5.0 RULE 6.3.5: EXHIBIT E–RECLAMATION PLAN

5.1 GENERAL REQUIREMENTS

The Process facility site is zoned by Lake County as Industrial/Mining (IM). Affected Land reclamation is consistent with supporting IM uses. Reclamation activities are based on the following criteria.

5.1.1 POST MINING LAND USE

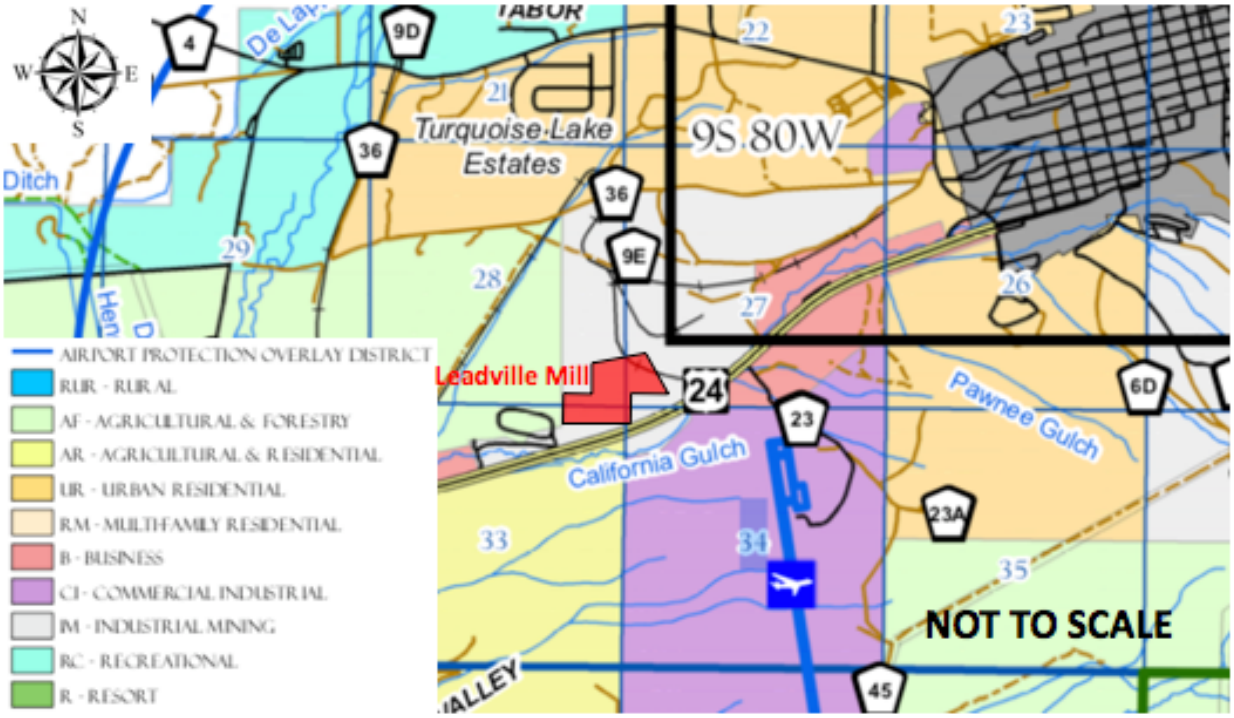
The Mill is located on land zoned Industrial Mining (IM) by Lake County. Other IM properties bordering the Mill include;

- A historic mill site (Leadville Gold and Silver Mill) owned by Salem Minerals to the North,
- The historic Leadville Corporation (currently in bankruptcy) process facility to the northeast,
- The AVS Project (owned by CJK Milling) to the East, and
- The Leadville Sanitation municipal sewage treatment plant to the southeast, and a parcel with a proposed concrete batch plant to the South.

The land bordering the Mill directly West is zoned Agriculture Forestry (AF) by Lake County. There are 4 residential properties located proximate to the Mill.

Lake County's long-term plan indicates that the IM zoning for the Mill and all properties East of the AF zone will remain IM. This is supported by Lake County's zoning map shown in **Figure 5-1**.

Figure 5-1: Lake County Zoning districts (Jan, 2024)



5.1.2 CLOSURE CRITERIA

Post-closure reclamation is based on the following criteria:

- Reclamation activities is consistent with IM use.
- Each reclamation task is completed assuming the worst-case scenario.
- No substituted land is reclaimed.
- Grading is to approximate original contours - and in compliance with the SWMP, with the following exception:
  - The FTD is graded to it final design contours.
- Metal buildings/structures marked for reclamation criteria;
  - Structure demolition,
  - Scrap sent to recyclers,
  - Concrete foundations removed and placed in ECS, and
  - No credit for salvage value.
- Processing equipment and transportable structures (e.g. ore prep steel container) includes;
  - Removal, and transport to 3rd-party purchaser or scrap recyclers.
  - No credit for salvage value.

- Mobile equipment criteria;
    - Remove equipment from Mill property to off-site CJK property for sale or salvage.
- Un-opened reagent containers are returned to vendors or sold to other operations permitted for their use.
- Diesel fuel to be given to employees or construction/operations contractors. Note this is not "Red Fuel", and so is legal for road use.
- Process solutions and opened reagents are placed in the ECS
    - This task is completed prior to closing ECS.
    - Opened reagent containers that cannot be returned to vendor or sold to other operations permitted for their use are dissolved in residual process water.
    - The process solution then reports to the ECS.
    - Solution in the ECS will be sprayed on the embankment (35-mil PP liner) where water will evaporate leaving a dry residue.
    - ECS backfilling will then commence
- Backfilling of ECS requires;
    - Requisite compaction to enhance stability and prevent leaching into groundwater.
    - The following items are backfilled.
        - Reagent residue,
        - Concrete foundations, and
        - ECS GCL and HDPE liners, and leak detection system.
- Grading, Topsoil & Revegetation
    - Disturbed areas are graded to approximate original contours, with exception of FTD.
    - Graded areas are covered with topsoil and revegetated. This activity is implemented as follows:
        - Upon commencement of operations, reclaimed topsoil, SPGM and tailings is analyzed for growth suitability.
        - Based on growth suitability studies, 6-inches to 12-inches of cover material is placed on graded areas.
        - Soil amendments are applied based on growth suitability studies.
        - Seed mix, as approved by CDRMS, and shown in **Table 5-1** is applied.

TABLE 5-1: RECLAMATION SEED MIX

Species	Scientific Name	Variety	Pls lbs./Acre
Yarrow	Achillea Lanulosa	-	0.1
Groundsel	Senecio Atratus	-	0.1
Lupine	Lupinus Perennial Lupine	-	1.0
Slender Wheatgrass	Elymus Trachycaulus	San Luis	1.4
Nodding Brome	Bromus Anomalus	-	2.5
Sheep Fescue	Festuca Ovina	Covar	0.5
Hard Festuca	Festuca Ovina Duriuscula	Durar	0.5
Red Fescue	Festuca Rubra	Penniawn	0.5
Tufted Hairgrass	Deschampsia Caespitosa	-	0.5
Redtop	Agrostis Alba	-	0.1
Blue Wildrye	Elymus Glaucus	-	1.75
Muttongrass	Poa Fendleriana	-	0.5
		Total pls lbs./acre (drilled)	**9.45**

5.1.3 EXCLUSIONS

The following infrastructure will remain in place, post operations to support future IM uses and post-closure mitigations. See **Exhibit F, Figure 6-1**.

- Site Access Road from US Highway 24 (South of site)
- Main Access Road from AVS property (East of site)
- Electric power line and transformer.
- Fresh water lines
- Fire Water Tank
- Mill and Crusher Buildings, including the following items these structure;
    - Structure/foundation
    - Concrete retaining walls associated with these buildings
    - Electric switchgear
    - Fresh water tanks
    - Office furnishing
    - Laboratory furnishing
    - Rest room
    - Sewer system, including lift pump system
- FTD Collection Pond
- ECS sump will remain in place.
- Monitoring wells LM-MW2 and LM-MW3 will remain for future monitoring, as required.
- Nosie, air quality, and seismic monitors.
- Access gate

5.2 IMPLEMENTATION

Reclamation activities are broken down into tasks, as shown in **Table 5-2**, and described below. See also **Figure 3-4**.

TABLE 5-2: RECLAMATION AREAS

Task	Reclamation Area
10	Historic Stockpiles & Tailings and Wire Fence
20	MDM, Slurry, Reagents & Solutions
30	Structures & Equipment
40	Emergency Containment Sump (ECS)
50	Filtered Tailings Deposit
50	Grading, Cover & Seeding

5.2.1 NO START-UP

If the Permit Amendment is denied, and closure is mandated by CDRMS, then the existing reclamation closure plan applies.

5.2.2 TASK 10 – HISTORIC STOCKPILES & TAILINGS AND WIRE FENCE

The Leadville Mill is an historic operation with legacy RoM stockpiles and tailings. Existing ore stockpiles and tailings have been stored on site since approximately 1991.

There are 3 historic stockpiles totalling approximately 1,500 tons which lie on unlined areas. As required in the existing permit, these piles are maintained using best management practices (BMPs) including plastic covers and down-gradient perimeter straw wattles.

There is also a tailings pile containing approximately 900 tons of tailings. This pile was moved to the northwest end of the Mill property under TR-5. This is also maintained using the same BMPs as the stockpiles as well as a temporary 6-mil polyethylene plastic sheeting (PPS) (often referred to as Visqueen©, a PPS brand) liner.

PRE-START-UP ACTIVITIES

The existing permit mandates that the stockpiles and tailings pile be removed within 60 days of project start-up. It is planned that this requirement also applies to this permit application.

- Current Activities. The following mitigations are observed prior to mill start-up.
    - The stockpiles are covered with reinforced polyethylene plastic sheeting PPS liner approximately 40ft x 100ft in size, with edges folded and

pinned, and held in place by tires, blocks, rocks and/or other suitable ballast.
  - The water runoff from the reinforced PPS is passed through erosion and sediment control measure consisting of wattles and vegetative filters.
  - Reinforced PPS is replaced as needed.
  - Stockpiled ore will be sampled, and a Synthetic Precipitation Leaching Process (SPLP) analysis will be performed, as outlined in the Division's August 27, 2009, letter prior to removal and prior to milling or disposal.
  - Upon commencement of operations, a stockpile removal schedule will be provided to CDRMS, and
  - Weather permitting, historical stockpiled ore will be removed and disposed within 60-days of production start.
  - The stockpile ores will be reprocessed or disposed of the FTD or other approved facility.

- Contemporaneous Activities.
  - Mill Start-Up. This material is used for plant start-up, and is reclaimed in this order. There is no cost associated with removing the tailings or stockpile material since this material is processed as MDM.
    - Temporary Tailings. located on North side of Mill Building.
    - Stockpile 1, located East of ECS.
    - Stockpile 2 & 3 combined, located on East side of Mill Permit Boundary. Stockpile 3, although small, has high clay content and will be reclaimed together with Stockpile 2.
  - Activity 1 – Pile Covers & BMPs
    - Remove straw wattles, silt fence, and covers
    - Haul waste material to landfill
  - Activity 2 – Grade & Seed
    - Grade/scarify ground at tailings pile and stockpile areas
    - Bring in topsoil/SPGM
    - Spread/dress topsoil/SPGM
    - Apply mulch to stockpiles areas only (as required).
    - Apply seed to stockpile areas only.
  - Activity 3 – Wire Fence. A 4-wire fence exists on the South, West, North, and a small portion of the East original (20.7ac Zuni Placer) property. The East side is fenced by Leadville Sanitation. CPW recommends the Mill fence be removed. However, the fence is listed as a requirement in the currently in-place CUP. Assuming Lake County approval, this fence will be removed.
    - Remove fence
    - Recycle fence material as scrap.

POST-CLOSURE ACTIVITIES

There is no post-closure activity contemplated for Task 10. All activities occur during start-up.

5.2.3 TASK 20- MDM, SLURRY, REAGENTS & SOLUTIONS

In the event of any shut-down, the first step in closure is to remove all MDM, slurry and reagents from the process plant.

MDM exists in the receiving Bunkers, Crushing hopper and conveyors, and the fine MDM Bin. Slurry exists in the entire process from the Ball Mill to the FTD. Reagents exist (1) in as-received containers, (2) opened containers as required for processing, or (3) as solutions in-process. Small amounts of chemicals also exist in the laboratory, and diesel fuel is in its double-lined storage tank.

POST CLOSURE ACTIVITIES

- Activity 1. Clear Facility of All In-Process Material.
    - Purge Process Facility.
        - Operate facility as designed, but without reagents. The most effective method is to run the material through the process plant. This will also help in flushing reagents from the equipment.
        - Assume maximum of 1,000 tons (800-tons in bunker and 200-tons in MDM Bin) of material is in process. All material is processed within 72-hours. Note that the process cannot be "sped-up" as the FTD filter must still meet the moisture requirement for FTD deposition.
        - This process is complete when clear water reports to the FTD Filter. As per the flowsheet, all water from FTD is reclaimed within the plant. At this point, all tanks and piping are clear of solid materials.
    - Remove Reagents & Solutions
        - Un-Opened Reagent Containers. Reagents have a high value. Un-opened reagents containers are returned to the vendor or given to other industrial users (or laboratories) that are permitted to have such reagents.
        - Opened Reagent Containers. The reagents in opened containers that cannot be accepted by others are;

- Placed into solution in their respective mix- and day tanks.
- Mix- and Day-tank solutions are pumped into the process until they report to the leach tanks.
- There is a small amount of chemicals in the laboratory. These chemicals are diluted with water and drained into the Mill Building sump (as is designed), which then report to the reclaim tanks.
- Solutions in the leach tanks are drained from the leach tanks into the ECS. Note all leach tanks have a tap at the bottom where a hose is connected. The tanks will mostly drain via gravity. A pump is used if required.
- This activity is complete when all solutions are in the ECS.

5.2.4 TASK 30 – STRUCTURES & EQUIPMENT

The property is in an area zoned for IM by Lake County and post operation use will remain IM. The Crusher, Mill, Cyanide Mix, and FTD Filter Buildings will remain. However, (1) equipment will be removed and either sold for use or scrap, (2) the Scale House Building and (3) the Leach Pad concrete curbing will be demolished and moved into the ECS.

This task only applies to closure scenarios.

POST CLOSURE ACTIVITIES

- Activity 1. Remove Equipment
  - Scale House
    - Scales
  - Crusher Building
    - Hopper
    - Jaw Crusher (if installed)
    - Screen
    - Cone Crusher
    - Conveyors
    - Dust Collector
  - Mill Building
    - Fresh- and Reclaim-water tanks
    - Ball Mill & Sump
    - Pre-Leach Thickener
    - Leach Filter & Head Tank

        - PLS Tanks
        - De-aeration Column
        - Detox Tanks
        - Reagent (Flocculent and Ferrous Sulfate) Mix- & Day-Tanks
        - Precipitation Filter & Feeder/Cone Mixer
        - Dore Furnace
        - Mine Office and Laboratory Equipment
    - Lead Pad & Cyanide Building
        - Leach Tank Motors & Agitators
        - Leach- & Holding Tanks
        - Reagent (Cyanide and Caustic) Mix- & Day Tanks
        - Diesel Storage Tank
    - FTD Filter Building
        - FTD Filter & Head Tank
- Activity 2. Dismantle Piping & Electrical
    - Electrical in Scale House
    - Piping in Mill Building, Leach Pad/Cyanide Building, and FTD Filter Building
    - Piping from Mill Building to Leach Pad area and to FTD Filter Building. This includes slurry and return lines.
    - Scale House
    - Crushed ore conveyor to Fine MDM Bin
- Activity 3. Remove Steel Structures
    - Scale House
    - Haul scrap to recyclers
- Activity 4. Remove Concrete (Leach Pad curbing and Scale House)
    - Break Concrete
    - Place in ECS. Concrete cannot be placed in the ECS until solution has evaporated (see Task 40).
    - Compact concrete.

5.2.5 *TASK 40 – EMERGENCY CONTAINMENT SUMP*

ECS will be used to hold demolished foundation concrete as well as its GCL, leak detection and HDPE liners. This task will be completed for either temporary cessation or closure. However, only the evaporation activity applies if temporary cessation.

POST CLOSURE ACTIVITIES

- Activity 1. Evaporate Solution
    - This activity will commence as soon as Task 20 is completed. It is the critical path to completing closure since it is dependent on solution evaporation rate.

CONTEMPORANEOUS RECLAMATION

As the FTD filling proceeds, the exterior slopes are completed to the design lines and grades, and benches and temporary ditches constructed to direct surface runoff from the exterior slopes and to prevent any ponding of storm water or snowmelt in interior areas of the FTD to the greatest degree practical.

The following is a general plan to establish an intermediate soil cover on the FTD concurrently as final exterior lines and grades are achieved during filter cake placement operations. The objective of the plan is to establish a vegetative cover concurrently with completion of tailings placement, focusing primarily on the exterior slope areas, utilizing a combination of both stockpiled topsoil, SPGM, and/or other suitable clean fill materials that can be augmented with organics to provide a source of macro-nutrients for plant growth.

- Prior to topsoil placement, the slopes and benches to be covered are graded and checked for slope accuracy and bench locations, width, etc. If this is practical, cover is applied. This occurs in the fall, if possible. There is a shortage of topsoil/SPGM within the site so some material, primarily mulch, is imported to complete the full extent of the FTD.
- Topsoil will be placed 6-inches thick and is not compacted. Some vegetation mixed with the soil is acceptable.
- The area of topsoil cover is dependent upon available material, and the area to be completed annually is at the discretion of the FTD facility manager. However, it is best to cover as much regraded area as possible, once the regrading is complete. The surface of placed topsoil is left roughened to enhance seed germination and rooting.
- Once the topsoil cover of an area is completed, seeding is be scheduled preferably for late September via broadcasting or hydro seeding. Fertilizer or other macro-nutrients is applied to the area as well using broadcast methods or can be a part of the mixture in the hydro seeding tank brought to the site by the contractor. A tackifier may also be used by the hydro seeding contractor if this method is used.
- The seed mix to be used is specified in **Table 5-1**.
- In the summer following seeding, an evaluation of the success of the seeding will be made by the engineer certifying the FTD and appropriate adjustments to the seed mix or mitigation of areas with poor coverage may be made.

5.2.7 TASK 60 – GRADING, COVER & SEED

The final reclamation step is grading, cover and seeding. This task is completed during any closure condition.

POST-CLOSURE ACTIVITIES

- Activity 1. Grading
  - Overburden Area 2
  - Overburden Area 3
  - Scale House structure disturbance to approximate original contours
  - Overburden Area 1 and ECS are graded together to approximate original contours.
- Activity 2. Cover with topsoil/SPGM 6-inches thick and Seed
  - Overburden Area 2
  - Overburden Area 3
  - Scale House disturbance.
  - Overburden Area 1 and ECS.

5.3 SCHEDULE

Post-operation closure activities including timing and the estimated duration is shown in **Table 5-3**.

- Given the harsh winters experienced in the area, and since the exact month operations will end is not known, the schedule accounts for delays/no operations during extreme winter months.
- Historic stockpiles and tailings areas will be removed within 6-months of project start-up
- The schedule provides 30 to 60 days of float for the critical path.

TABLE 5-3: RECLAMATION CLOSURE SCHEDULE

Task	Task Description	Duration (days)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
10	Historic Stockpiles,Tailings,Wire Fence	60	>Completed within 6 months of Startup																		
20	MDM, Slurry, Reagents & Solutions	15	> Time accounts for RFQ, award and contractor hire.																		
30	Structures & Equipment	120	>Work starts after Task 20 is complete																		
40	Emergency Containment Sump	180	>Work starts after Task 30 is complete and acconts for evaporation																		
50	Grading Cover & Seeding	10	>Seeding																>Reseeding		