

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
INSPECTION TYPE:	WEATHER: Clear	INSP. DATE:	INSP. TIME:
Monitoring		October 17, 2022	14:15
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Climax Molybdenum Company	Diana Kelts	112d-3 - Designated Mining Operation	
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:	
Normal I&E Program		\$91,011,850.00	
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGE	NCY:
NA	None	None	
INSPECTOR(S):	INSPECTOR'S SIGNATURE:	SIGNATURE DAT	Е:
Lucas West	agan	October 24, 2022	

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>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES Y	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE N	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>Y</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 Y	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS <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 as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining and Safety. Climax is a 112d-3 Molybdenum mining and milling operation located primarily in Summit County. Diana Kelts accompanied the inspection and represented the Operator. The site consist of 14,000 permitted acres with approximately 8,000 acres of affected lands. The site is bisected by Colorado State Highway 91 and public access is controlled by a guard station at the main gates. The Division currently holds \$91,011,850.00 in Financial Warranty for the site. Eleven Photos accompany this report to illustrate the current site conditions.

This inspection was focused on the following areas:

- Mill Facility Secondary Containment Areas
- Sludge Densification Plant (SDP) and Secondary Containment
- Property Discharge Water Treatment Plant (PDWTP) and Chemical Storage and Transfer Areas

Mill Facility Secondary Containment Areas

The Mill Facility secondary containment is broken into three areas, the grinding circuit containment, the flotation circuit containment and tailings thickener containment. The grinding circuit containment area was observed and was actively being mucked out of dust and debris at the time of the inspection. Photo One shows the area with its active cleaning operations. The containment area has been volumetrically verified to be able to contain a catastrophic failure in the grinding circuit. The concrete floor area all drains to a separate sump, which after containment is pumped back into the circuit at the resumption of operations. The area is well kept, and no evidence of compromise was noted. The flotation circuit containment area was also observed. Separated by a concrete wall from the grinding circuit containment area, the flotation containment area acts in the very same way. The concrete floor is sloped to sumps which after containment can be recycled back into the system. The volumes of containment has been verified and the containment area was neat, well-kept and clean. Photos Two and Three show examples of the flotation circuit containment areas. Stored within the containment area are several IBC Totes of various non-hazardous reagents. All reagents stored in this area are orderly, labeled and well kept. No evidence of leaks or spills was noted from the reagent containers. Following the flow of materials, tailings are delivered to the Tailings Thickener within the Mill Building. The tailings thickener is contained by the thickener containment area which is the concrete structure around the thickener. The containment area showed no signs of compromise and has been volumetrically verified to contain a catastrophic failure. The Sump and containment area can be seen in Photos Four and Five. From the sump, material can either be recycled back into the system or in an emergency situation be fed directly to the tailings delivery line and out to the Mayflower Tailings Storage Facility. All areas of the thickener containment area are clean, well-kept and appear to be able to function as designed.

<u>SDP</u>

The Sludge Densification Plant (SDP) is a 2 part facility consisting of a lime storage and mixing facility, and the treatment facility. Both facilities are located adjacent to the Tenmile Tailings Storage Facility (TSF). The lime storage and mixing facility is the ancillary facility, referred to as the McNulty Lime Station and is used for storing large quantities of hydrated lime, where it is mixed with makeup water and fed to the SDP to be used in the treatment facilities. The lime slurry is directed to the SDP, where it is mixed with seepage water in a series of neutralization tanks. The neutralization tanks are large steel tanks set on concrete foundations with agitators and pumps to lower the pH. All tanks appeared to be in excellent condition. An example of the

tanks can be seen in Photo Six. Once the target pH is achieved a polymer flocculent is added to assist in metals precipitation and the slurry pumped to the clarifier. The polymer flocculent is stored and mixed for use in the plant. A small steel containment berm is located on the floor surrounding the tanks to contain minor spillage. No evidence of spillage was observed in that area. Within the SDP several locations are used for fuel and oil storage, as well as containing a backup generator station. All fuels and oils are stored properly with secondary containment, and the generator set is in good working condition. Additionally, a small tank of chlorine used in potable water treatment is stored within the SDP. The tank and all components are in excellent condition and no evidence of spillage was noted. Like the lime storage facility, secondary containment is achieved by way of a series of troughs and sumps. Greater secondary containment is achieved by way of a series of troughs and sumps. Greater secondary containment is achieved by its proximity to the Tenmile TSF meaning that any catastrophic failure would report directly to TSF. Throughout the SDP, the facility is well kept, clean, neat and organized. The SDP Sludge Cell was observed and noted to be at its lowest observed water level shown in Photo Seven. The waters have evaporated off allowing the sludge in the cell to begin drying out. The sludge, Cell and all embankments are in good condition.

Surrounding the SDP Sludge Cell is the Tenmile Tailings storage Facility. At the time of the inspection the water is being pumped from the TSF at the Tenmile Decant to create a smaller pool at the Southwest Corner. Due to the reduced water level, the Operator has begun importing cap material to begin contemporaneous reclamation of the surface of the TSF. The cap material is being imported and deposited in the Southeast corner of the facility. The plan is to continue the reclamation to the extent possible as the TSF water level is reduced. The capped area can be seen in Photo Eight.

<u>PDWTP</u>

The Property Discharge Water Treatment Plant is located near the most down gradient area of the permit area and houses the final water treatment facility prior to discharge. Similar to the SDP, the facility contains a lime storage area used for pH adjustment during water treatment operations. The interior of the PDWTP contains several tanks where lime is mixed creating a slurry, mixed with process water, has polymer added for precipitation, and sent to the clarifiers for polishing prior to discharge. All tanks, reactors and mixing facilities are in excellent condition, the main facility is very well kept, clean neat and organized. The main facility has a series of troughs leading to main sump for secondary containment. A view of the troughs and tanks can be seen in Photo Nine. Connected by an underground man-way, the filter building is located adjacent to the clarifier tanks. The filter building is in good condition and contains various chemicals used during the water treatment process. Most notable is sulfuric acid, used for pH adjustment. The sulfuric acid injection station can be seen in Photo Ten. Photo Eleven shows the sulfuric acid storage area which is its own separate room equipped with sump, spill kits and readily accessible PPE. The tank and sump are in excellent condition. Located just outside the filter building is the sulfuric acid loading station. The loading station is equipped with secondary containment for possible spills that may happen during the unloading process. The station is clear of debris, well-kept and appears to be in good operating condition.

All inspected areas were in excellent condition at the time of the inspection, no problems or possible violations were noted. All responses to this report should be directed to Lucas West at the Colorado Division of Reclamation, Mining and Safety at 1001 E 62nd Ave, Room 215, Denver CO 80216. Direct contact can be made at the Division's Grand Junction Field office, by phone at 303-866-3567 Ext. 8187 or by email at lucas.west@state.co.us.

PHOTOGRAPHS





the of the sumps that concets material and retains it to the system for processing.



Photo Four: View West, showing a portion of the Thickener Containment Area. This containment area is designed to capture material in the event of a spill from the Tailings thickener located in the Mill Building.



Photo Five: View East, showing the main sump located in the Thickener Containment Area. The sumps allow material to be recycled back in to the system, or in an extreme emergency, fed directly to the Tailings Delivery Line and out to the Tailings Storage Facilities.



Photo Six: Southeast, showing the tanks within the SDP as well as containment troughs that run through the center of the building. All tanks and troughs in the SDP are in excellent condition and appear to be functioning as designed.









Inspection Contact Address

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

CC: Travis Marshall, DRMS Dustin Czapla, DRMS