



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

August 8, 2024

Nick Michael
Union Milling Company, LLC
P.O. Box 620490
Littleton, CO 80162-0490

RE: Leadville Mill, File No. M-1990-057, 112d-1 Conversion (CN-3) Application Adequacy Review

Dear Mr. Michael:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced application in order to ensure that it adequately satisfies the requirements of the Colorado Mined Land Reclamation Act (Act) and the associated Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rules). During review of the material submitted, the Division determined that the following issue(s) of concern shall be adequately addressed before a decision can be rendered.

Application Form

1. Page One of the Permit Application lists the current Permitted Acreage as 9.9 with the addition of 32.7 Acres for a proposed total Permit Acreage of 42.6, however the currently approved Permit Acreage is 8. Please submit a replacement Page 1 with the correct Permitted Acreage and resulting change in the proposed Acreage. Additionally please review all other maps and exhibits to ensure that the acreages are correct. Further specific examples will be called out in this review.
2. Page 5, item 15 of the application package lists the proposed Designated Chemicals to be used or stored within the Permit Area and the specific chemical formulas are listed. Please provide a replacement Page 5 with a revised item 15 that lists the chemical formula as well as the common or trade name for each Designated Chemical to be used or stored within the Permit Area.

Exhibit A- Legal Description- Rule 6.4.1

3. Due to the Discrepancy in Acreages in the application form and throughout the Application Exhibits, Please provide a metes and bounds legal description of the Permit Boundary as well as the Affected Area Boundary with the acreages reported pursuant to Rule 6.4.1(1). The metes and bounds survey description with acreage of the Permitted Area shall be performed by a licensed land surveyor.



Exhibit B- Index Map- Rule 6.4.2

4. Section 2.0 lists the proposed Permit Boundary as 42.93 Acres and the proposed Affected Lands as 42.6 Acres. In conjunction with Item 1 of this review, please update these numbers with the correct value.

Exhibit C- Pre-mining and Mining Plan Map(s) of Affected Lands- Rule 6.4.3

5. Per Rule 6.2.1(2)(b) maps must be signed by the qualified person that created them. Please update Figure 3-1 through Figure 3-5 to include signatures.
6. In Figure 3-1 it appears that the proposed permit boundary extends into the Leadville Sanitation Facility property. Per Rule 6.4.3(a) please provide an accurate map that shows the permit boundary in relation to surrounding property.
7. The 200 ft buffer appears to extend into Hwy 24 on Figure 3-2. Please confirm that the highway is within the buffer and if so please label the highway on Figure 3-2 per Rule 6.4.3(b). Additionally, please see comments in the Exhibit S section of this review for further information regarding the executed Structure Agreements.
8. Per Rule 6.4.3(g) please show the owner's name on man-made structures within 200' of the permit boundary.
9. Page 3-1, Section 3.0 lists that Figure 3-3 depicts the site topography. Figure 3-3 was included in the online submission however no Figure 3-3 was included in the hard copy application materials. Please provide a hard copy of Figure 3-3.
10. Figures 3-4 and 3-5 contain map elements that are not fully identified or described in the Legend. Please submit revised maps ensuring that all items depicted in the map are represented in the Legend.

Exhibit D- Mine Plan (Mill Plan) - Rule 6.4.4

11. Per Rule 6.2.1(2)(b) and 6.2.1(2)(e) maps must be signed by the qualified person that created them and have an appropriate legend. Please update Figure 4-1 to include a signature and legend that contains all of the symbols found on the figure. Additionally, as mentioned in Item 10 of this review, Figure 4-1 contains map elements that are not included in the Legend. Please update the legend to reflect all map elements.
12. The Process Material Balance first appears in Table 4-5 and is duplicated in other Exhibits. in the 850 Area- FTD filter Circuit, the table shows there are 16 lbs of Sodium Cyanide in that area. Please provide an in depth description of where the Cyanide is contained, and what the ultimate fate of the residual cyanide is. Also, if this table requires an update, please ensure to update all other Exhibits as needed to reflect the change.
13. The "Operations" section of section 4.2.4 regarding Area 000, discusses the haul route and various road lengths associated with the site, however when compared with Figure 4-1 and using the provided scale, the distances in the narrative are inconsistent with the scaled and measured distances on the map. Please update the narrative with the correct distances, or if Figure 4-1 is in error, please provide an updated figure 4-1.
14. Page 4-15 explains that lime will be introduced at a rate of 8 lbs per ton onto the crusher conveyor to the MDM to precondition the material; however no discussion about the storage or

handling of the bulk lime was included. Please provide a revised "Reagents" section discussing the delivery, storage and handling of lime in the crusher circuit. In the revised section please also address how much lime will be stored on site at any given time, its storage location and method. Additionally please provide containment capacity of the crusher building ensuring sufficient volume exists to contain any potential spills of the material during operations.

15. The "Operations" section regarding Area 100- Crushing circuit states that water sprays will be available and operate as required to control dust. Also, the geochemical data, specifically, SPLP and ABA of all ore materials to be stored in the MDM Bunker was not provided. Please provide the SPLP and ABA results for all materials proposed to be processed at the mill facility and differentiate the results from the stockpiles currently on site from the results from the Penn Mine Group. Additionally, it is stated that at steady state there will be up to 8,000 gallons of water in the Bunkers, please provide a drainage control plan to manage the accumulated water. If the results from the SPLP and ABA test identify that the material is acid generating, and or has the potential to leach constituents the MDM will need to be considered an Environmental Protection Facility (EPF) and measures will need to be taken to contain the accumulated dust control water, management of the same and disposal or use of that water. This EPF will be subject to all appropriate Sections of Rule 6.4.21 and Rule 7 including secondary containment requirements and concrete sealant will be required.
16. Figure 4-5 (S1) appears to show a concrete floor in the MDM however, it does not extend under the feed hopper for the Crusher Circuit. In conjunction with item 15 of this review, if the ore material proposed to be processed is identified as Acid Generating or has the potential to leach constituents of concern, the apron from the MDM will need to be extended to account for spillage during dumping, loading into the hopper and the management of dust control water. Based on the results requested in Item 15, please revise the design of the area between the MDM and the Crusher Building taking these considerations into account.
17. The "Operations" section regarding Area 300 Leach Circuit states that slurry is piped from the PLT to the ALTs via a 4' diameter pipe inside the mill building and a 4" double walled pipe when outside however no materials, construction or location information related to the piping was provided. Please provide more information regarding the double walled piping including its location, any support facilities, materials to be utilized and provide drawings to support the supplemental information.
18. Please provide engineered drawings for all plumbing and electrical circuits in addition to the provided structural engineering drawings.
19. Also included in the Operations section regarding the Area 300 Leach Circuit, the volumes and capacities of the leach tanks. It is stated that accounting for 1 foot of freeboard, the volume of the tanks is about 21,900 cubic feet and the maximum capacity of the Leach Tanks is 132,000 gallons. Based on the provided dimensions compared to the capacity volumes there appears to be an error. Please clarify the volumetric capacity of each of the 4 Leach Tanks in both Gallons and Cubic Feet, as well as the total volumetric capacity for the 4 tanks combined.
20. The "Operations" section regarding Area 400, Page 4-39 states that the filters in the PLS clarifiers are rinsed with fresh make-up water and disposed of in the local landfill. Please provide more details on the decontamination efforts necessary to ensure the clarifier filters

contain no residual cyanide. Additionally, please further describe the rinse water management during these decontamination efforts to ensure the rinse water is properly characterized and handled should it contain residual Cyanide from the clarifier.

21. Additionally, in the "Operations" section, Page 4-39, states that "Air, vented from the vacuum pump, contains no pollutants and is vented to the atmosphere." Please provide documentation from the Colorado Department of Public Health and Environment that an APEN permit is not required. If an APEN Permit is required, please include it in Exhibit M- Other Permits and Licenses.
22. Pages 4-42 and 43 briefly discuss the Area 500- Cyanide Detoxification, however more detail will be required. Please provide a more in depth description of the Cyanide Detoxification process, including the concentration of Cyanide in solution coming into the system and the concentration of Cyanide leaving the system.
23. Pages 4-45 and 46 detail the Operations of Area 600 - Refinery. In conjunction with Item 21 of this review, please provide documentation that smelting and refining operations do not require an Air Emissions Permit from CDPHE.
24. Pg 4-46 states that flux is used to remove impurities during the refining process, please provide an updated narrative discussing the waste product from refining operations, and include a chemical characterization of said waste. If the waste product is to be considered hazardous, please provide a plan to manage and dispose of the waste.
25. Table 4-18 on Pg 4-48 is titled the same as Table 4-14 on Pg 4-42 please provide an updated section with the correct table name.
26. Section 4.2.5 - Reagent Management discusses the reagent delivery and receiving area, stating that there is a 5,000 sq. ft. area to facilitate safe unloading of reagents however no drawings were included depicting the area. Please note that the reagent unloading area will be considered an EPF and will require an engineered design, complete with containment capabilities. Please provide a more detailed description of the area, supported by engineered drawings showing the design, including containment facilities to be installed.
27. Additionally, the entire section dedicated to Reagent Management pgs 4-56 through 4-62 should be located and more detailed in Exhibit U - Environmental Protection Plan. Please revise Exhibit U to include the information contained in section 4.2.5. Further items regarding Designated Chemicals storage, management and use will be further addressed in the Exhibit U section of this review.
28. Section 4.2.6 discusses the laboratory facilities and various testing that will be performed with that facility. Pgs 4-67 and 4- 68 discuss the specific tests that will be conducted, however there is no mention of sampling or testing in the Cyanide Detoxification circuit to ensure the detoxification is complete, nor is there mention of sampling the Tailings Material before it is transported to the FTD. Please note that the Division will require sampling of both streams. Please provide a revised section detailing the sampling and analysis procedure for the Cyanide Detox Circuit, including a threshold of acceptable detoxification, and the Tailings material prior to transport to the FTD with an emphasis on residual Cyanide.
29. Pg. 4-68, specifically the Sample Preparation & Testing Section, item 2 states that samples delivered in a 5 gallon bucket will be emptied on the floor of the Conex for composting. Please

note that for mixing or handling of samples that contain Cyanide solution, residual cyanide or any other Designated Chemicals, it will need to be handled in a contained environment, and the floor of a Conex container is insufficient. Please provide a more detailed description of the sample preparation process, including the use of some form of containment structure to ensure materials containing Cyanide or other Designated Chemicals is being conducted in a contained manner.

30. Section 4.3.1, Pg 4-74 states that meteoric water is captured in the ECS and used as process makeup water. However, Colorado State Law requires that any impounded storm water or snowmelt be released within 72 hours unless a storage right and or substitute water supply plan has been issued. No documentation was provided in Exhibit G- Water Information or Exhibit M- Other Permits and Licenses demonstrating those permits are in process, obtained or not required. Please provide the volumetric calculations showing the volume of meteoric water that could be retained in the ECS and provide documentation that a Water Storage Right and or Substitute Water Supply Plan has been obtained. If these permits are not required, please provide documentation from the Division of Water resources, on letterhead stating such.
31. The Spill Containment section beginning on Pg 4-76 briefly discusses containment capacities at the various areas of the Operation. This section should be included in Exhibit U- Environmental Protection Plan, however it is not. Additionally this section is not supported by drawings and volumetric calculations demonstrating containment capacity. Please revise this section, relocate it to the appropriate section of Exhibit U, and include the volumetric demonstrations of each containment area. Also, of the drawings contained within Exhibit D, none of the drawings depict the conveyance mentioned that would funnel a potential spill from the mill building to the leach pad, then on to the ECS. Please also include the drawings depicting the curbing and containment methods used in each area.
32. Also included in the Spill Containment Section, it is stated that the concrete floors in the mill building are sealed, however evidence observed during previous site inspections do not support that the concrete floors have already been sealed. If the floors have already been sealed, please provide more information on the sealant used, including product name, SDS if available, and chemical rating of that product. If the floors have not yet been sealed please provide the above requested information for the sealant to be used. This information should also be included in Exhibit U- Environmental Protection Plan.
33. Section 4.4.2 on Page 4-81 states that testing was done using feed composites assembled from both drilling and bulk samples of the Penn Group dump material, that are located on a different permitted site, however no reference was made to the stockpiles that currently exist on the Leadville Mill site. Please clarify if the tailings and geochemical characterization results included samples from the on site stockpiles or just the material from the Penn Mine. If the currently submitted data and analysis does not include ALL on site stockpiles proposed to be processed, please provide the Division with the Acid Base Accounting and Synthetic Precipitate Leachate Procedure results for the raw material, as well as all appropriate tests conducted after that material has been run through the bench scale testing to generate tailings. Please note that at a minimum the SPLP results must include all constituents in the approved Groundwater Monitoring Plan.

34. In addition to the SPLP and ABA of the tailings material, please provide a 40 element analysis of the tailings material for characterization.
35. The results for the Mill Tailings TCLP as well as the RCRA TCLP Metals included in Tables 4-30 and 4-31 appear to be in conflict with the laboratory data included in the appendices. Please provide an explanation for this apparent discrepancy, or update the tables to reflect the correct values.
36. Pgs 4-81 and 4-82 assert that the tails that will be produced from the proposed operation are definitively non acid generating, based on the levels of pyritic sulfur as well as the pH of the paste tested. Based off of USGS guidance, materials that have a Net Neutralization Potential (Neutralization Potential-Acid Potential) of less than 1 are considered acid producing. Based on the data submitted, the Net Neutralization Potential of the Tailings Material is -14. Please provide more information supporting your claim that the Tailings Material is non Acid-Generating.
37. Section 4.4.2, Pg 4-84 discusses the chemical stabilization of metals based on the cyanide detoxification process proposed to be used at the site, however it also states further testing will be completed to fully validate these results. Please explain what further testing will be required, and how the cyanide detoxification process stabilizes these target metals.
38. Pg. 4-88 states that the filtrate liquidated that is separated during tailings dewatering will flow to the collection pond at the FTD and then flow via gravity to be used as process make-up water. Please note that the water return line running from the collection pond to the reclaim tanks will be considered an EPF and will require secondary containment for all reaches of the pipeline. Please provide design specifications, supported by figures and or drawings. This information will be required in Exhibit U- Environmental Protection Plan.
39. Additionally, it is stated that the collection pond will collect snowmelt and surface runoff from the FTD, and that water will be retained and used as process water. In conjunction with Item 30 of this review, please provide a volumetric estimate of the quantity of rain and snowmelt to be collected given the footprint of the FTD as well as documentation from the DWR that a Substitute Water Supply Plan and or Storage Right has been obtained for that volume.
40. Section 4.4.3 pgs. 88-89 briefly discusses the general concept of slope stability and states that "as validation of this condition, a series of slope stability analyses will be carried out...". It also goes on to infer that factors of safety for similarly sized material with the same target moisture content and compaction rating have a factor of safety in excess of 2.0. This appears to be theoretical and no actual slope stability analysis has been conducted for specific materials generated during the bench scale testing. Pursuant to Rule 6.5, Please provide a Geotechnical Stability Exhibit with Factor of Safety Calculations, demonstrating the analysis performed on the actual materials to be produced and in the configuration proposed under the FTD Plans.
41. The "Unit Operations Section" on Pg. 4-96 identifies that Tailings slurry will be pumped from the detoxification tanks at the mill via an HDPE slurry line to the FTD. However no details on construction or secondary containment was provided. Please note that the Tailings Slurry line from the Mill to the FTD will be considered an EPF and will need to have secondary containment measures in place. Please provide additional information regarding this EPF, All applicable sections of Rules 6.4.21, 7.3 and 7.4 apply.

42. The narrative section regarding Filter Cake Seepage Collection on Pg. 4-100 states a 6 inch layer of clean aggregate will be laid directly on top of the primary geosynthetic liner, however the details contained in Figure 4-21 show a 1 foot layer. Please clarify if the drainage layer proposed is to be 6 inches or one foot, and either correct the narrative or the figure respectively.
43. In the narrative and supporting appendices describing the design of the FTD, it is noted that the FTD does not utilize a double lined design with leak detection. Please provide more information as to why the FTD did not include these features.
44. Section 4.4.5 FTD Geometry, Capacity & Construction Sequencing a protective soil layer is proposed to be placed on top of the geocomposite and that the demand for this material may be provided by excavated borrow or other suitable sources identified within the site or adjacent properties. Please note that any and all borrow locations within the project need to be identified and accounted for in the Mining and Reclamation Plans. Any material generated from outside of the Proposed Permit Boundary will need to come from a site Permitted by DRMS for that activity. Please identify any and all sources of soil borrow material, if generated onsite, please update Exhibits D and E accordingly, and if generated off-site, please provide the location, site name and DRMS Permit number of that facility.
45. Section 4.4.6 discusses the salvage and segregation of topsoil and Suitable Plant Growth Material (SPGM) including stockpiling for reclamation. Stabilization efforts including ditches, soil berms or other features will be constructed to prevent erosion, however the Division highly recommends the establishment of temporary vegetative cover to accomplish the stability concerns. Please commit to seeding the topsoil and SPGM stockpiles with either the final reclamation seed mix or propose a temporary seed mix to be employed.

Exhibit E- Reclamation Plan – Rule 6.4.5

46. Section 5.1.2 discusses scrap from structure demolition and various equipment to be sent to various recycling facilities or 3rd party purchasers. Please note that the Division cannot account for recycling or post closure sale of equipment. This exhibit will need to be revised to account for the disposal of all materials generated from structure demolition, designate their disposal location (facility) and account for equipment disposal. Please revise this exhibit and account for the disposal of these materials and equipment. Please also update all other applicable sections of this exhibit to reflect this change.
47. Similarly, the same section discusses the returning of unopened reagents to the manufacturer, and disposal of process water within the ECS to allow the water to evaporate, with on-site disposal of the chemical residue in the ECS. Both of these practices are not authorized by the Division. All unopened reagents must be disposed of in an appropriate hazardous materials disposal facility and any process water containing dissolved reagents must be disposed of at a hazardous waste disposal facility. Please revise the exhibit, identifying the appropriate disposal facility, and provide an estimate of the volume of materials that will be disposed of. Please also update all other applicable sections of this exhibit to reflect this change.
48. Throughout the exhibit, there is little to no discussion regarding the decontamination of equipment, and handling of the rinsate. In the revised exhibit, please provide an in depth explanation of the decontamination and shut down procedures required before disposal of equipment. In the revised narrative, please provide a volumetric estimate of the rinse water

required, as that rinsate will be considered hazardous waste that will need to be disposed of properly.

49. Section 5.1.3 identifies the FTD collection pond as a post reclamation feature. Please provide a more detailed rationale for the collection pond to remain, including any post closure monitoring that will be required. Also, Figure 6-2 shows the Gravity Drain to the Mill Building to remain after reclamation. If the pond is still connected to the Mill Building, please describe the use, quality, quantity and ultimate fate of water that will be collected in the pond post closure. Please note, that the Colorado Division of Water Resources may require additional permitting for the pond. Please consult with DWR and provide documentation of their requirements.
50. Additionally, Section 5.1.3 mentions the ECS Sump will remain in place, post closure however an ECS Sump is not mentioned in any other Exhibits and is not shown in the Reclamation Plan Map, Figure 6-1. Please clarify, what the ECS Sump is, where it is located and how it will be reclaimed.
51. In addition to Item 46 of this review, for all of the equipment listed in Section 5.2.4, that is proposed to be placed in the ECS. Please provide a volumetric estimate of the equipment to be placed in the ECS ensuring that sufficient capacity is available. Please note that the Division requires on site disposal of material to be buried a minimum of three feet below the final reclamation grade. In the revised portion of this Exhibit please commit to placing all materials disposed in the ECS a minimum of three feet below final grade.
52. Throughout the Exhibit, various items such as demolition, topsoil handling, placement, etc. will have volumetric numbers associated with them however no volumetrics are given. Please revise the exhibit, including volumetric estimates such as volume of topsoil or overburden to be moved and placed. This information should correlate with the values provided in Exhibit L- Reclamation Cost Estimate to ensure an accurate reclamation cost estimate can be performed by the Division.

Exhibit F - Reclamation Plan Maps – Rule 6.4.6

53. The Reclamation Plan Map Figure 6-1 is not signed, please provide a signed version of Figure 6-1. Also, the topographic contours are not labeled. In the revised map, please ensure the contours are labeled.
54. Map 6-2 is also not signed, please provide a signed version of Figure 6-2.
55. Pursuant to Rule 6.4.6(b) on both of the revised maps, please portray the proposed final land use for each portion of the affected lands.

Exhibit H – Wildlife Information – Rule 6.4.8

56. Section 8.1 lists the proposed Permit Boundary at 42.93 Acres. In conjunction with the other items in this review related to incorrect acreages please update this section with the correct acreage.
57. Section 8.2.1 discusses the exclusionary fencing to be installed at the recommendation of Colorado Parks and Wildlife including the ECS and FTD Collection pond. However, after reviewing the construction information of the liner in the FTD, the Division recommends that the wildlife exclusion fencing encompass the entire FTD to prevent terrestrial wildlife from crossing exposed sections of the liner, which could result in punctures to the 60 Mil HDPE liner.

Please commit to installing the recommended exclusionary fencing around the entire perimeter of the FTD.

Exhibit I – Soils Information – Rule 6.4.9

58. The Leadville Sandy Loam is described in section 9.2.3 as being severely limited for use with septic tank absorption fields due to moderately slow permeability. Figures in Exhibit C depict a septic tank in the Leadville Sandy Loam. Please justify locating the septic tank in this soil series.

Exhibit M- Other Permits and Licenses – Rule 6.4.13

59. As listed previously in this review, additional permitting may be required from the Colorado Division of Water Resources for the retention of waters in the ECS and FTD collection pond as well as for the FTD collection pond post closure. If they are required, please provide documentation of application for those permits, if they are not required, please provide documentation from DWR stating such.
60. Exhibit D discusses the use of a nuclear density gauge for field density tests on the FTD. Are licenses required for radioactive materials on site. If they are required, please provide documentation of application for those permits, if they are not required, please provide documentation from CDPHE stating such.

Exhibit R – Proof of Filing with County Clerk and Recorder – Rule 6.4.18

61. Please note that all submitted documentation requested in this review or provided as responses to any other reviews must be placed for public review with the County Clerk and Recorder in addition to the original application pursuant to Rule 6.4.18. When submitting responses please ensure to include a receipt from the Clerk and Recorder's Office.

Exhibit S- Permanent Man-made Structures- Rule 6.4.19

62. None of the Structure Agreements provided in the Appendices to Exhibit S are executed by the Structure Owners. Please provide the fully Executed Structure Agreements, Pursuant to Rule 6.4.19. Where an agreement cannot be obtained please provide an engineering evaluation as prescribed in Rule 6.4.19(b).

Exhibit U – Environmental Protection Plan- Rule 6.4.21

In General, this Exhibit fails to meet the requirements of Rule 6.4.21. Specific items are addressed below, however a majority of the applicable information is presented in Exhibit D, Mining Plan. This information should either be duplicated or relocated to Exhibit U, as the information and drawings apply to the Environmental Protection Plan, and specific information regarding the Environmental Protection Facilities. Please revise the narrative, and supply any supporting maps or drawings as applicable to this Exhibit. Items needing revision include the items listed below, however are not strictly limited to these items.

63. Section 21.2 calls out maps presented in other Exhibits. While this is helpful, the maps do not specifically identify all Environmental Protection Facilities or identify the locations where designated chemicals, toxic or acid-forming materials, which will be used, stored, handled, exposed, disturbed or disposed of within the permit area, and existing or potential sources of

acid mine drainage. Please provide additional maps, sketches, plans or other equivalent representations as required by Rule 6.4.21(2) and as necessary to support the revised narrative requested by this review.

64. Per Rule 6.4.21(4)(c) please commit to providing the Office with any additional permit that may be required within 30 days of receipt.
65. Per Rule 6.4.21(5) please fill out the "use" field in Table 21-3 for all designated chemicals.
66. Section 21.6 contains many references to various portions of Section 4 for the required information. This information, though contained in Section 4 should either be moved to, or duplicated in this section. Please revise section 21.6 to address all requirements or Rule 6.4.21(6). Additionally, Rule 6.4.21(6)(a) is not addressed at all in either section. Please fully describe the procedures for the disposal, decommissioning, detoxification or stabilization for all designated chemicals and toxic or acid-forming materials. Please also ensure the revised narrative meets the requirements of each of the other subsections of Rule 6.4.21(6).
67. The Facilities Evaluation of Section 21.7 is presented in generalities rather than specifics of each Environmental Protection Facility as required by Rule 6.4.21(7). Several items within this review identify specific additional Environmental Protection Facilities, however that is not intended to construe that these are the only ones. An Environmental Protection Facility means a structure which is identified in the "Environmental Protection Plan" as designed, constructed and operated for control or containment of designated chemicals, uranium, uranium by-products or other radionuclides, acid mine drainage, or toxic or acid forming materials that will be exposed or disturbed as a result of mining or reclamation. This section must also include drawings demonstrating all conveyances and containment structures supported by volumetric demonstrations of their containment capacities. Please revise this section, including all other applicable information required by this review, providing a narrative evaluation of EACH Environmental Protection Facility, supported by drawings and figures.
68. Please revise 21.8 through 21. 11 to include updated groundwater and surface water information that was submitted during the Division's Permilimary Adequacy Review.
69. In addition to referencing Exhibit K, please discuss climate characteristics in section 21.12 per Rule 6.4.21(13). Specifically, please provide a water balance for contaminants systems open to the environment.
70. As previously called out in this review, the Geochemical Data Section of Exhibit U, presents the data acceptance criteria based on RCRA Metals, Mercury Analysis and TCLP tests. While this is helpful, the Division requires a 40 Element Analysis, Synthetic Precipitation Leachate Procedure Tests and Acid Base Accounting. Please provide the 40 Element Analysis, SPLP and ABA data for all applicable materials including the stockpiles currently located on site. Please also ensure that the lab reports for ABA are reported in Net Acid Forming Potential v Net Neutralization Potential.
71. Within Section 21.14 it is stated that "CJK will provide CDRMS with a detailed construction schedule when the conclusion of the permitting process is better understood." This is an acceptable practice, however for Each EPF or group of similar EPF's, a separate Technical Revision will be required that finalizes the design, supported by Issued for Construction Drawings, establishes a Quality Assurance and Quality Control program for construction, sets a

specific Construction Schedule with Incremental Inspections and defines acceptance criteria for the certified As-Built Package that will be required. Please commit to submitting a Technical Revision for Each EPF, when appropriate, that will include the items listed above and any other information as deemed necessary by the Division.

72. Sections 21.16- 21.18 all reference information contained in other Exhibits. Please also include the required information in these sections of Exhibit U regardless if they are presented in other Exhibits.
73. During the review period of this application, several addendum appendices have been provided such as the updated Stormwater Management Plan and Permit, and documentation from the US Army Corps of Engineers. Due to these additions not being officially submitted they are currently not part of the formal record. Please provide those appendices with your responses to this review and update any and all applicable Exhibits with the updated information.
74. Appendix 21-2 provides the applicable Safety Data Sheets for Designated Chemicals however the SDS sheets for Lime and Soda Ash were not provided. Please provide the SDS sheets for Lime and Soda Ash.

Rule 6.5 - Geotechnical Stability Exhibit

75. Please provide the Geotechnical Review of the FTD. The Review should identify all geologic hazards that have the potential to affect the proposed tailings stack and include an engineering stability analysis for proposed final slopes. The Geotechnical Review should also include a geotechnical and stability analysis that demonstrates appropriate factors of safety and that off-site areas will be protected or that there is no potential for off-site impacts.

Other

76. For Sections 23 and 24, the Emergency Response Plan and CN Management Plan, the Division will review these Exhibits when all other details have been finalized and the changes required during the various Adequacy Reviews have been incorporated into these respective Exhibits.
 - a. Please revise the Emergency Response Plan to include loss of containment and spill reporting
 - b. Please provide a completed Cyanide Management Plan
 - c. The Cyanide Management Plan states that Union Milling will be completing tasks on site during operation. Please clarify if CJK Milling or Union Milling are making the commitments outlined in the plan
 - d. Please revise the cyanide management plan to include MSHA rather than OSHA.

Please submit your response(s) to the above listed issue(s) by Monday, December 16, 2024 in order to allow the Division sufficient time for review. The Division will continue to review your application and will contact you if additional information is needed. Please note that the current Decision Date for your application is set at Friday February 7, 2025. The Decision Date is already set at the maximum allowable time under Rule 1.4.1(9). If you require additional time to address the above listed issues, an Extension request beyond 365 days from the date of completeness will need to be made to, and approved by the Mined Land Reclamation Board.

If you require additional information, or have questions or concerns, please contact me. Direct contact can be made at the Division's Grand Junction Field Office, by phone at 303-866-3567 ext. 8187 or by email at lucas.west@state.co.us.

Sincerely,



Lucas West
Environmental Protection Specialist
Division of Reclamation, Mining and Safety

Cc: Travis Marshall, DRMS

Ec: Nick Michael, Union Milling Company, LLC
Gary Knippa, Union Milling Company, LLC
All interested parties