1.0 INTRODUCTION & BACKGROUND

The Leadville Mill (the Mill) is owned by ~~Construction Investments, LLC (CI)~~ CJK Milling Company (Evergreen, Colorado) and operated by Union Milling ~~Company~~ Contractors, LLC (UMC) (Littleton, Colorado) ~~with their corporate offices located in Littleton, Colorado. UMC was formed on September 19, 2008~~. CJK Milling Company's Leadville Mill was formed on April 4, 2020 located at 13815 Highway 24, Leadville, Colorado 80461. The Leadville Mill was formerly included as a facility permitted under Calais Resources, Permit M1990-057 (the Permit). ~~UMC is permitting the facility as a separate standalone 110(d) regulated custom ore processing mill, which will occupy a 9.9ac permit area.~~ CJK Milling Company Leadville Mill is permitting the facility as a separate standalone 112(d) regulated custom ore processing mill, which will occupy approximately 20.7 acre (ac) permit area. A new proposed bond is shown in Sec 5.6.

The facility is in Lake County, about 1.5mi west of Leadville, Colorado. The Mill has a Lake County Conditional Use Permit (CUP) granted on September 9, 2011; and other permits are summarized in the Colorado Department of Reclamation Mining and Safety (CDRMS) permit application (Sec. 7.0, Exhibit F). The Mill was constructed in 1989 and operated through ~~1991~~ 2000. The Mill has an existing reclamation bond of ~~$51,700~~ $64,430, which was revised on February 7, 2012.

~~The following mine permit application includes an environmental response to CDRMS September 30, 2010 Hard Rock, Metal, and Designated Mining Operations regulations. On November 23, 2011 CDRMS designated the Mill a 110(d) facility requiring compliance with the following regulations;~~

- ~~Sections 6.3.1 through 6.3.12 (Exhibit A-Legal Description; through Exhibit L-Man Made Structures);~~
- ~~Section 6.4.21 (Exhibit U-Designated Mining Operation (DMO) Environmental Protection Plan(EPP));~~
- ~~Section 6.5. (Geotechnical Stability) and;~~
- ~~Rule 8 (Emergency Notification by All Operators, Emergency Response Plan for Designated Mining Operations and Emergency Response Authority of the Office)~~.

1.1 SITE BACKGROUND

The Mill is an existing gold and silver, ~~lead, zinc, and copper~~ ore processing facility located in the Northeast Quarter of the Northeast Quarter of Section 33, and the Southeast Quarter of the Southeast Quarter of Section 28, Township 9 South, Range 80 West of the 6th Principal Meridian, Lake County Colorado. The mill site is a separate, stand-alone facility with no mining operations on or immediately adjacent to the facility. The Mill is inoperative, undergoing renovation and facilities reconstruction. There is no mining operation, consequently there are no;

- Overburden removal activities,
- Overburden stockpile activities,
- New waste rock stockpiles,
- Ore deposit excavations, or
- Other related mining events outside of ore processing.

There is no groundwater within 80ft ~~to 100ft that will be encountered, dewatered, contained or discharged~~ of the ground surface, dewatered, contained or discharged. No explosives will be used.

The constructed Tailings Storage Facility (TSF) was partially constructed under M1990-057 (Technical Revision (TR-03). A General Storm Water Permit is in effect and has been updated. (See Appendix 14-1). ~~is currently being reconstructed under TR-03 of the Permit. To date, the TSF embankment has been completed, and installation of the primary and secondary liners as well as the leak detection system are yet to be completed. Construction activities are conducted under an approved Construction Activity Storm Water General Permit (Permit COR 03I191) adjacent to the existing mill building. The Storm Water Permit will be incorporated with a separate facility storm water permit following completion of construction activities, and the construction permit terminated in accordance with the Construction Storm Water Inactivation Notice, Part D(2) and replaced with a General Storm Water Permit. The General Storm Water Permit will be submitted to CDRMS prior to commencing operation~~

The site is located on the northern side of the California Gulch, tributary to the Arkansas River. The property boundary is approximately 550ft north of US Highway 24, and Highway 24 approximately 300ft north of California Gulch. The property entrance is located at N39°13'44.41" and W106°19'51.14" (39.2290028,-106.3308722) at an elevation of 9,745ft. Construction activities associated with the TSF disturbs approximately 5.5ac within the ~~9.9ac~~ 20.7ac permit area. The property is bounded on

the east by the Leadville Sanitation District facility and on the north, west and south by lands zoned Industrial/Mining (IM). ~~Two residences are 400-800ft west of the property.~~ Man-made structures within the permit boundary and shown in Figure 6-2 include:

- Gas pipeline (Xcel Energy);
- Utility power lines (25kV) (Xcel Energy);
- Sewer pipeline (Leadville Sanitation District);
- ~~2 roads (access to Mellott, and Philips properties)~~ Residential Access Roads; and
- Polishing pond and perimeter fence-between Mill and Sanitation Facility property boundary (Leadville Sanitation District).

~~The structures are identified on Figure 6-2 and Structure Compensation agreements and an engineering report are presented in Sec. 13.0, Exhibit L~~. Man-made structures within 200ft of the Mill, structure compensation agreements and an engineering report are presented in Sec. 13.0, Exhibit L.

There are two distinct topographical features describing the Mill property. The northern portion of the property consists of a moderately steep, south-facing slope, draining to the south. The average grade of this slope is 25% and ranges in elevation from 9,760ft to 9,730ft. The southern portion of the property consists of a gently sloping area that drains toward the west-southwest. The average channel grade ~~of the southern slope~~ is 3% and the slope on the southern portion of the property ranges from 9,730ft to 9,700ft at the southwest property corner.

An unnamed 1-3ft wide drainage channel enters the property on the eastern boundary, adjacent to the northwest corner of the Leadville Sanitation District polishing pond. This channel ~~generally~~ flows to the southwest across the property, crossing under two access roads. The channel flows into what appears to be an old soil conservation drainage ditch in the southwest corner of the property and the water then flows ~~along the contour to the northwest~~ to the southwest, exiting the property on the western boundary. Undisturbed area runoff water to the North of the unnamed drainage channel reports to the channel. ~~The flows are limited and the culverts under the road are 12in in diameter, with no evidence of overtopping or washouts. The water exits the property into an existing road drainage network, flowing to the Highway 24 drainage network and then to California Gulch.~~ 12-inch CMP culverts are designed to convey a 10-year 24-hour storm event. Water exits the property into an existing road

drainage network flowing to the Highway 24 drainage network and then to California Gulch.

Undisturbed area runoff water South of the unnamed drainage channel does not report to a drainage channel, and overland flows through trees and vegetative cover, leaving the property along the southern boundary. ~~Runoff water in the construction area reports to either the TSF or is filtered through silt fences and vegetative filters prior to continuing its overland flow to a downslope channel.~~ For further information regarding site drainage refer to Appendix 14-1.[1]

According to the Lake County Soil Survey, Leadville sandy loam (LeE) is the only soil type that exists within the property's drainage basin. ~~This is a woodland soil.~~ The predominant tree species on the property is Lodgepole Pine.

1.2 REFERENCES

Apodaca, L.E., et al., 1996 Environmental Setting and implications on water quality upper Colorado River Basin, Colorado and Utah: U.S. Geological Survey Water Resources Investigation Report 95-4263, 33p.

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Topper, R, Karen Spray, William Bellis, Judith Hamilton, Peter Barkmann, 2003 Groundwater Atlas of Colorado, Colorado Geological Survey and the Division of Minerals and Geology, Department of Natural Resources, Denver, Colorado, 210 p.

Wallace, Alan, R., 1993, *Geologic Setting of the Leadville Mining District*, Lake County, Colorado, Open File Report 93-343, U.S. Geological Survey, Denver, Colorado, 22 p.

[1] A1AR4Q1-Q12