Wildlife Protection Plan accordingly and included discussions of adaptive management and monitoring requirements. See Appendix D14 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
305	ODFW	1	Consolidated Permit Application Page 99, Section 2.21	Comment: This section references a Greater Sage-Grouse habitat assessment conducted as part of the baseline data collection. The baseline study plans require baseline vegetation data needed to facilitate habitat categorization and mitigation planning, but this data collection was not specific to comply with the sage- grouse standards. Proposed Resolution: Needs clarification and revision. The required sage- grouse habitat assessment, per OAR 635-140, has not yet been completed.	Section 2.22 of the CPA includes 2020 sage-grouse related surveys and associated assessment, while Section 2.22.5 details the sage grouse surveys.
306	ODFW	4	Consolidated Permit Application Page 102; Section 2.21, last paragraph	Comment: It is not suitable to conclude that sage- grouse do not use the habitat within the survey area because no evidence of use was determined. Surveys can be used to determine sage-grouse presence at the time surveys were conducted. The lack of evidence of sage- grouse habitat use within the survey area does not mean sage- grouse were not present; it just indicates there was no evidence detected to prove presence. Proposed Resolution: Remove reference to sage- grouse not utilizing the survey area or area adjacent to the proposed development.	Remove language stating the sage-grouse do not use the survey area. Rather state that evidence of sage-grouse was not observed. See BDR version 4 Section 5.7, starting on page 35.
307	ODFW	1	Consolidated Permit Application Pages 110-11	Comment: The application states that workers will commute daily from surrounding towns, and that Calico will provide a daily bus shuttle from Vale. However, it is unclear if this is voluntary or mandatory busing to reduce the number of personal vehicles traveling. In addition, the application (page 95) references the use of Michell Butte Road as emergency access, and acknowledges the use for recreation access, but the application does not evaluate the potential conflicts or use of this road by employees. Proposed Resolution: Compliance with Division 420 is required, which includes mandatory bussing of employees. If busing is proposed as voluntary, it does not meet the standard in OAR 635-420-0010(4)(f)(C) to minimize impact to big game winter range on the access road. Voluntary bussing does not address the minimization requirement for mitigation. This should be address in the Wildlife Protection Plan. A traffic study should be conducted for impacts and use associated with Mitchell Butte Road. There needs to be an evaluation of cumulative impacts and connected actions related to transportation and conflicts with big game winter range.	Updated the wildlife protection and mitigation plans to address required bussing of workers. See Appendices D14 and D15 of the CPA.
308	ODFW	2	Consolidated Permit Application Page 174; Section 3.3.12.9.1	Comment: References that “precautions are implemented to minimize impacts to wildlife” yet there is no elaboration on how this will be accomplished. Proposed Resolution: Demonstrated compliance with zero wildlife mortality objective	Wildlife Protection Plan updated to reflect goal of zero mortality and minimize impacts to wildlife. See the wildlife protection plan in Appendix D14 of the CPA.
309	ODFW	2	Consolidated Permit Application Page 182-183; Section 3.3.13	Comment: TSF does not appear to have design features for wildlife exclusion Proposed Resolution: Compliance with OAR 635- 420, and how these standards are addressed in the TSF design and in the	Revised wildlife protection plan to describe how chemical processing solutions and wastewaters positively exclude wildlife. See Appendix D14 of the CPA.
310	ODFW	1	Consolidated Permit Application Section 3	Comment: The Operating Plan does not include discussion on the fish and wildlife injury and mortality monitoring. A fish and wildlife protection and mitigation plan is required as part of the Operating Plan. Page 218, Section 3.6.9 references the wildlife mitigation plan but this section should also address the wildlife protection plan. The reference to wildlife protection policies only reference the prohibition of feeding or harassment of wildlife, which is inadequate to address the standards in OAR 635-420. Operating plan states that mining and exploration can happen year-round, but this does not evaluate the requirements per the wildlife protection plan. Section 3.5.3.6 references fencing around the perimeter of the facility. Fencing needs to meet standards in OAR 635-420. Operation plan (page 214, Section 3.5.5.4) states there will not be bussing or transportation provided for employees. Section 3.6, (page 216)-no discussion of wildlife in the Operational Environmental Protection Measures. Proposed Resolution: Compliance with OAR 632- 037-0060.	See Sections 3.13.6 and 3.13.7 for the discussion of wildlife protection and wildlife mitigation plans. Also see the Wildlife Protection Plan and Wildlife Mitigation Plan in Appendices D14 and D15 to the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
311	ODFW	1	Monitoring Plan, Appendix G Page 7, Sections 2.7, 2.9	Comment: Monitoring Plan does not elaborate on wildlife monitoring to meet standards in OAR 635-420. There is no evaluation that demonstrates compliance with the standards. For example, OAR 635-420-0070 requires wildlife injury and mortality reporting, however there is no discussion on wildlife monitoring during mine operations. In addition, the reporting frequency on a quarterly basis does not comply with standards. Table 1 does not include reference to any required wildlife monitoring. In addition, does not include details on wildlife reclamation monitoring that complies with Division 420. Specifically, Section 2.9 does not elaborate on how the wildlife monitoring will be accomplished and by whom. For example: There is reference to monitoring of fencing and netting to prevent access by avian species but there is not a reference to plans for these items. There is reference to monitoring of exclusion features but they do not appear to be included in the design standards. Surveys for presence/absence does not comply with the requirements in the rule for wildlife monitoring. Proposed Resolution: Compliance with standards in OAR 635-420 and OAR 632-037.	Revised Wildlife Protection Plan to include wildlife injury and mortality reporting. See Appendix D14 of the CPA.
312	ODFW	2	Appendix T	Comment: The Ecological Risk Assessment does not adequately evaluate the cumulative impacts of the supernatant pool and impacts to wildlife, such as wildlife toxicity. Proposed Resolution: Comply with standards to Division 420/wildlife protection plan.	The ecological risk assessment was conducted by SRK and has been included as Appendix F to the CPA.
313	ODFW	1	Page 5; Section 4.4	Comment: Comment regarding the protection of wildlife-refers to the Wildlife Mitigation Plan, yet the mitigation plan does not include any cyanide discussion. This information should be included in the Wildlife Protection Plan, not the Wildlife Mitigation Plan. Proposed Resolution: Comply with the standards in OAR 635-420-0010(4)(g) and other applicable standards in DOGAMI and DEQ statute/rule.	See the Wildlife Protection Plan provided in Appendix D14 of the CPA.
314	ODFW	1	Wildlife Protection Plan: N/A, not included as part of the CPA	Comment: ODFW could not locate the Wildlife Protection Plan, as required per OAR 635-420-0020. It is not clear how OAR 635-420-0030(5) has been evaluated or will be complied with. For example: • Is the chemical composition of the tailings as measured from the test, representative of the supernatant pool? • The pool will be subject to high levels of evaporation. Will that result in differential concentration of potentially harmful substances within areas of the TSF, particularly on the surface? • How does the recycling of water from the supernatant pool concentrate the potentially hazardous substances and alter the chemical make-up of the tailings discharge seasonally or long-term? • The required chemical composition information is presented only for the tailings. The same evaluation and assessment for any accumulated wastewater in the waste rock or ore stockpile sumps was not found. (OAR635-420-0010(4)(d)(A) • It is unclear how the wastewaters will be maintained in a condition that is not hazardous to wildlife. The ecological risk assessment uses a snapshot derived from 4 tailings samples from the bench testing that involves assumptions which may not be applicable (OAR 635-420-0010(4)(d) 635-420-0010(4)(e) requires ongoing and constant monitoring of the protection measures The conclusion of the ecological risk references the methods used but does not include the resulting data and the statistical test to determine significance. (OAR 635-420-0010(4)(d)(B)) Proposed Resolution: Compliance with the standards and requirements in OAR 635-420 and OAR 632-037. Additional assessment and/or studies are needed to evaluate impacts on wildlife exposure, including bioaccumulation	See the Wildlife Protection Plan in Appendix D14 of the CPA. Additional routine sampling of the tailings will be conducted, as identified in the Tailings Chemical Monitoring Plan provided in Appendix D2 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
315	ODFW	1	Wildlife Mitigation Plan, Appendix I	Comment: The wildlife mitigation plan does not comply with the applicable ODFW policies—OAR 635, Divisions 140, 415, or 420; and DOGAMI OAR 632-037. The mitigation plan does not include any maps, aerial photos, or other documentation of existing habitat. For ODFW to evaluate the plan and compliance with Division 415 and 140, maps of proposed habitat classification with acreages of potential impacts should be provided. The plan references Calico may purchase habitat credits from a mitigation bank. However, there are currently no wildlife mitigation banks or credits available. Proposed Resolution: Revised plan demonstrating compliance with ODFW standards and policies. The mitigation plan should clearly identify compliance with OAR 635, Division 140, 415, and 420. In addition, for sage grouse compliance with OAR 660-023-0015. A revised mitigation plan must comply with the sage-grouse requirements and describe components of the mitigation hierarchy and how each are achieved. ODFW Sage-Grouse Mitigation Program has a Greater Sage-Grouse Habitat Mitigation Program Operations and Administration Manual that must be used to show compliance with ODFW's sage-grouse mitigation rules. The Program Manual can be accessed at: www.dfw.state.or.us/wildlife/sagegrouse/	The Wildlife Mitigation Plan has been updated to incorporate comments.
316	ODFW	1	Wildlife Mitigation Plan, Appendix I Page 5, Section 2	Comment: The plan states that Calico is committed to mitigate impacts to only Category 3 and 4 habitats. However, the statute and rule require compliance with ODFW policies, which are not limited to Category 3 and 4 habitats. Big game winter range is identified as Category 2. The Wildlife Mitigation Plan does not address how mitigation will be achieved to meet the standards. Proposed Resolution: Revised plan demonstrating compliance with ODFW standards and policies. The mitigation plan should clearly identify compliance with OAR 635, Division 140, 415, and 420. In addition, for sage grouse compliance with OAR 660-023-0015. A revised mitigation plan must comply with the sage-grouse requirements and describe components of the mitigation hierarchy and how each are achieved. ODFW Sage-Grouse Mitigation Program has a Greater Sage-Grouse Habitat Mitigation Program Operations and Administration Manual that must be used to show compliance with ODFW's sage-grouse mitigation rules. The Program Manual can be accessed at: www.dfw.state.or.us/wildlife/sagegrouse/	See revised Wildlife Mitigation Plan in Appendix D15 of the CPA.
317	ODFW	1	Wildlife Mitigation Plan, Appendix I Page 6, Section 3.1	Comment: The assessment of sage-grouse habitat was completed using outdated guidance. Sage-grouse habitat is designated as core, low density, and general in association with population dynamics and proximity to leks. Assessment of sage-grouse habitat is no longer considered under habitat categories 1-6 as outlined in ODFW's Fish and Wildlife Habitat Mitigation Policy. Compliance with OAR 635-140 is required. In 2015, Department of Land Conservation and Development and ODFW created Oregon Administrative Rules (OAR 660-023-0115 and OAR 635-140-0000 thru 0025, respectively) as part of the Governors Executive Order 15-18 to address sage-grouse conservation and set standards for assessing impacts to sage-grouse from development. Wildlife sections of the application lack required components of both OARs and are therefore not in compliance with standards set to address project impacts to sage-grouse and its habitat. Project impacts to sage-grouse, consistent with Division 140, were not evaluated. Therefore, appropriate sage-grouse mitigation plan (SGMP) requirements have not been fulfilled. Proposed Resolution: Revised plan demonstrating compliance with ODFW standards and policies. The mitigation plan should clearly identify compliance with OAR 635, Division 140, 415, and 420. In addition, for sage grouse compliance with OAR 660-023-0015. A revised mitigation plan must comply with the sage-grouse requirements and describe components of the mitigation hierarchy and how each are achieved. ODFW Sage-Grouse Mitigation Program has a Greater Sage-Grouse Habitat Mitigation Program Operations and Administration Manual that must be used to show compliance with ODFW's sage-grouse mitigation rules. The Program Manual can be accessed at: www.dfw.state.or.us/wildlife/sagegrouse/	Wildlife Mitigation Plan has been updated. See Appendix D15 of the CPA.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
318	ODFW	1	Wildlife Mitigation Plan, Appendix I Pages 6-7, Table 2	Comment: The mitigation plan includes assumptions on habitat classification, function, and value without ODFW consultation. ODFW does not concur with the evaluation as proposed in the mitigation plan or summary Table 2. For example, 20% sagebrush cover is a high cover percentage to start to classifying as sagebrush habitat. This should be evaluated on the most current sagebrush data and likely go below 10%. Proposed Resolution: The mitigation plan should also include habitat maps that clearly identifies impact areas overlaid with habitat categories. Evaluate and reference the best available data to support the classification of habitat.	Wildlife Mitigation Plan has been updated. See Appendix D15 of the CPA.
319	ODFW	2	Wildlife Mitigation Plan, Appendix I Page 9, Sections 4 and 5	Comment: The plan includes statements that the final design layout and certainty regarding temporary and permanent impact acreages will be available prior to construction. It is not clear how mitigation, consistent with ODFW standards and policies, will be accomplished without certainty of project impacts. Section 5 states Calico will implement habitat enhancement actions. However, the proposed Wildlife Mitigation Plan does not provide any proposal that demonstrates how the project impacts will be mitigated. This includes appropriate avoidance and minimization, as well as compensatory mitigation based on Division 140 and 415. Proposed Resolution: Demonstrate how the project impacts will be mitigated. This includes appropriate avoidance and minimization, as well as compensatory mitigation based on Division 140 and 415.	Updated Wildlife Mitigation Plan provided in Appendix D15 of the CPA.
320	ODFW	1	Wildlife Mitigation Plan, Appendix I Page 9 Section 5	Comment: Project impacts to sage-grouse and associated required mitigation set forth in OAR 635-140-0025(3) are calculated through ODFW's Sage-Grouse Mitigation Program. ODFW's Habitat Quantification Tool (HQT) is used to determine the functional loss of sage- grouse habitat that results from project direct and indirect impacts. The Habitat Mitigation Area section of the application must incorporate the mitigation responsibility as calculated and negotiated through ODFW's Sage-Grouse Mitigation Program to be compliant with sage-grouse mitigation standards. Proposed Resolution: Incorporate ODFW's HQT calculated mitigation requirement for sage-grouse into the Habitat Mitigation Area discussion. To complete the final HQT calculation, ODFW will need detailed project GIS files, list of sage-grouse specific minimization measures, and a finalized vegetation survey to determine habitat function. Review the Greater Sage-Grouse Habitat Mitigation Program Operations and Administration Manual for compete details.	Grassy Mountain GIS files were submitted to DOGAMI with BDR ver 4 in October 2020. Greater Sage-Grouse HQT discussed in Section 6 of the Wildlife Mitigation Plan, provided in Appendix D15 of the CPA. Final vegetation baseline report is included as Appendix B to the Wildlife Mitigation Plan.
321	USFWS	3	Noxious Weeds Plan, Section 4.3.2, page 11	Comment: Prescribed burned is contraindicated in degraded, low-elevation sagebrush habitat. Proposed Resolution: Do not include prescribed burning as a method to address noxious weeds.	The Noxious Weeds Plan has been revised to remove prescribed burns. See Appendix D17 of the CPA.
322	USFWS	1	Cyanide Management Plan, Page 5	Comment: The CMP cites the Wildlife Mitigation Plan in reference to "Standard of Practice 4.4 Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions." and "Standard of Practice 4.5 Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water." No mention of cyanide management is included in the Wildlife Mitigation Plan. Proposed Resolution: The cyanide management plan and wildlife mitigation plan must address measures to protect fish and wildlife from exposure to cyanide.	Updated the Cyanide Management Plan to include wildlife protection measures. See Appendix D8 of the CPA for the Cyanide Management Plan. The Wildlife Protection Plan, also provided in Appendix D to the CPA, discusses cyanide storage in relation to wildlife protection.
323	USFWS	2	Mitigation Plan	Comment: The Mitigation Plan will need to be updated to reflect 2015 sage-grouse mitigation policy and OARs Proposed Resolution: Update plan in consultation with ODFW and USFW mitigation coordinators.	Updated Mitigation Plan provided in Appendix D15 to the CPA to comply with OAR 635 and Great Sage-Grouse Habitat Mitigation Program. Also see comments and actions 362-365.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
324	USFWS	2	Mitigation Plan, Table 2, pgs. 6-8	Comment: The habitat described in Table 2 and in the text (starting on page 7) include three overarching types: (1) developed, (2) grassland, (3) shrub-steppe. Shrub-steppe is described as having >20% shrub cover (Wyoming big sagebrush and/or yellow rabbitbrush) while grasslands are described as having an "inconspicuous" shrub cover. The use of 20% shrub cover as a threshold to delineate shrub-steppe from a grassland is too high, as even 10- 15% shrub cover would not be "inconspicuous". Further, from a wildlife perspective, shrub cover >5-10% is considered a threshold to distinguish habitat value for sage-grouse. Proposed Resolution: We recommend reclassifying the land cover and habitat types within the permit area; ensuring shrub cover values are consistent; and including sage-grouse in the list of species included in the list of species known to use perennial grasslands and sagebrush shrub-steppe.	Modified Wildlife Mitigation Plan in Appendix D15 to the CPA: Revised Table 2, reclassifying the land cover and habitat types. Also see comment 341. In BDR version 4 detailed discussions on land coverage and habitat type have been removed and the reader is referred to the Wildlife Mitigation Plan (see page 24 of the BDR).
325	USFWS	3	Mitigation Plan, Section 6.1, page 10	Comment: This mitigation plan does not consider how the addition of new anthropogenic features (power lines, improved roads, mining buildings/facilities, etc.) will serve as subsides to predators, particularly avian predators of sage-grouse, and may increase the presence of ravens. Avian predators have far-reaching foraging impacts which may extend into nearby habitat utilized for nesting by sage-grouse. Proposed Resolution: Mitigation principles incorporated into the mitigation plan will need to address impacts resulting from increased avian predator subsidies.	Included a discussion of potential increased avian predator subsidies and associated impacts to sage-grouse in Wildlife Mitigation Plan. Also included a discussion of measures to minimize and mitigate these impacts.
326	USFWS	3	Mitigation Plan, Section 6.2, page 10	Comment: The FWS will need to review avoidance buffers once nesting surveys are completed in accordance with the original Wildlife Study Work Plan. The following are considerations that may be incorporated into future permitted activities. These may be revised pending additional information detailing project activities or observed nesting activity. For active Ferruginous hawk nests: No activity within 0.5 mile buffer from March 5 to June 15. Additional recommendations (optional): further limit impacts by building a nest platform nearby that is not within line of sight of the project, and/or limit the amount of time spent at the site. 1. For active Golden eagle nests: No activity within 1.0 mile buffer for nests that are within line of sight of the project (buffer could be less if topography blocks the nest) from Jan 15 to July 15. If the nest is within 1 mile and within line of sight of the activity, USFWS recommends obtaining an eagle take permit. Additional recommendations (optional): further limit impacts by limiting the amount of time spent at the site. 2. While the Migratory Bird Act does not specifically prohibit nest disturbance, it does prohibit take. So if activities cause abandonment of the nest and eggs or chicks are present, it would be a violation of the Act. The Bald and Golden Eagle Act clearly prohibits nest disturbance. Proposed Resolution: Nests should be surveyed in accordance with the work plan, during the nesting season, to determine if they are active.	Additional nest surveys were conducted in 2020 and are reported in BDR Version 4. The TRT Wildlife Subcommittee acknowledged this (02/01/2021), and the TRT approved the BDR Version 4 as complete at their 02/02/2021 meeting. Revised report (Version4) and associated files are on DOGAMI website: https://www.oregongeology.org/mlrr/Calico-GrassyMtn_appResponseDocuments.htm
327	DEQ	2	CPA/3.5.2/pg 201, App. M/ pg 12, 37-40	Comment: Section 3.5.2 indicates that during construction a 2,000 kW emergency generator will provide electricity for more than a year until a power line is installed. Form AQ201 (pg 12) and the emission estimates on pages 37-40 only allow for a maximum of 100 hours of emergency generator operation for maintenance and testing. Proposed Resolution: During construction the generator will be operated for more than 100 hours per year and is not considered an "emergency" generator during that time. Please provide an estimate of emissions from the generator during construction. These emissions will need to be included in the PSEL and NSR/PSD implications should be considered.	To be included in the air permit application.
328	DEQ	1	Appendix M/ Att B	Comment: The modeling protocol in Section 2 of Attachment B of Appendix M should be approved by DEQ prior to application submittal. An ACDP application is not considered complete if the modeling protocol has not been approved by DEQ. Proposed Resolution: Submit the modeling protocol to DEQ and received approval of the protocol.	Air toxics emissions inventory, modeling protocol, and RAWP have been submitted (4/27/2021) and resubmitted (10/19/2021) but not yet approved by DEQ.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
329	DEQ	3	Appendix M Emissions Inventory 1.2/ 32, 1.3/48-52, attachment A	Comment: AQ230 (pg. 32) notes that mercury and PM emissions are anticipated from BH1 and CF2, pollution controls for the MF. TAC emissions from these units are not reflected in the emissions inventory. Proposed Resolution: Consider mercury and TAC emissions in PM emissions from BH1 and CF2. For any TEUs you determine to be exempt, substantiate that each TEU meets the applicable criteria as defined in OAR 340-245-0060(3). In your emissions inventory, list all TEUs you have designated as exempt in accordance with OAR 340-245-0040(3)(a)(A).	Air toxics emissions inventory, modeling protocol, and RAWP have been submitted (4/27/2021) and resubmitted (10/19/2021) but not yet approved by DEQ.
330	DEQ	3	Appendix M Emissions Inventory 1.2/25, 1.3/48-52 Attachment A	Comment: AQ230 notes that mercury and PM emissions are anticipated from VS1 and CF1, pollution controls for the CKD, but TAC emissions are not reflected in the emissions inventory. Proposed Resolution: Consider mercury and TAC emissions in PM emissions from VS1 and CF1. For any TEUs you determine to be exempt, substantiate that each TEU meets the applicable criteria as defined in OAR 340-245-0060(3). In your emissions inventory, list all TEUs you have designated as exempt in accordance with OAR 340-245-0040(3)(a)(A).	Air toxics emissions inventory, modeling protocol, and RAWP have been submitted (4/27/2021) and resubmitted (10/19/2021) but not yet approved by DEQ.
331	DEQ	3	Appendix M Emissions Inventory 1.3/45-52, Attachment A	Comment: AP-42 was used for HAP emission factors from diesel combustion. Proposed Resolution: Use SCAQMD AB2588 and Ventura APCD AB2588 for TAC list and emission factors. Revise emissions inventory worksheets and emissions inventory to reflect these TAC emission factors and emissions.	Air toxics emissions inventory, modeling protocol, and RAWP have been submitted (4/27/2021) and resubmitted (10/19/2021) but not yet approved by DEQ.
332	DEQ	2	Appendix M Modeling Report and Risk Assessment Work Plan 2.3/4	Comment: Section 2.3 focuses on pollutants subject to NAAQS with a brief reference to HAPs in section 3.0, which is in the Risk Assessment Work Plan. Proposed Resolution: Expand section 2.3 to include the list of TACs modeled. State any difference in emission rate units between pollutants subject to NAAQS and CAO reporting.	Air toxics emissions inventory, modeling protocol, and RAWP have been submitted (4/27/2021) and resubmitted (10/19/2021) but not yet approved by DEQ.
333	DEQ	3	Appendix M Modeling Report and Risk Assessment Work Plan 2.4/5	Comment: Roadway emissions are usually modeled as volume sources, but are proposed to be modeled as line sources here. Proposed Resolution: Provide justification for using a line source rather than a volume source for roadway emissions	Managed under the CAO process and the ACDP application, being submitted separately.
334	DEQ	2	Appendix M Modeling Report and Risk Assessment Work Plan 2.6/7	Comment: Figure 2 shows the Borrow Blasting area extends beyond the fence line. Proposed Resolution: Revise either the Borrow Blasting area boundary or fence line boundary to show the Borrow Blast Area does not extend beyond the fence line.	Managed under the CAO process and the ACDP application, being submitted separately.
335	DEQ	1	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.2/17	Comment: No zoning map for the project's surrounding area is provided. Proposed Resolution: Provide an area zoning map.	Managed under the CAO process and the ACDP application, being submitted separately.
336	DEQ	1	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.2/17	Comment: No crosswalk of receptors to exposure locations is provided. All receptors should have an assigned exposure location. Proposed Resolution: Provide a crosswalk of receptors to exposure locations, in addition to the individual locations provided in Table 5. See Section 4.3.3 of DEQ's Draft Recommended Procedures for Air Quality Dispersion Modeling for more information.	Managed under the CAO process and the ACDP application, being submitted separately.
337	DEQ	2	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.1/14	Comment: The term HAPs is used. CAO requirements are for toxic air contaminants (TACs), which include HAPs and other reportable chemicals. Proposed Resolution: Confirm that the chemical list includes all reportable TACs listed in OAR 340-245-8020 Table 2, and replace the term HAPs with TACs.	Managed under the CAO process and the ACDP application, being submitted separately.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
338	DEQ	3	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.1/15, Table 4	Comment: Confirm that the table includes all appropriate TACs, not just HAPs. Proposed Resolution: Confirm that the chemical list includes all reportable TACs listed in OAR 340-245-8020 Table 2, and replace the term HAPs with TACs.	Managed under the CAO process and the ACDP application, being submitted separately.
339	DEQ	3	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.1/15, Table 4	Comment: PAHs are listed. DEQ's primary interest is in individual PAHs. Proposed Resolution: If the results of the risk assessment are acceptable assuming all PAHs are benzo[a]pyrene (BaP), it may not be necessary to estimate individual PAH emissions. BaP should be evaluated for non-cancer as well as cancer effects. Assuming all PAHs are BaP is a very conservative assumption. Other options are to evaluate PAHs individually, or determine BaP equivalent concentrations for all carcinogenic PAHs.	Managed under the CAO process and the ACDP application, being submitted separately.
340	DEQ	3	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.2/17, Table 5	Comment: If the requested zoning map shows areas of residential or commercial use rather than individual locations, the maximum air concentration within the zone may need to be calculated. The facility has an option of rebutting the assumption that all of a zoned area is being used for the zoned use. Proposed Resolution: The requested zoning map may resolve this issue. It may be reasonable to ask for rebutting the zoned use based on current use of the land.	Managed under the CAO process and the ACDP application, being submitted separately.
341	DEQ	2	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.2/22	Comment: Calculation methods are provided in section 3.2.2, but it is unclear which RBCs were used for risk assessment. DEQ needs to confirm that risk assessment calculations are being performed correctly. Proposed Resolution: Provide a table listing compound names, CAS numbers, and corresponding RBC levels used to calculate risk.	Managed under the CAO process and the ACDP application, being submitted separately.
342	DEQ	2	Appendix M Modeling Report and Risk Assessment Work Plan 3.3.1/23	Comment: DEQ needs to confirm that risk assessment calculations are being performed correctly. Proposed Resolution: In the risk assessment, provide detailed supporting calculations by TEU and by chemical in a spreadsheet so DEQ can confirm the results.	Managed under the CAO process and the ACDP application, being submitted separately.
343	DEQ	4	Appendix M Modeling Report and Risk Assessment Work Plan 3.3.1/23, Table 8	Comment: It is inappropriate to report a risk as "0.000". Proposed Resolution: In the risk assessment, rather than show "0.000", show "<0.001" for maximum calculated risk reported for applicable risk categories.	Managed under the CAO process and the ACDP application, being submitted separately.
344	DEQ	4	Appendix M Modeling Report and Risk Assessment Work Plan Appendix C, Table D-1 and Table D-2	Comment: PAHs are listed twice in Tables D-1 and D-2. Proposed Resolution: Remove one PAH row from the TAC list.	Managed under the CAO process and the ACDP application, being submitted separately.
345	DEQ	1	Appendix M Modeling Report and Risk Assessment Work Plan 3.2.1/16/Figure 6; 3.2 Appendix A (Table A-1 Model Source Parameters)	Comment: The Risk Assessment identifies the TSF in Figure 6 and notes mercury and HCN as toxics impacting the inhalation pathway. WAD-Cyanide is a toxic component to the tailings discharge and tailings deposition process. The potential for the TSF, then, to emit toxics must be considered in this section. This potential source should be included at Table A-1 as a modeled source. Proposed Resolution: The CAO Risk Assessment must consider fugitive cyanide releases from the Tailings Storage Facility.	Managed under the CAO process and the ACDP application, being submitted separately.
346	DEQ	4	Appendix Y SWPCP pg. 10; 2.1.9	Comment: Typo goals. Proposed Resolution: Change goas to goals	Typo corrected in Section 2.1.10 of the SWPCP in Appendix D4 of the CPA.

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347	DEQ	4	Appendix Y SWPCP pg. 23; 4.1	Comment: Monitoring waiver is not "M." Proposed Resolution: Report "W" in the column(s) for any monitoring waiver.	Table deleted from SWPCP. Plan references monitoring waivers in Sections 3.0 and 3.2 in Appendix D4 of the CPA.
348	DEQ	3	CPA -- General Ausenco	Comment: General permitting comments: The application includes a comment that oil water separator wastewater will be used for dust control. This will be addressed during permitting phase. 2.Engineering plans include surge pond with floor drain hooked up to it. Surge ponds must be lined. 3. The application proposes a post-reclamation maintenance period of only three years, which includes annual site visits to monitor revegetation. The applicant should expect a post-closure period of 30+ years. 4. The application states that the containment of process flows and reagents, and the collection and containment of surface contact water will be located in a concrete slab. Concrete by itself is not considered a liner for wastewater. This concept will need to be revised to protect the environment from the wastewater. 5. Section 4.9 P. 236 of application states: "Reclaimed areas not meeting regulatory standards would be evaluated, and corrective actions implemented. These measures could include, if necessary, additional soil amendments, reseeding, and installation of erosion control measures. This obligation would cease when the reclamation goals and requirements have been achieved, and upon release of all related reclamation bond(s)." This will be addressed with further comments. 6. Many of the plans lack details like what are their plans to manage the chemicals used for milling. Need to identify if there is secondary containment for the tanks, is the concrete coated, etc. 7. This summary includes comments regarding the permit application, but is not considered complete. Due to the volume of material submitted, including the baseline reports that accompanied the application, more questions may be forthcoming as more detailed reviews occur. Proposed Resolution: Address during permitting phase.	The plan and the Reclamation Plan have been updated. This include water reuse, chemical management, and post-closure operations.
349	DOGAMI	2	2.5, pg. 40	Comment: In the conclusions for geochemistry it states: "Only two percent of samples tested meet the BLM criteria and can be classified as NAG forming materials based on a net neutralizing potential greater than 20 kg CaCO3 eq/ton and greater than three-fold excess of neutralizing capacity." This statement is untrue and is due to misuse of the NAG acronym which in the CPA acronym list denotes "net acid generating" but which is incorrectly used here as "non acid generating". Proposed Resolution: The acronym should be spelled out to state non acid generating.	SLR will revise the CPA as appropriate so that acronyms are used consistently. This statement has been revised as follows: "Only two percent of samples tested meet the BLM criteria and can be classified as non-acid forming based on a net neutralizing potential greater than 20 kg CaCO3 eq/ton and greater than three-fold excess of neutralizing capacity".
350	DOGAMI	2	2.8, pg. 70	Comment: In steady state analysis it states: "These scenarios are distinguished by low, intermediate, and high hydraulic conductivity values (ranging from 10-6 cm/s to 10-4 ft/d) for the shallow aquifer zone, and low hydraulic conductivity (10-6 cm/s, or 0.003 ft/d) for the deep zone (Table 37)." The units in red are incorrect and equate to 4 x 10-8 cm/s. Proposed Resolution: Correct the units to cm/s.	No change.
351	ODFW	4	Reclamation Plan Page 230; Section 4.7.1.2 and Page 231 Section 4.7.1.4	Comment: These two sections seem to be identical paragraphs	This section has been updated.
352	ODFW	4	General Comments	Comment: CPA accessibility. Proposed Resolution: Standardize the filing name convention for consistency across all downloadable files. As revisions are made, including an identification system in the file name.	File nomenclature has been assigned as follows: report name+year+month.
353	ODFW	4	General Comments	Comment: CPA accessibility. Proposed Resolution: Comment: Recommend including the appendix name in the file name when that file is an appendix in the application	Appendices have been hyperlinked to appendix number cross references in text.
354	ODFW	4	General Comments	Comment: CPA accessibility. Proposed Resolution: Comment: Recommend a comment tracking table for evaluating future application submittals	This document is the proposed resolution.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
357	DEQ	1	Appendix L – 3672R.Grassy. WPCFN	Comment: Fees totaling $90,300 not submitted Proposed Resolution: Submit fees with hardcopy of the permit application with a "wet signature."	DOGAMI will calculate appropriate fees and provide instruction as agreed between DOGAMI and Calico. This will not impact the determination of completeness.
358	DEQ	1	Appendix M/pg 4	Comment: This permit requires not only payment of the initial permitting fees, but also the annual fee, and a specific activity fee for modeling review. These fees must be received by DEQ before the application can be deemed complete. Proposed Resolution: Payment of fees to DEQ is required	Original CAO fees have been paid. The ACDP fees and CAO activity fees will be paid as part of the ACDP application submittal.
359	DOGAMI	2	1.3, 1.6, 1.7.1	Comment: The property ownership information is unclear. There is confusing and undefined use of the terms Property, Project area and Permit area. Section 1.7.1 refers to Bishop private lands while section 1.3 only lists Calico and BLM as landowners. Section 1.6 says that the access road (part of permit area) is on BLM land and private lands without showing or explaining ownership of private lands. Proposed Resolution: Provide a clear definition of terms used to refer to lands (Project, property, permit) and a clear map showing all relevant ownership. Provide a clear and complete listing of ownership for the Permit area.	The Property, Project Area and Permit Area are the same. The Permit Boundary includes the mine, process, plant area and access area. Section 1.1.3, Project Name, Location, and Access, includes land ownership information denoted in the tax lot and ownership information in Table 1 and in Map 3.
360	DEQ	1	Appendix R	Comment: Incomplete LUCS: The LUCS approval from Malheur County has the legal description as Township: 22S, Range 44E, Section: ____ and Tax Lot 101 only. The application has the legal description as Township: 22 South; Section: 5,6,7,8, Range: 44 East and Tax Lot: 100 and 101. Section 1D and 1E were not completed. See additional Land Use comments specific to OAR 340-043 under section OAR 340-043-0020 Permit Required Proposed Resolution: Submit a completed LUCS, including sections 1D and 1E. Provide land use findings for TL100. Work collaboratively with DOGAMI, the coordinating agency, to ensure land use compliance with all planning goals and planning documents required by DLCD and ODFW, including the specific rule requirements cited in the comment section.	A completed LUCS including Sections 1D and 1E was submitted. The LUCS with letter and final findings (dated August 6, 2021) has been included in Appendix E.
361	DEQ	1	Appendix R	Comment: Incomplete LUCS: · The LUCS approval from Malheur County has the legal description as Township: 22S, Range 44E, Section: ____ and Tax Lot 101 only. · The application has the legal description as Township: 22 South; Section: 5,6,7,8, Range: 44 East and Tax Lot: 100 and 101. Section 1D and 1E were not completed Proposed Resolution: Provide land use findings for TL100. Submit a completed LUCS, including sections 1D and 1E.	A completed LUCS with Sections 1D and 1E was submitted. The LUCS with letter includes findings for TL100. The LUCS with letter and final findings (dated August 6, 2021) has been included in Appendix E.

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
362	DEQ	1	Appendix R	Comment: The proposed project is located in low density sage grouse habitat, as that term is defined by LCDC rules implementing statewide planning goal 5 (OAR 660-023). Malheur County has issued a land use compatibility statement (LUCs) regarding a parcel of non-federal land that covers a portion of the project site (other parts of the proposed project are located on federal lands administered by the Bureau of Land Management (BLM)). The county LUCs provides that the applicant must comply with OAR 660-023 and OAR 635-140 in terms of the mitigation hierarchy. OAR 660-023-0115(10)(a)(A) and (B) contain the requirements for complying with the mitigation hierarchy (consideration of alternative locations and consideration of ways to minimize impacts). The application must contain information and analysis showing that these requirements have been satisfied in order to be complete. The county's LUCs also requires the applicant to show that the requirements for compensatory mitigation are met. These requirements are contained in OAR 660-023-0115(10)(a)(C). The county's LUCs states that the applicant must submit a compensatory mitigation plan to ODFW for that agency's approval. The application must contain the plan required by the county's land use decision in order to be complete. With regard to federal (BLM) lands, in order for the application to be complete, the applicant must submit the same type of information as described above, showing compliance with Goal 5 and OAR 660-023-0115(10)(A)-(C). Reliance on compliance with Statewide planning goals is a common requirement of state permitting and cooperating agencies, including DEQ. DEQ understands that DOGAMI will ultimately provide interagency coordination and land use requirement responses to the applicant pursuant to its agency coordination requirements at ORS 517.957 aimed at overall coordination of a single Consolidated Application (ORS 517.952 (5)). DEQ understands this coordinated completeness review by DOGAMI on land use is purposed to allow the applicant to comply with DEQ requirements at OAR 340-043-0020(3). Proposed Resolution: Address land use issues as required in statute, rule, and the Malheur County LUCS. Work collaboratively with DOGAMI, the coordinating agency, to ensure land use compliance with all statewide planning goals and planning documents required by DLCD and ODFW, including the specific rule requirements cited in the comment section.	The Grassy Mountain Mine Project Wildlife Mitigation Plan describes how the project will provide compensatory mitigation for expected impacts of the project on wildlife habitat, following the requirements described in OAR 635-415-0000 through 635-415-0025 (ODFW's Fish and Wildlife Habitat Mitigation Policy). The Plan also addresses how the project will comply with the Greater Sage-Grouse Conservation Strategy and the associated Oregon Land Conservation and Development Department Rule for Greater Sage-Grouse (OAR 660-023-0115). It includes a section addressing how the mitigation hierarchy (OAR 635-140-000 through 635-140-0025) has been applied to the project, and describes the proposed compensatory mitigation specifically for greater sage-grouse. The Plan is included in Appendix D15 of the CPA.
363	DEQ	2	General	Comment: OAR 340-093-0130 requires that the site characterization report includes, among other things, a list of adjacent landowners and a map showing the boundaries of those adjacent properties. This was not found in the application. Proposed Resolution: Revise application to include this information.	OAR 340-093-0130 is not applicable. The Site Characterization report as required by OAR 340-093-0070(3)e is applicable for a new disposal site permit. This project is not applying for a disposal permit. This application does include a list of adjacent landowners and a map showing the boundaries of those adjacent properties. See Table 1 and Map 3.
364	DEQ	1	General	Comment: The Land Use Compatibility Statement from Malheur County only approves the use for Tax Lot 101 as identified in the findings and as completed by the applicant. Figure 3 of the wastewater design shows the system and plant operations to be on tax lot 100. The site evaluation application to Malheur County also shows the test holes are located on tax lot 100. Therefore, the LUCS is not reflective of the development and the WPCF permit application cannot be accepted. Proposed Resolution: Submit appropriate LUCS along with a complete WPCF-OS permit application that addresses the property where development is occurring.	A completed LUCS with Sections 1D and 1E was submitted. The LUCS with letter includes findings for TL100. The LUCS with letter and final findings (dated August 6, 2021) has been included in Appendix E1. The WPCF-application and LUCS are consistent with the property. The WPCF-OS application identifies Tax Lot 100 as the location of the septic field, included in Appendix E6. The WPCF-N application identifies both Tax Lot 100 and 101 as the project location, included in Appendix E9.
365	DEQ	3	Appendix Y SWPCP pg. 22; 3.8, 3.8.1	Comment: Tier I reports are required for all monitoring exceedances. Tier I reports are only submitted to ODEQ if exceed impairment monitoring, 60-days from receiving results. Proposed Resolution: Revise plan requiring Tier I for all monitoring and submittal as required in the permit.	Language adjusted in the SWPCP to update Tier 1 (Section 3.8.1) and Tier 2 (Section 3.8.2) monitoring requirements in Appendix D4 of the CPA.
366	DEQ	3	Appendix C (Tailings Design Report) Drawings C- 15, C-16, D-2	Comment: The design does not include a proper leak detection system as part of the TSF liner. Proposed Resolution: Revise design to include a leak detection system and underlying secondary liner over the entire floor of the TSF.	The TSF leak detection design system is discussed in Section 6.7 of the TSF Design Report.
367	DEQ	3	Appendix E, Section 4.4 and 5.6, pp. 8 and 11	Comment: While a rule of thumb of 110% may be acceptable to account for rainfall it may be inadequate for larger storm events. Proposed Resolution: Revise plan and address responses to events larger than 110%	ERP addresses response to incidents regardless of size or presence of secondary containment (Section 4). See Appendix D6 of the CPA.

Response to DOGAMI CPA Completeness Review

Comment #	Source	Comment Category	CPA Reference	Comment	SLR Response
368	DEQ	3	Appendix C, Section 2.1, pg. 3	Comment: The OWRD "low hazard" determination may not be appropriate for a dam that is retaining millions of tons of potentially hazardous material in a drainage. The dam failure analysis in Appendix C does not evaluate impacts to the environment or account for cost of cleanup of a large release of tailings from the TSF. Proposed Resolution: DEQ recommends consultation with OWRD and preparation of a dam failure analysis that includes environmental risks and costs of failure of valley dam TSF. DEQ recognizes that OWRD Dam Safety regulations apply to the evaluation of the TSF embankment risk assessment.	OWRD determined the TSF to be low hazard.
369	DEQ	3	Appendix C (Tailings Design Report)/Drawings C- 15, C-16, D-2	Comment: The proposed design includes a composite liner. It also includes a leak detection system consisting of three pipes directly beneath the primary collectors of the main leachate collection piping network. Such a detection system would detect liquid at the locations of these pipes, but would not detect leaks through the liner along the majority of the TSF floor. We also note that there is no composite liner at the location of the leak detection pipes. At these locations, the plastic liner and clay liner are separated by approximately 10 inches so that the plastic liner can run beneath the primary collection pipe and the clay liner can run beneath the secondary collection/detection pipe. The benefit of a composite liner provided by placing the clay and plastic directly in contact with one another is therefore missing where it is needed most. Proposed Resolution: To meet the requirements of OAR 340-043, which include a composite liner and a leachate detection system, the liner design must include a composite liner that remains a composite liner over the entire TSF footprint, and which is underlain by a secondary collection system and, beneath that, a second liner.	Addressed during 11-12-2020 meeting with DEQ. The liner system associated with the leakage detection system has been modified to provide a composite liner system beneath the collection pipes.
370	DEQ	N/A	General	Comment: Detailed comments provided throughout. Proposed Resolution: Revise application in response to comments pertaining to 340-093-0130 and 340-093-0140.	Revised application in response to comments pertaining to 340-093-0130 and 340-093-0140.
371	DEQ	3	Appendix I	Comment: Endangered species Proposed Resolution: Please address any comments provided by ODFW.	The Wildlife Mitigation Plan has been prepared following the ODFW comments.
372	DEQ	1	Appendix O	Comment: Fees totaling $2,193 not submitted Proposed Resolution: Submit fees with hardcopy of the permit application with a "wet signature."	The stormwater Notice of Intent and associated fees were submitted to Oregon DEQ, Confirmation Number DEQEDM000004343 scheduled payment date December 14, 2021.