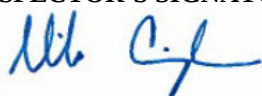




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Henderson Mine	MINE/PROSPECTING ID#: M-1977-342	MINERAL: Molybdenum	COUNTY: Clear Creek, Grand
INSPECTION TYPE: Monitoring	INSPECTOR(S): Michael A. Cunningham	INSP. DATE: March 14, 2018	INSP. TIME: 10:00
OPERATOR: Climax Molybdenum Company	OPERATOR REPRESENTATIVE: Tim Haynes, Amber Parmet	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$37,993,785.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: April 12, 2018	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>N</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

The Henderson Mill inspection was conducted by Michael Cunningham and Peter Hays of the Division of Reclamation, Mining and Safety (Division) as part of the Division's monitoring inspection program. Mr. Tim Haynes and Ms. Amber Parmet of Climax Molybdenum - Henderson Operation (Henderson) were also present for the inspection. The purpose of the inspection was to evaluate the Environmental Protection Facilities (EPFs) at the Henderson Mill.

The inspection commenced with a meeting during which the following topics were discussed:

Aspen Canyon Well

The Operator has performed a full acid rehab of the well. One water quality sample has been taken from the well, which showed reduced levels of iron. The next sampling event is scheduled to occur in May 2018.

Technical Revisions

The Operator is preparing a Technical Revision to raise the level of the roadway adjacent to the seep collection area at the toe of the tailings dam. The roadway will be raised by 18" to increase the free-board capacity of the collected seep water.

The Operator informed the Division the seep gates on the Ultimate Canal will be automated so they can be remotely controlled from the mill. The Ultimate Canal is designated as an EPF and such a change will require the submittal of a Technical Revision.

Upon review of the current Environmental Protection Plan (EPP), the Division found the Lime Slaker has not been included under the EPP which was approved under Technical Revision No. 18. The Lime Slaker was approved as an EPF under Technical Revision No. 4. Subsequent revisions to the EPP shall include the Lime Slaker as an EPF. Additionally, the Operator should review the current EPP to ensure the details of all previously approved EPFs, including design details, have been included.

The Division approved Technical Revision No. 29 on April 4, 2018, which addressed Stage 1 construction of a buttress dam at the toe of the original dam and set back sections of 3 Dam.

Water Treatment

The Operator will conduct a pilot project in which a reverse osmosis system will be used to treat process water. The pilot project will be completed in 2018 and is expected to last one month.

Acid And Toxic Materials

The inspection focused on the EPFs at the Henderson Mill which involve process water and designated chemical storage. A complete list and discussion of the EPFs can be found under Technical Revision No. 18.

Mill Process Water Storage Tanks

Two 1.5 million gallon steel tanks are located to the east of the mill building. The steel tanks are situated upgradient of the mill facility and provide water for the various processing circuits via a gravity fed line. The Operator reserves 500,000 gallons in each tank for firefighting purposes. Based on visual observations, the

tanks were found to be in good condition and the Division did not observe any signs of discharge from the tanks. The signage on both tanks indicates the individual tank capacity is 1,000,000 gallons. The Operator has acknowledged the discrepancy between the EPP and the sign on the tanks. The tank volume will be verified and signs will be updated as necessary.

Designated Chemical Storage Facilities

The Nokes Building stores two 12,300 gallon tanks which store liquid sodium hydroxide. In addition, dry phosphorus pentasulfide is stored in 4,000 pound aluminum tote bins, with a total storage capacity of 80,000 pounds. The sodium hydroxide is mixed with the phosphorus pentasulfide in a 10,500 gallon tank to create the Nokes reagent. The facility mixes Nokes reagent which is utilized at the Henderson Mill and the Climax Mine (M-1977-493). A complete overhaul of the interior mixing tank, including addition of an epoxy shield to the base of the tank, was performed in January 2018. No problems were observed in the Designated Chemical Storage Facilities.

Hydrochloric Acid Storage

Hydrochloric Acid is stored in a single 50,000 gallon fiberglass tank located to the north of the mill building. A second 50,000 gallon tank which has been decommissioned is stored in the same location. The Operator informed the Division they are currently trying to find contractor to perform integrity testing on the 50,000 gallon tank. The limestone berm which surrounds the storage area and serves as secondary containment was in good shape. No problems were observed in the Hydrochloric Acid Storage area.

Flotation Chemical Storage

OrePrep F-579, a frothing agent used in the flotation process, is stored in 250 gallon totes. In addition, Orform D8 Depressant, a suppressant used in the flotation process, is stored in 450 gallon totes. The totes are stored within the mill building and any release of chemicals would be captured by the mill sump system. No problems were observed in the Flotation Chemical Storage area.

Pine Oil Storage

Pine oil is stored in a steel tank within the oil room in the mill building. The EPP specifies pine oil is to be stored in a 14,400 gallon tank. However, a sign on the tank indicates the tank capacity is 32,000 gallons. The Operator has acknowledged the discrepancy between the EPP and the sign on the tank. The tank volume will be verified and the sign will be updated as necessary. The Division observed pine oil on the side of the tank. In addition, absorbent pads had been placed at the base of the tank to capture the discharge. The pine oil discharge appeared to originate from the top of the tank and likely occurred when the tank was being filled. Any releases in the oil room are contained by a concrete wall and are directed to the mill sump system. The Operator informed the Division all of the tanks in the oil room underwent integrity testing in 2017.

Collector Oil Storage

Collector oil, which is used in the flotation process, takes the form of either Vapor oil or Diesel #2. The Operator informed the Division they are not currently utilizing Diesel #2 as a flotation agent. The Collector oil is stored in a 32,000 gallon steel tank within the oil room in the mill building.

Syntex Storage

Syntex, a frothing agent used in the mill process, is stored in a steel tank within the mill building. The EPP specifies Syntex is to be stored in a 13,200 gallon tank. However, the sign on the tank indicates the tank capacity is 17,000 gallons. The Operator has acknowledged the discrepancy between the EPP and the sign on the tank. The tank volume will be verified and the sign will be updated as necessary.

Sodium Lauryl Sulfate Storage

Sodium Lauryl Sulfate, also referred to as Witconate, is stored in 200 pound drums within the mill building. The EPP specifies the maximum storage quantity of Witconate is 50 drums. The Division observed 41 drums during the inspection. The drums were stored off of the ground on wood pallets. No problems were observed in the Sodium Lauryl Sulfate Storage area.

Tergitol NP-9/9N9 Surfactant Storage

Tergitol is stored in a steel tank with a 9,400 gallon capacity. The storage tank is located within the mill building and any release of chemicals would be captured by the mill sump system. No problems were observed in the Tergitol NP-9/9N9 Surfactant Storage area.

Lime Slaker

The Lime Slaker is attached to the mill building and is accessed through an external entryway. The lime storage silo has a capacity of 125 tons. The Lime Slaker building has a 2 foot high containment wall to capture any overflow, which is directed to the tailing discharge line. As previously noted, the Lime Slaker has not been included in the EPP. No problems were observed in the Lime Slaker area.

Inspection Contact Address

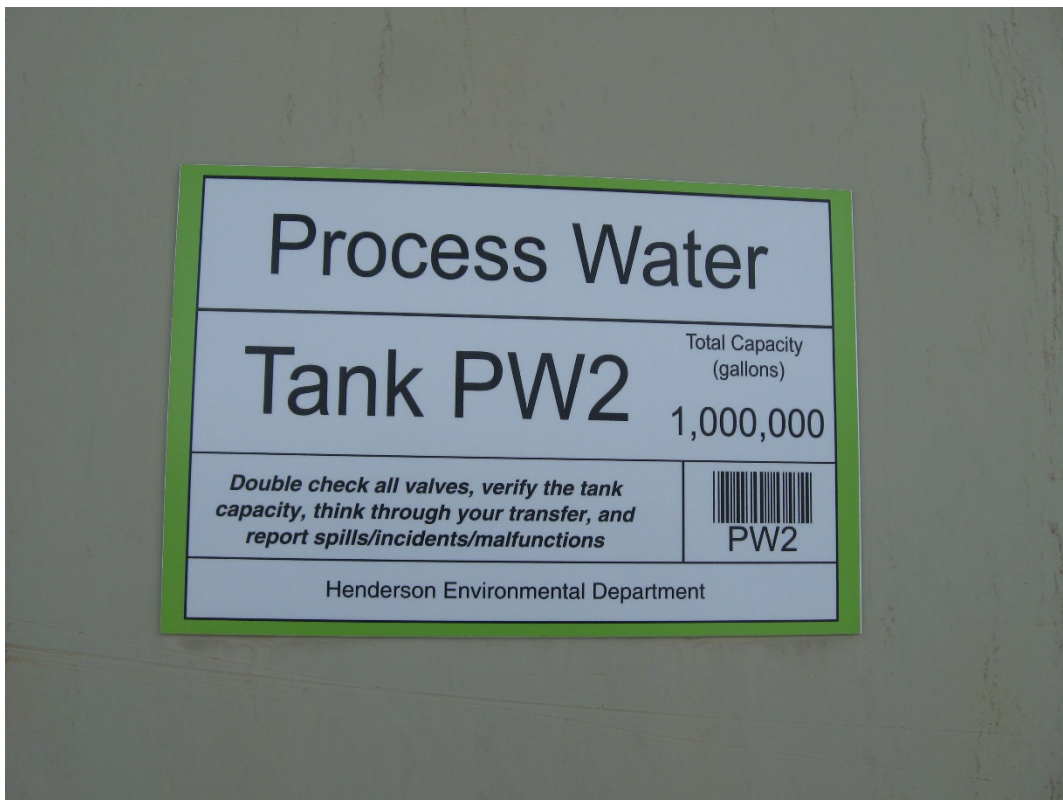
Miguel Hamarat
Climax Molybdenum Company
19302 County Rd. #3
Parshall, CO 80468

CC: Wally Erickson, DRMS

PHOTOGRAPHS



1. Process Water Storage tank.



2. Signage on Process Water Storage tank.



3. Hydrochloric Acid Storage Area.



4. Secondary containment for Hydrochloric Acid Storage Area.



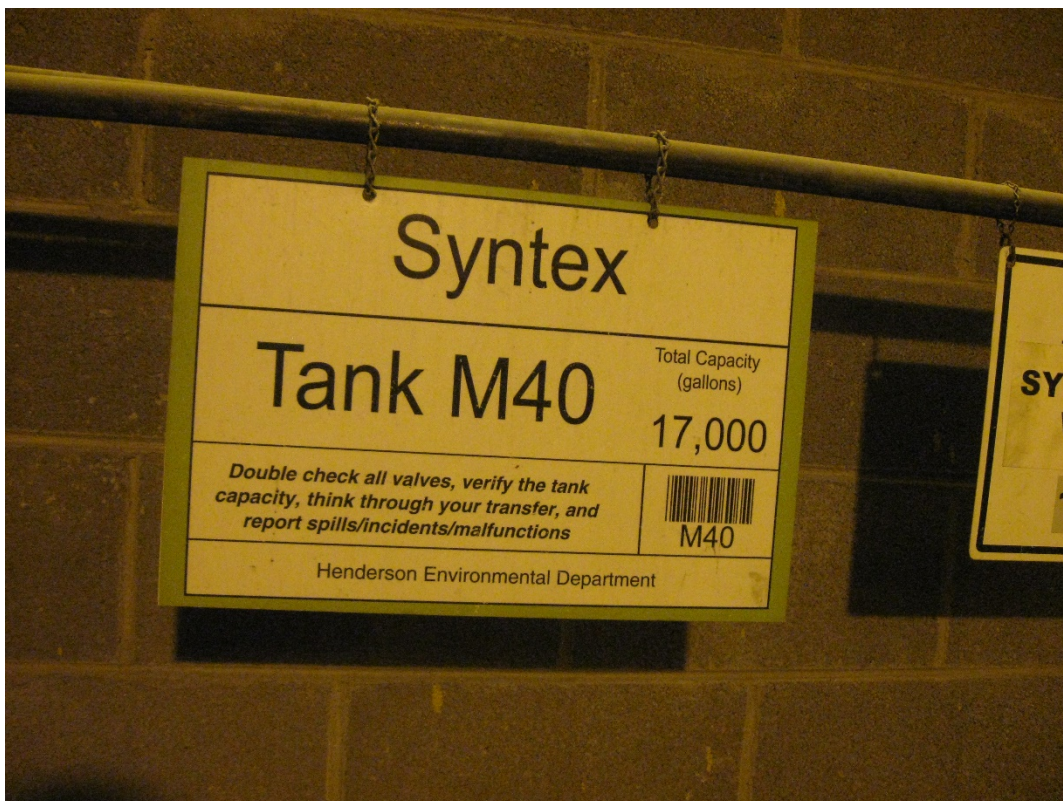
5. Nokes Building - phosphorus pentasulfide tote storage.



6. Nokes mixing tank.



7. Sodium Lauryl Sulfate Storage.



8. Signage adjacent to Syntex Storage tank.



9. Signage adjacent to Pine Oil Storage tank.



10. Absorbent pads at base of Pine Oil Storage tank.



11. Flotation Chemical Storage Area.



12. Lime Slaker silo.