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.**

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| **MINE NAME:**<br>Climax Mine | **MINE/PROSPECTING ID#:**<br>M-1977-493 | **MINERAL:**<br>Molybdenum | **COUNTY:**<br>Lake, Summit |
| **INSPECTION TYPE:**<br>Monitoring | **WEATHER:**<br>Clear | **INSP. DATE:**<br>December 12, 2024 | **INSP. TIME:**<br>09:45 |
| **OPERATOR:**<br>Climax Molybdenum Company, Climax Mine | **OPERATOR REPRESENTATIVE:**<br>Alex Ungers<br>Kayla Moden | **TYPE OF OPERATION:**<br>112d-3 - Designated Mining Operation | |
| **REASON FOR INSPECTION:**<br>Normal I&E Program | **BOND CALCULATION TYPE:**<br>None | **BOND AMOUNT:**<br>$91,011,850.00 | |
| **DATE OF COMPLAINT:**<br>NA | **POST INSP. CONTACTS:**<br>DRMS | **JOINT INSP. AGENCY:**<br>None | |
| **INSPECTOR(S):**<br>Amy Yeldell | **INSPECTOR'S SIGNATURE:**<br>Amy Yeldell | **SIGNATURE DATE:**<br>December 30, 2024 | |

## 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.**

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

**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 Colorado Division of Reclamation, Mining and Safety (Division) normal monitoring program. Climax Mine is a 112d-3 Molybdenum mine and milling operation located in Summit, Eagle and Lake County and is accessed from Colorado State Highway 91. The site consists of 14,000 permitted acres, of which approximately 8,000 acres have been affected. The Division currently holds $284,783,656.00 in Financial Warranty for the site. Alex Ungers and Kayla Moden represented Climax Molybdenum Company. Amy Yeldell represented the Division.

Division staff first checked in at the guard station at the main gates located on the east side of HWY 91. The weather was clear and breezy during the inspection. The entire site was covered in snow. Roads were well maintained and the site was completely accessible.

The following areas were inspected/discussed: 5 Dam Seepwater Collection System, Permitting updates, PDWTP and Progress on new Molybdenum building (MRTP).

PDWTP-Sludge Cells
Half of the sludge that has been deposited in the PDWTP sludge cell was shipped off site to the landfill in Golden. This material required off-site disposal due to t-norm exceedances. It is anticipated that the remaining amount will be shipped off in 2025. Then Climax will utilize the two cells and alternate annually where they deposit in one cell and ship out of the other. Then the next year they alternate. At the time of the inspection the cells were largely covered in snow and were just indentations.

5 Dam Seepwater Collection System TR-36
Completed building was observed. The pump operates off of a high-level alarm. Additionally, there are two inspections a day, one per shift to ensure all systems are functioning correctly. The discharge pipe that the pumped water flows through and into the clear pond was observed. The pipe is insulated and located beneath the road. No water was observed discharging at the time of the inspection but according to Mr. Ungers they have observed it operating intermittently meaning the system is functional. Photos 1-4

PDWTP-MRTP
The new Moly building is nearly complete. The Ferric Sulfide (FeSo) mix tank located within the add-on Moly building. It takes FeSo in powder form from the silos outside and mixes it with the effluent water. There are two large Mix tanks located within the building. The FeSo works by dropping the pH of the water to drop out the Moly. The flocculant storage tanks were also observed. Piping was being coated (painted) during the inspection. All containments were dry. A smaller tank within the building consolidates the Moly Sludge before its transported to the Moly Sludge Cell TR-38. Photos 5 and 6.

The clarifiers had some potable clean water in them as they were being tested. These clarifies function the same as the other PDWTP clarifiers, sludges settle to the bottom and treated water flows over the top. Two agitators 'stir' the water to help mix the water. Photos 7 and 8.

PDWTP - Main
Observed were the potable clean water and raw water tanks. In floor sump systems were operating as designed. The filter press has a new awning over it. At the time of the inspection the filter press was not being utilized, sludges were transferred to the sludge cells for final dewatering. Once other construction activities slow Climax may revisit utilizing the filter press. The Lime slurry mixer tank hydrates powder lime stored in the silo outside. The mixer tanks now get bypassed. Previously effluent water entered the PDWTP at this location. Now

water goes to the Moly room first. There is a closed valve that diverts water to the Moly building. The water once treated in the moly room then is used to hydrate the lime, adjust the pH. The Sludge recycle tank holds sludges to allow them to continue to thicken until a desired density then the material goes to the waste tank and is periodically transferred to the sludge cell prior to being shipped off site. Photos 9-11.

Thickeners were observed operating. This is the primary location that flocculants are added and can be dosed on demand. The flocculant is piped to the thickeners from the main building where they are stored and mixed. Photo 12.

PDWTP-Filter Building

From the thickeners water goes to one of the three filters. Water is top fed into the quadrant tanks. The bottom of the tank is a sand medium that the water filters through before exiting. Periodically the sand is backwashed. Mr. Ungers indicated that the sand medium has a 10 yr shelf life. It was recently tested since it's near the 10 year mark and it continues to function as designed. The sand will likely be replaced in the next year or so. At the time of the inspection filter A was not running.

Recently the acid tank was cleaned out. Periodically the system would gum up and needed to be serviced. The excess acid that was previously in the acid room tank is located in secondary containment totes near the dosing location. Once all of the old product is used then Climax will go back to using the acid room and delivery line system. pH is the only real-time tracker for water. If water fails it gets auto diverted back into Mayflower rather than being discharged into Tenmile. Miscellaneous oils were observed within secondary containment. Overall the building appear well maintained. Photos 13-15

Availability Of Records/Permitting Updates:

TR-36: complete just need to submit red-lines for final certification from DRMS
TR-37: Bond is on its way and has been received by the Division-now accepted by DRMS
TR-38: Will send in as-builts of the moly sludge cell. Construction is complete but may do some additional modifications, anticipated to close out in Spring 2025.
TR-39: anticipated by end of year. Will update EPP and Submit WQMP (water quality monitoring plan) for all sample locations
TR-40: Pit dewatering system (EPF) will be a part of the life of mine plan and re-evaluated for reclamation post-mining.

Backfilling and Grading:

All contouring associated with TR-36 appears to be complete.

Hydrologic Balance/ Water Treatment:

All aspects of the PDWTP appeared to be functioning as designed.

Roads:

Roads were well maintained despite snow cover and the entire site was accessible.

Subsidence:

No slides or damages were observed.

No Problems or Possible Violations were identified during this inspection.
Responses to this inspection report should be directed to: Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd Ave, Denver CO 80216. Direct contact can be made by phone at 970-210-1272 or via email at amy.yeldell@state.co.us

**Inspection Contact Address**

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Highway 91, Fremont Pass
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CC:
Travis Marshall, Senior EPS, Grand Junction DRMS
Dustin Czapla, DRMS
Todd Jesse, DRMS
Eric Detmer, Climax

## PHOTOGRAPHS

Photo 1: 5 Dam Seepwater Collection System superstructure.

Photo 2: Pump located within the 5 Dam Seepwater Collection System


Photo 3: New cutoff wall and visual inspection point from within the 5 Dam Seepwater Collection System

Photo 4: Discharge pump into the clear pond from the 5 Dam Seepwater Collection System

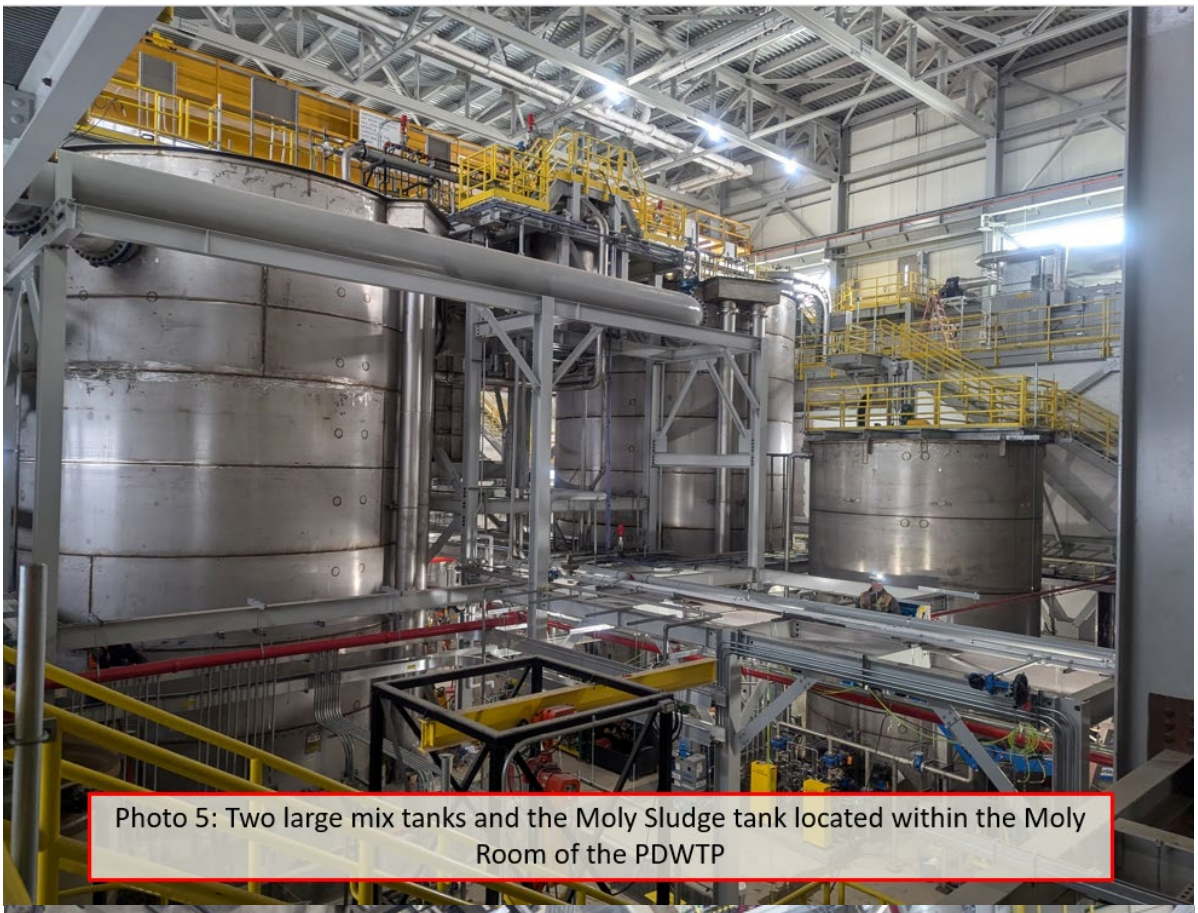

Photo 5: Two large mix tanks and the Moly Sludge tank located within the Moly Room of the PDWTP

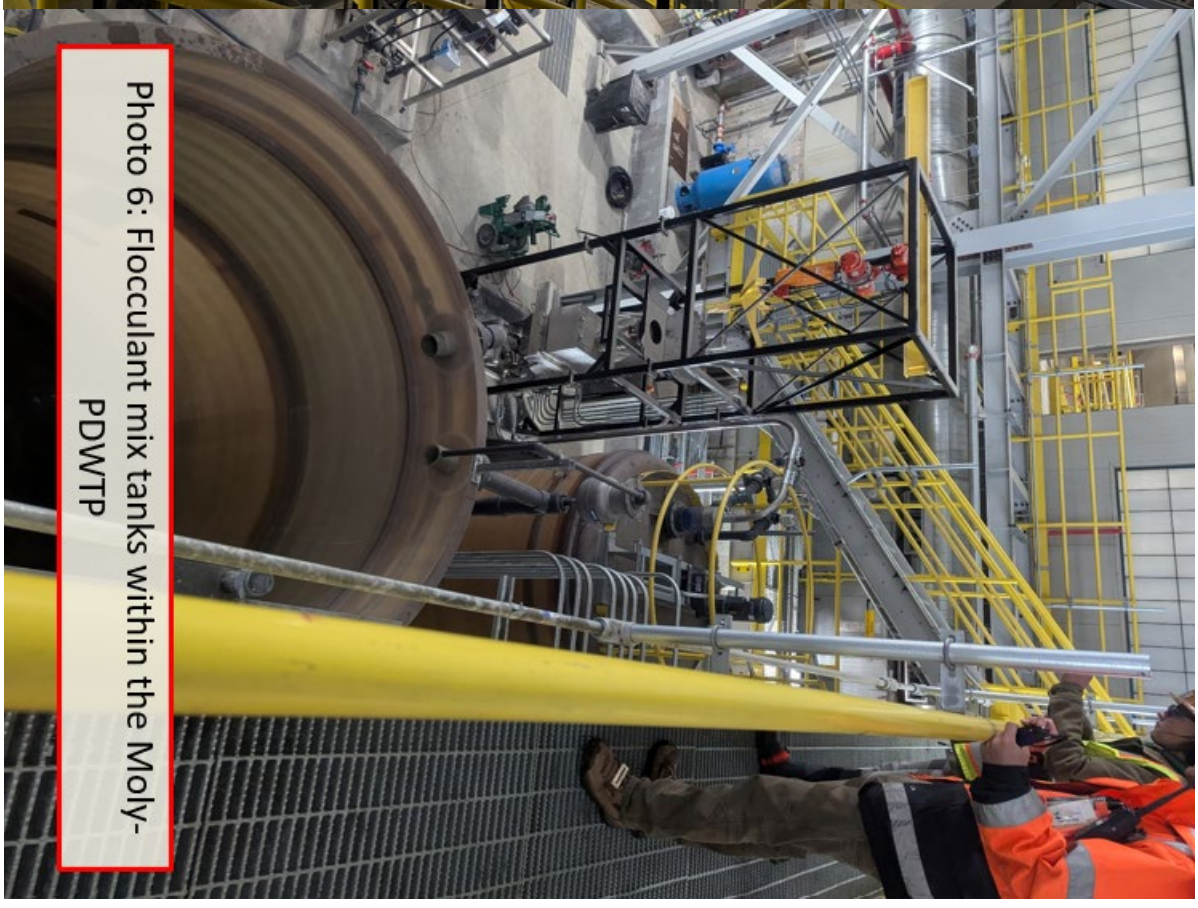

Photo 6: Flocculant mix tanks within the Moly-PDWTP

Photo 7: Moly-PWDTP Thickener #1

Photo 8: Moly-PWDTP Thickener #2

Photo 9: Potable and raw water tanks

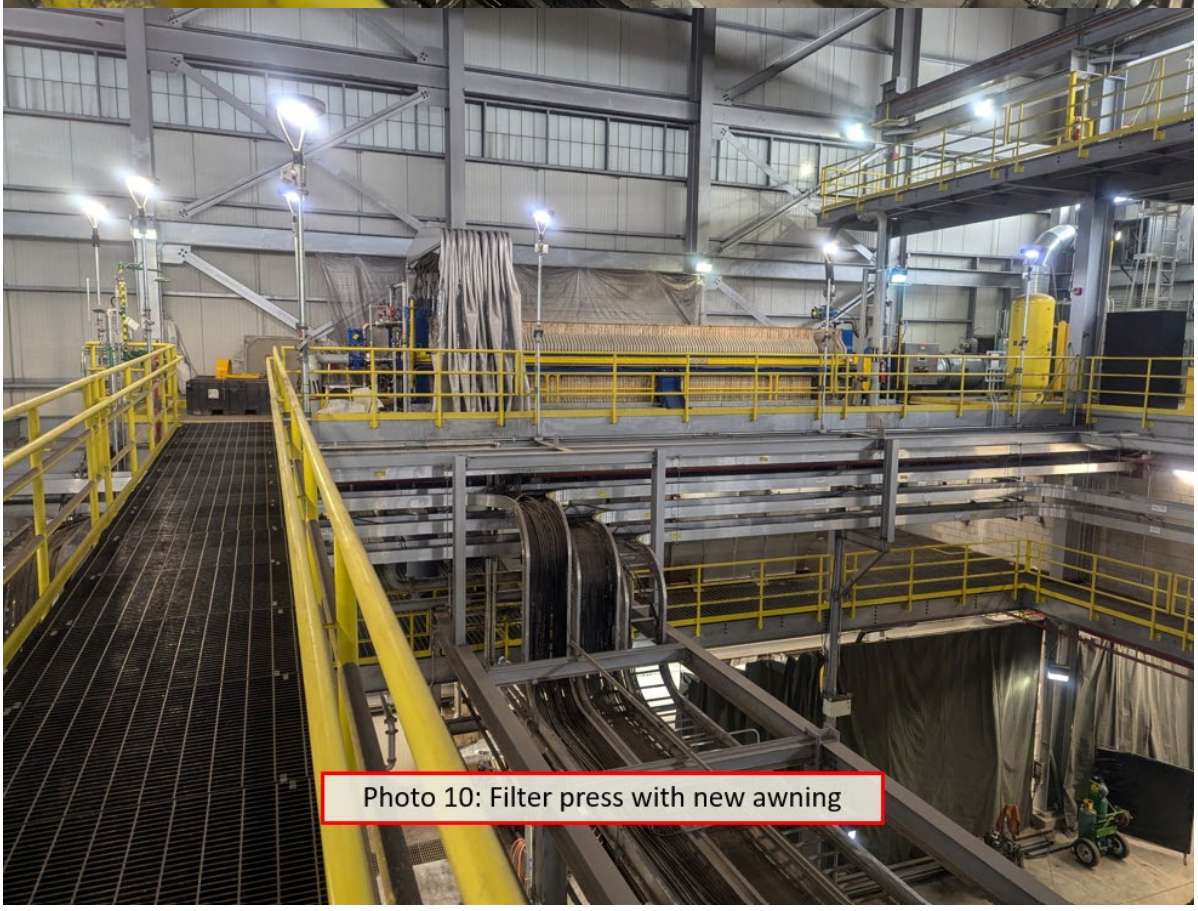

Photo 10: Filter press with new awning


Photo 11: Feed water bypass to Moly building, valved to slime mix tank within PDWTP closed.

Photo 12: Thickener of the PDWTP

Photo 13: Filter C

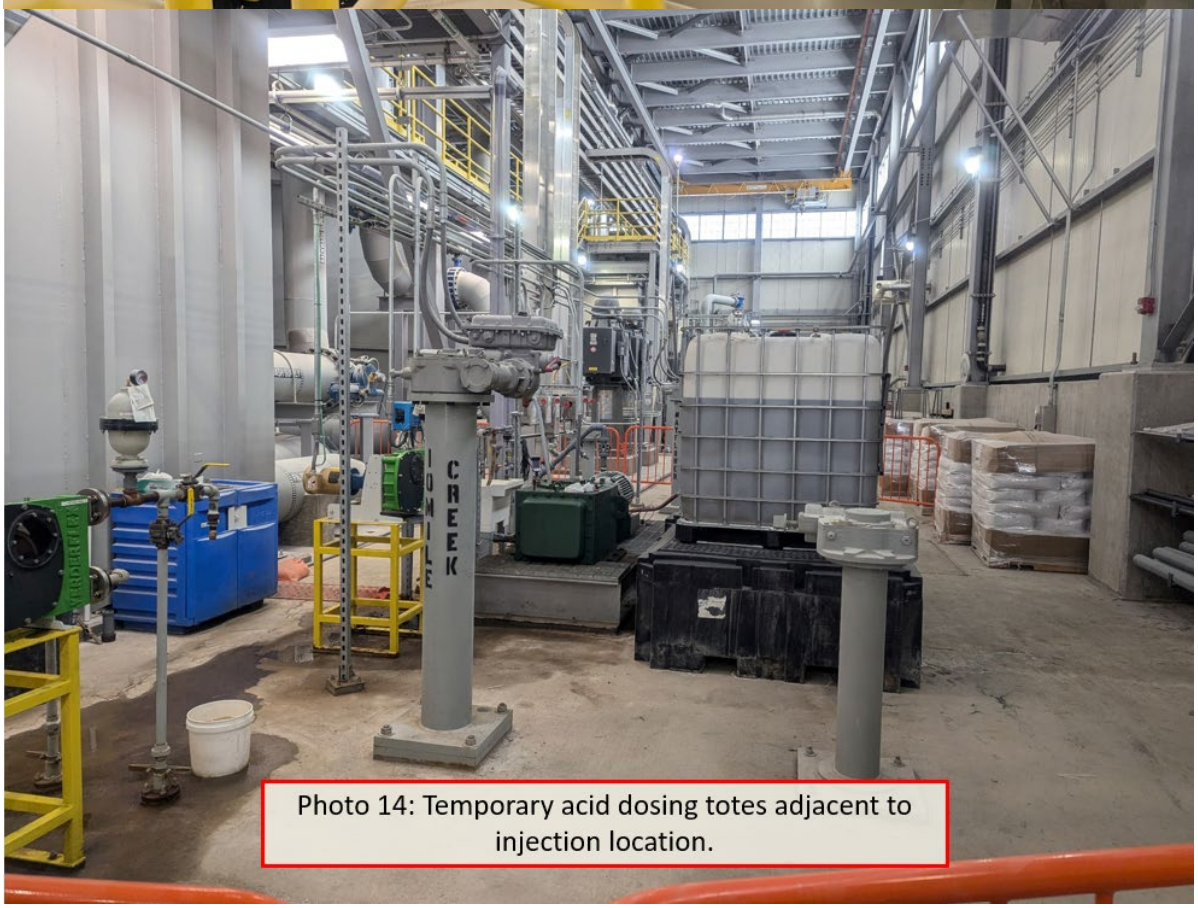


Photo 14: Temporary acid dosing totes adjacent to injection location.


Photo 15: Oils within the filter building located within containment