




**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.

<b>MINE NAME:</b> Henderson Mine	<b>MINE/PROSPECTING ID#:</b> M-1977-342	<b>MINERAL:</b> Molybdenum	<b>COUNTY:</b> Clear Creek, Grand
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Cloudy	<b>INSP. DATE:</b> May 19, 2023	<b>INSP. TIME:</b> 10:00
<b>OPERATOR:</b> Climax Molybdenum Company	<b>OPERATOR REPRESENTATIVE:</b> Geoff Niggeler	<b>TYPE OF OPERATION:</b> 112d-3 - Designated Mining Operation	
<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b>	<b>BOND AMOUNT:</b> \$135,204,778.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>INSPECTOR(S):</b> Brock Bowles Peter Hays	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> June 7, 2023	

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

## **OBSERVATIONS**

This inspection was conducted by Brock Bowles and Peter Hays of the Division of Reclamation, Mining and Safety (Division). Geoff Niggeler of Climax Molybdenum- Henderson Operations (Henderson) was present for the inspection. The Henderson Mill is located 15 miles south of Parshall in Grand County. This site is a 112d-3 Designated Mining Operation (DMO) permitted for 11,877.5 acres. At the time of the inspection it was warm, cloudy, with a mix of sun and rain showers. The ground was damp from all the recent rains.

The Storm Water Management Plan for the Mill was updated in April 2020. The plan identifies potential pollution sources from the mill operation and the associated conveyor system. The plan provides guidelines for best management practices which are designed to minimize the likelihood of pollutants being carried off through storm water discharges. This inspection looked at some of the BMPs installed along the conveyor corridor. The inspection was cut short because of lightning protocols implemented by Henderson.

OF-M23 was impounding water. The berm, rock dam and waddle were in good condition. The water was being filtered through the waddle and discharging as designed.

OF-M31 was not impounding water. The roadside berm was in good condition directing water to the outfall. The rock dam was in good condition. The straw waddles are in need of repair (photo 1).

OF-M19 was impounding water and in good working order. The berm, rock dam and waddle were in good condition. The water was being filtered through the waddle and discharging as designed (photo 2).

OF-M5 is a two part system. The upper part treats water from the main haul road. Water from the haul road is directed to a series of straw waddles and rock-filled gabion cages, which were both in good condition (photo 3). The water was pooled in front of the waddles, filtered through the waddles and discharged as designed into the channel below. The channel below the gabion cages directs the water from the upper conveyor access road to a culvert under the main haul road. The lower channel was full of sediment and the culvert inlet was nearly clogged. The inlet side of the culvert needs to be cleaned and all sediment control structures need to be re-established.

OF-M6 and OF-M12 are along the haul road. Both were impounding water. The berms, rock dams and waddles were in good condition.

OF-M7 is along the haul road. It was not impounding water. The berms, rock dam and waddles were in good condition. The outfall is almost completely full of sediment and needs to be cleaned (photo 4).

Vegetation test plots were installed on the north end of the tailings pile (photo 5). The purpose of the plots are to determine the best reclamation methods for reclaiming the tailings pile. The test plots were seeded last fall and the vegetation was just starting to sprout on the plots.



## PHOTOGRAPHS



Photo 1 – Outfall OF-M31



Photo 2 – OF-M19





Photo 3 – OF-M5- water on left from haul road. Water from bottom of photo from conveyor access road



Photo 4 – OF-M7 needs cleaning





Photo 5 – Vegetation test plots on north end of tailings pile

**Inspection Contact Address**

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