COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

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):** Lucas West	**INSP. DATE:** August 8, 2022	**INSP. TIME:** 11:00
OPERATOR: Climax Molybdenum Company	**OPERATOR REPRESENTATIVE:** Meagan Graham, Paul Weber	**TYPE OF OPERATION:** 112d-3 - Designated Mining Operation	

REASON FOR INSPECTION: High Priority	**BOND CALCULATION TYPE:** None	**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:** August 12, 2022

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM/POSSIBLE VIOLATION: Problem: A failure of infrastructure resulting in loss of containment of untreated waters occurred. Specifically, a coupler failed on an ancillary line to the 5 Dam Tailings seepage return line resulting in an approximately 2,000 gallon spill of untreated waters into Tenmile Creek. The spill was immediately reported to CDPHE and the Division and promptly repaired. Rapid water quality analytics were performed at the time of the spill, and a full sample was taken at the point of compliance sampling location. Immediate results suggest no water quality standards were violated and that no continued impacts are expected. The failure occurred in an area with inadequate Secondary Containment of an Environmental Protection Facility.

CORRECTIVE ACTIONS: The Operator shall, within 60 days of the date of this report, submit a written evaluation of the failure, steps being taken to mitigate potential future failures in the area and the full water quality results from the sample taken at the time of the event. The submittal should also include an evaluation of the secondary containment devices in the area of the failure. If new additions or updates to the secondary containment features are required, the Operator shall address those changes through a permit revision. The evaluation and determination of need for a permit revision shall be submitted to the Division no later than Tuesday October 11, 2022.

CORRECTIVE ACTION DUE DATE: 10/11/22

OBSERVATIONS

This inspection was conducted in response to a Spill Notification received by the Division of Reclamation, Mining and Safety. On Friday, August 5 at 14:03, the Operator provided emergency notification to the Division, via telephone, of failure of an Environmental Protection Facility (EPF) pursuant to Rules 8.1 (b) and 8.2.1 (a), within 24 hours of identifying the failure. The Operator also provided notice to the Colorado Department of Public Health and Environment (CDPHE) on August 5 at 14:04. CDPHE forwarded the notice to the Division at 17:17. The report detailed a spill of approximately 2,000 gallons of tailings seepage water from the 5 Dam Seepage Return Line that occurred in an area with inadequate secondary containment resulting in the spill entering Tenmile Creek. The notice through the Colorado Environmental Spills or Release Reporting Form satisfies the Emergency Response Notification Requirements in accordance with Hard Rock and Metals Mining Rule 8. The spill was of finite volume and was immediately repaired. Five Photos accompany this report to illustrate the site conditions at the time of the inspection.

In addition to the inspector and Operator Representative listed on page one of this report, Reed Bennetts was present for the inspection. Reed was the responding party to the event and along with his team, completed the necessary repairs. The source of the spill was a coupler on the PIG Line attached to the 5 Dam seepage return line, located adjacent to the 5 Dam Seep Water Pump Station. The PIG line is used to send an apparatus through the Seepage Return line, so it is an ancillary line to the Return Line. The apparent cause of the failure was a corroded coupler that failed as seen in Photo One. Once the failure occurred the seepage water made a surface expression and flowed towards the 5 Dam Clear Water Emergency Decant Pond. The pond can be seen in Photo Two. The pond consists of a spillway with 4 culverts leading into Tenmile Creek. The culverts and discharge point can be seen in Photos Three and Four. As stated previously the spill was caught almost immediately, and was of finite volume. No visual evidence of impairment or environmental damage was observed at the discharge point into Tenmile Creek. Immediately following the spill, the line was isolated and pumps shut down in order to allow the crew to make the necessary repairs by replacing the failed coupler. The repairs were made the day of the event, and the area was backfilled and graded. The repair area can be seen in Photo Five. At the time of the event field pH was taken of the spilled waters. The pH was 7.7. Also, a rapid sample was analyzed by the Operator's laboratory at the Property Discharge Water Treatment Plant, specifically for manganese, the primary constituent of concern. The result from that test was 0.3 mg/l, which is below the applicable water quality standard. A full sample was taken at the Point of Compliance Surface Water Sampling Location and the results from that analysis are pending.

Though immediate action was taken and the problem has been mitigated, the event has been cited as a Problem as it resulted in loss of containment of untreated waters. The Operator shall, within 60 days of the date of this report, submit a written evaluation of the failure, steps being taken to mitigate potential future failures in the area and the full water quality results from the sample taken at the time of the event. The submittal should also include an evaluation of the secondary containment devices in the area of the failure. If new additions or updates to the secondary containment features are required, the Operator shall address those changes through a permit revision. The evaluation and determination of need for a permit revision shall be submitted to the Division no later than Tuesday October 11, 2022.

PHOTOGRAPHS

Photo One: View east, showing a close up view of the filed component in the PIG Line, which attaches to the 5 Dam Seepage Return Line. The failed coupler is attributed to the fact that the part should have been stainless steel, however was not and corroded over time.

Photo Two: View northeast, showing the 5 Dam Clear Pond Emergency Decant Pond that the spill reported to.

Photo Three: View south, showing the interior of the Emergency Decant Pond and it's associated culverts that discharge directly to Ten Mile Creek.

Photo Four: View east, showing Ten Mile Creek immediately downstream of the culverts outfall. No visual evidence of impairment was observed at the time of the inspection.

Photo Five: View east, showing the regraded area where the repairs were made. The repairs were immediate, and the grading was adjusted so any possible future spills will report to the 5 Dam Clear Pond.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

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

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

Inspection Contact Address
Diana Kelts
Climax Molybdenum Company
Highway 91, Fremont Pass
Climax, CO 80429

CC: Dustin Czapla, DRMS
Travis Marshall, DRMS
Russ Means, DRMS