




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: Climax Mine	MINE/PROSPECTING ID#: M-1977-493	MINERAL: Molybdenum	COUNTY: Lake, Summit
INSPECTION TYPE: Monitoring	INSPECTOR(S): Dustin Czaplá	INSP. DATE: September 22, 2022	INSP. TIME: 13:00
OPERATOR: Climax Molybdenum Company	OPERATOR REPRESENTATIVE: Eric Detmer	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$91,011,850.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: September 27, 2022	

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>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</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>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

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

OBSERVATIONS

This inspection was conducted as part of the Division of Reclamation, Mining and Safety's (Division) normal monitoring program. Eric Detmer guided DRMS for the inspection.

The inspection focused on the following areas:

- Robinson TSF and 2 Dam
- Tenmile TSF and 3 Dam
- Mayflower TSF and 5 Dam
- North 40 and McNulty OSF's
- Molybdenum Removal Water Treatment Plant

Robinson TSF and 2 Dam

The Robinson TSF and pond are an EPF and function as the primary process water storage facility for the site. The reservoir stores process water that is collected from the Tenmile and Mayflower TSFs and delivered through the Tenmile Tunnel. Water collected from the Tenmile TSF is decanted through the Tenmile Decant to the Tenmile Tunnel and water collected from the Mayflower TSF is pumped by the Mayflower barge system to the Tenmile Tunnel. Robinson Pond also collects seepwater and toe drain discharge from 1 Dam as well as seepwater pumped from the Robinson Dam and 4 Dam seepage collection systems. The reservoir primarily contains industrial process water, TSF seepwater and 4 Dam seepwater, along with unintercepted storm water from the surrounding area and overflow from Chalk Mountain Reservoir. 2 Dam is partially inundated by the upstream portion of the Tenmile TSF in the Tenmile Creek drainage. The dam is well vegetated and appears stable. The Robinson TSF has been capped with a rock cover and most of the surface reclaimed. Vegetation is becoming well established. No problems were noted in this area.



Robinson Pond



Robinson Pond



2 Dam

Tenmile TSF and 3 Dam

The Tenmile TSF and 3 Dam are an EPF. The TSF contains acid-generating material. Mill tailing is delivered to the TSF through the tailings delivery line. A water pool is maintained at the upstream end of the Tenmile TSF for process water storage, storm water management, and as the first stage in the water treatment system. Seepage from 3 Dam is routed to a collection pond and pumped back by vertical turbine pumps to the Sludge Densification Plant or diverted to the water pool on the Mayflower TSF. The pumping system is located within the 3 Dam Pump Station below the Tenmile TSF. No problems were noted in this area.



Tenmile TSF



Tenmile TSF



3 Dam

Mayflower TSF and 5 Dam

The Mayflower TSF and 5 Dam are the last downstream TSF in the Tenmile Creek Watershed. The TSF contains acid-generating material. To prevent dam failure, the Mayflower TSF includes an emergency flood bypass tunnel. Along with tailings storage, the Mayflower TSF also provides containment of contaminated materials or designated chemicals that might be accidentally released up-gradient of the TSF. Seepage from 5 Dam is routed to concrete ponds. Collected seepage is pumped back by vertical turbine pumps to the 3 Dam Pump Station or the water pool on the Mayflower TSF. The 5 Dam seepwater pumping system is located within the Mayflower Pump Station below the TSF. No problems were noted in this area.



Mayflower TSF



5 Dam



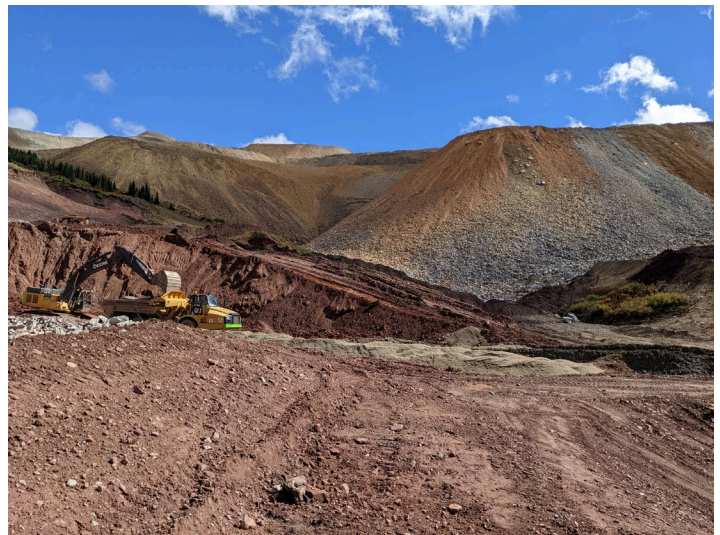
Concreted pond below 5 Dam

North 40 and McNulty OSF's

The North 40 is located on the south side of the McNulty OSF. The overburden materials excavated from the pit are trucked to the OSFs. The overburden consists mostly of igneous and metamorphic rock, which is either unmineralized or contains uneconomical mineralization. Sedimentary rock from the Minturn Formation makes up a lesser part of the overburden. Low grade ore is stockpiled on top of the south portion of the North 40 for processing near the end of mine operations. Overburden placement on the McNulty OSF is currently active. During mining OSF overall slopes are not to exceed 2.4H:1V. Work was occurring in the McNulty expansion area. Topsoil is being salvaged and stockpiled at the base of the OSF area. Underdrains were being installed. No problems were noted in this area.



McNulty OSF



Underdrains being installed in McNulty expansion area



Topsoil being salvaged from the slope in the McNulty expansion area



Topsoil stockpiled at base of McNulty expansion area

Molybdenum Removal Water Treatment Plant

Plans to construct the Molybdenum Removal Water Treatment Plant were approved through TR34 in May 2022. The Operator's contractor has broken ground on the project, preparing the site for laying the foundation. No problems were noted in this area.



MRWTP area

No problems or violations were noted during this inspection.

Responses to this inspection report should be directed to Dustin Czapla at the Division of Reclamation, Mining and Safety, 1313 Sherman Street Room 215, Denver, Colorado, 80203, phone number (303) 866-3567, ext. 8188.

Inspection Contact Address

Eric Detmer
Climax Molybdenum Company
Highway 91, Fremont Pass
Climax, CO 80429