

# 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:	MINE/PROSPECTING ID#:	MINERAL:	COUNTY:
Climax Mine	M-1977-493	Molybdenum	Lake, Summit
<b>INSPECTION TYPE:</b>	WEATHER:	INSP. DATE:	INSP. TIME:
Monitoring	Clear	December 7, 2023	10:00
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	<b>TYPE OF OPERATION:</b>	
Climax Molybdenum Company	Alex Ungers	112d-3 - Designated Mining Operation	
<b>REASON FOR INSPECTION:</b>	<b>BOND CALCULATION TYPE:</b>	BOND AMOUNT:	
Normal I&E Program	None	\$91,011,850.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:	
NA	DRMS	None	
INSPECTOR(S):	INSPECTOR'S SIGNATURE:	SIGNATURE DATE:	
Amy Yeldell		December 15, 2023	
Todd Jesse	Amy Geldell		

## **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>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>Y</u>	(SF) PROCESSING FACILITIES Y	(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>Y</u>	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE <u>NA</u>	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS Y
(AT) ACID OR TOXIC MATERIALS <u>Y</u>	(OD) OFF-SITE DAMAGE <u>NA</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 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 \$91,011,850.00 in Financial Warranty for the site. Alex Ungers represented Climax Molybdenum Company and accompanied Amy Yeldell and Todd Jesse of the Division on the inspection.

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: Permitting updates, Sludge cells, Construction Updates for TR-36 (5-Dam Seep Secondary Containment), Water Quality, Progress on new Molybdenum building (MRTP).

#### Permitting Updates:

Climax is on track to submit bonding information to the Division by the April 1, 2023 deadline. On December 5, 2023 the Division had a video call with Climax staff and consultants to clarify expectations and information required. No additional questions were identified between the meeting and the inspection.

In the field Mr. Ungers pointed out to staff the proposed location for the MRTP (Moly Removal Treatment Plant) sludge cell(s). It is adjacent to the Clinton cut off. A new road will be required to access the cell. The MRTP will generate sludge material that will need to be deposited much like the PDWTP. This waste stream was tested and falls below the T-norm thresholds and therefore is eligible for on-site disposal according to CDPHE. Plans are nearly complete, and a Technical Revision request is imminent. Climax's goal is to begin construction of the cell(s) in summer of 2024.

# Mayflower Sludge Cells:

Located on the east side of the Mayflower TSF are the sludge cells (Photo One). These contain the dewatered solids from the PDWTP Thickeners. Recently CDPHE has changed the T-Norm rule making these sludges no longer eligible for on-site disposal. Climax has created two cells within the greater sludge cell. The northern cell contains waste from 2012-22 pre-T-Norm. This material is grandfathered in from registration. Mr. Ungers is working with CDPHE to determine if this material is also eligible for on-site disposal or if it will require removal. The southern cell is 2022 on and falls under the T-Norm Rules. Climax will periodically empty this cell by removing the solids from the site. Climax intends to use the same disposal processes as Henderson but they system has not yet been formally set up. The Division clarified that for bonding purposes we will need to know if the pre-T-Norm sludge can remain. For post-T-Norm, what is the maximum amount of sludge to be on site that could need to be removed.

## TR-36 Construction Updates:

The Division observed the area where three culverts have been plugged. This is associated with the Phase 3 inspection punch list of TR-36. Mr. Ungers explained that crews dug out around the culverts, capped them with cement then re-backfilled and contoured the drainage. Due to snow cover only the survey stakes were visible (Photo Two). Contouring verification should occur when the features are free of snow.

The Phase 1 inspection items are partially completed. 1) Demolition of inlet headwall on 120-inch dia. culvert has been completed. 2) Install cutoff structure is in progress, first pour was observed during the inspection. 3) Install wet well, has not yet commenced.

The Division observed the cofferdam in the drainage which holds water back to keep a dry working area. Any drainage is then piped through the culvert. The old cut-off wall is completely demoed and additional excavations have been made in preparation for its replacement. The new bottom portion of the wall has been poured. Staff could see forms and blanketed concrete that's being heated to aid in curing. See Photos Three to Six

Overall construction progress has been slower than anticipated. It is due to a combination of weather and job management. The contractor has since made adjustments to help keep the project on track. Climax will continue to notify the Division as key benchmarks are completed to help facilitate the incremental inspections.

## Water Quality:

Climax indicated that they are having water quality issues with GW-1. During times of low water, they are having too low of pH. There are lots of historical mining surrounding the sites so it may be geologically driven in times with less dilution. Regardless per the approved permit they have committed to staying above a pH of 6.5. Currently Climax is doing a root cause investigation to identify the sources or cause and brainstorm solutions. It was mentioned that the well was old (1940) so a potential mitigation measure maybe to drill a new paired well to validate results. Further discussion will be presented in their annual report.

#### Overview of progress on new Molybdenum building (MRTP):

The new molybdenum removal (MRTP) building (TR-34) is under construction. This is a supplementary process to Climax's existing Property Discharge Water Treatment Plant (PDWTP). Once online the raw water will first go into the Moly building, then water will go to the existing PDWTP building and finally the existing Metals Filter Building before discharge.

A crane and several crews were on site actively working on this new EPF. The steel frame is nearly complete and the metal siding is being applied. The foundation for the thickener tanks is currently being poured (Photo Seven). The building is slated to be online in the first quarter of 2025.

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 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

#### **Inspection Contact Address**

Alex Ungers Climax Molybdenum Company Highway 91, Fremont Pass Climax, CO 80429

CC: Travis Marshall, Senior EPS, Grand Junction DRMS Dustin Czapla, DRMS Lucas West, DRMS Todd Jesse, DRMS Alex Ungers, Climax

#### PERMIT #: M-1977-493 INSPECTOR'S INITIALS: ACY INSPECTION DATE: December 7, 2023

# **PHOTOGRAPHS**







