



**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><br>Henderson Mine                 | <b>MINE/PROSPECTING ID#:</b><br>M-1977-342                                                                         | <b>MINERAL:</b><br>Molybdenum                                     | <b>COUNTY:</b><br>Clear Creek |
| <b>INSPECTION TYPE:</b><br>Monitoring               | <b>WEATHER:</b> Clear                                                                                              | <b>INSP. DATE:</b><br>May 12, 2025                                | <b>INSP. TIME:</b><br>09:00   |
| <b>OPERATOR:</b><br>Climax Molybdenum Company       | <b>OPERATOR REPRESENTATIVE:</b><br>Miguel Hamarat and Ron Hickman                                                  | <b>TYPE OF OPERATION:</b><br>112d-3 - Designated Mining Operation |                               |
| <b>REASON FOR INSPECTION:</b><br>High Priority      | <b>BOND CALCULATION TYPE:</b><br>None                                                                              | <b>BOND AMOUNT:</b><br>\$271,566,513.00                           |                               |
| <b>DATE OF COMPLAINT:</b><br>NA                     | <b>POST INSP. CONTACTS:</b><br>None                                                                                | <b>JOINT INSP. AGENCY:</b><br>None                                |                               |
| <b>INSPECTOR(S):</b><br>Nikie Gagnon<br>Jared Ebert | <b>INSPECTOR'S SIGNATURE:</b><br> | <b>SIGNATURE DATE:</b><br>May 23, 2025                            |                               |

**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>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>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 in response to Rule 8.2.1 Emergency Notifications submitted to the Division within the past month. Nikie Gagnon and Jared Ebert of the Division of Reclamation, Mining and Safety (Division) conducted the inspection. Ron Hickman and Miguel Hamarat, representing the Climax Molybdenum Company (Operator/Henderson) accompanied the Division during 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 with a maximum affected area of 4,360 acres.

On April 28, 2025, Ron Hickman notified the Division via phone about the discovery of a pinhole leak in the tailings line adjacent to the Tailings Storage Facility (TSF) at the Henderson Mill and the corrective actions taken to contain the leak and divert the tailings to another outlet. On April 30, 2025, Mr. Hickman submitted a follow-up written report to the Division which included a description of the event and the measures implemented to repair the pipeline until it can be replaced over the summer.

On May 8, 2025, Ron Hickman notified the Division about an overflow in the lower seepage collection system below 3-Dam at the Henderson Mill and the corrective actions taken to contain the overflow and clean out the seepage collection vaults. On May 12, 2025, Mr. Hickman submitted a follow-up written report to the Division which included a description of the event and the preventive maintenance procedures that will be implemented to rectify the condition.

These notifications were submitted in compliance with Rules 8.2.1, 8.2.2, and 8.2.3.

The Division followed up by conducting an inspection of the two Environmental Protection Facilities.

### **Mill EPR 1.3 – Tailings Delivery System**

During the inspection, the Division observed a section of 42" HDPE pipeline that conveys tailings slurry from the Mill to the TSF. The leak occurred at a joint where two sections of HDPE pipeline are fused together. Mr. Hickman informed the Division that approximately 200 gallons of slurry leaked from the pipeline over the course of 30 minutes. The tailings slurry was rerouted to the No. 1 Cutout and the pipe was repaired using a metal band (Photos 1-3). The spilled tailings slurry around the pipeline will be placed into the tailings impoundment as practicable.

The Operator explained the cause of the leak was likely scouring at the joint. In the steeper sections of HDPE, the fused bead around the connecting joints causes eddy erosion in the pipeline over time (Photo 4). The pipelines are inspected daily for leaks and ultrasonic NDT (non-destructive testing) is completed near flanges and fuses each year to evaluate wear and erosion. Based on the data collected, sections of pipeline are rotated to prevent scouring on one side and replaced as needed. According to the Operator, the section of pipeline where the leak occurred will be replaced during the summer of 2025. The metal band will remain in place until then.

### **Mill EPF 1.5 – Seep Water Collection and Return System**

The 3-Dam seepage collection and pumpback system was approved under Technical Revision 9 in 2000. The system includes an engineered spillway, French drains, and vaults which collect seep water and route it

through two 10-inch HDPE pipelines from the toe of 3-Dam to the main seepage collection system at the base of 1-Dam and Ute Park Pump station (Photos 1-14).

During this inspection, the Division observed the seepage collection area below 3-Dam (Photo 5). Mr. Hickman stated that during a routine inspection, staff observed seep water flowing from an overflow pipe (Photo 9). They determined that the pipeline was clogged between two cleanout ports, diverting flow to the overflow pipeline. Generators were brought in and used to pump water from the vault and the clogs were flushed out (Photo 7). Overflow water was contained in the seepage area below the dam. The Division did not observe any evidence of seep water flowing outside the immediate collection area. Mr. Hickman informed the Division that the pipelines clog due to precipitate formation in the lines and staff conduct routine inspections of the collection area daily and clean out the lines in the spring. Following the incident, Henderson implemented additional preventive maintenance measures which include entering the upper dosing vault in the spring for cleaning and they plan to evaluate the system for improvements that require less maintenance.

Henderson will evaluate the collection system for improvements that would require less maintenance and submit a revision if necessary. Additionally, two groundwater wells (MLGW-17 and MLGW-20) located downgradient of the seepage collection area were observed during the inspection. Henderson monitors the groundwater for any evidence of seepage reaching the wells and submits a groundwater report to the Division annually.

While on site, the Division observed the north end of 1-Dam and the placement of Coherex for dust suppression (Photo 15), a short section of the Ultimate Canal adjacent to the dam where a pipeline is proposed (Photo 16), and the excavation progress for the foundation of the Water Treatment Facility (Photo 17)

This concludes the Division's report. A subset of the photographs taken during inspection are attached. Any questions or comments regarding this inspection report should be forwarded to Nikie Gagnon at the Colorado Division of Reclamation, Mining and Safety at 720-527-1640, or email at [nikie.gagnon@state.co.us](mailto:nikie.gagnon@state.co.us).

**PHOTOGRAPHS**



Photo 1: Looking at a section of the HDPE tailings delivery line where the leak occurred. A metal banded clamp was used to repair the pipe.



Photo 2: View looking northeast at the Tailings Delivery line, adjacent access road, and beginning of 3-Dam. The banded section is where the leak occurred (red arrow). Tailings flowed along the access road and the spill was contained in this area.



Photo 3: Looking at the area where the spilled tailings slurry accumulated when it leaked out of the HDPE pipe.



Photo 4: Connecting joint along the HDPE tailings line. Over time, the pipe tends to scour at these joints, especially in steeper sections.



Photo 5: Looking up at the seepwater collection area below 3-Dam. French drains (red arrows) collect seep water and funnel it to the collection system vaults to the pipelines.



Photo 6: 3-Dam seepwater collection vault covers.



Photo 7: Generators observed in the area of the containment area.



Photo 8: Looking down at siphon valves within a seep water vault.



Photo 9: Looking at the overflow pipe for the seepage collection system below the engineered spillway.



Photo 10: Looking north down the seepage collection area below 3-Dam. Overflow water appeared to infiltrate into the ground here. No evidence of water leaving the permit area was observed.



Photo 11: Control station and pump house for the seepwater collection system below 3-Dam.



Photo 12: Looking down into the 3-Dam seepwater pump vault. Water is pumped to the main return pipeline.



Photo 13: Looking east at two groundwater wells (MLGW-17 and MLGW-20) downgradient from the seepwater collection area.



Photo 14: Looking at the outlet for the main seepwater return pipeline located at the base of 1-Dam near the Ute Park Pump station.



Photo 15: Looking west at the ultimate canal on the north end of the TSF where a pipeline is proposed to be installed.



Photo 16: Looking south across the Tailings Storage Facility from the north end of 1-Dam. The tire tracks are associated with the use of Coherex for dust suppression which was recently spread across the tailings deposition area.



Photo 17: Standing on a ledge along the north side of the Mill looking down at the excavation work for the foundation of the future Water Treatment Plant.



Figure 1: Google Earth image depicting the location of the two emergency notification events near 3-Dam.

**Inspection Contact Address**

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