

**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:		MINE/PROSPECTING ID#:	MINERAL:	COUNTY:	
Schwartzwalder Mine		M-1977-300	Uranium	Jefferson	
<b>INSPECTION TYPE:</b>		INSPECTOR(S):	INSP. DATE:	INSP. TIME:	
Monitoring		Michael A. Cunningham	November 19, 2018	10:00	
OPERATOR:		<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:		
Colorado Legacy Land, LLC		Jim Harrington, Billy Ray	112d-2 - Designated Mining Operation		
<b>REASON FOR INSPECTION:</b>		BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program		None	\$8,900,000.00		
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA		None	None		
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:		
Clear	101 0.1		November 29, 2018		
	N	n y			

### **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 Y	(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 Y	(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>	(OD) OFF-SITE DAMAGE <u>N</u>	

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

### **OBSERVATIONS**

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Jim Harrington and Bill Ray were present on behalf of Colorado Legacy Land, LLC. The Schwartzwalder Mine is inspected quarterly; this inspection serves as the fourth quarter inspection of 2018.

#### Hydrologic Balance:

The treatment of groundwater continues to be the primary activity conducted at the Schwartzwalder Mine. The water treatment plant was shut down the previous week and the Operator anticipates the water treatment plant will remain off-line until the first week of January 2019. The mine pool was at 201' below the Steve Level, or 51' below the required elevation of 150'.

The Division is currently reviewing Technical Revision No. 27 (TR27) which addresses the relocation of the submersible pump from its current location within the Steve Adit. The relocation of the submersible pump to the Jeffrey Air Shaft will allow the pump to be placed at an approximate elevation of 410' below the Steve Adit and will allow for above ground maintenance and repair of the pump. In addition, TR27 addresses proposed changes to the groundwater sampling methods.

The Division inspected the cutoff wall and observed that all flows in Ralston Creek were being routed through the by-pass pipeline. The Division observed the by-pass pipeline had shifted onto the access road adjacent to the south waste rock pile. This is the second time the by-pass pipeline has shifted onto the access road, with the by-pass pipeline shifting in the same location each time. The Division did not observe any visible damage to the by-pass pipeline. Following the last time the by-pass pipeline moved, the Operator chained the pipe in place to prevent further movement. The Operator committed to moving the by-pass pipeline back to the north edge of the access road once temperatures were warm enough, so as to prevent damage to the pipeline. The Division recommends utilizing a different and more robust method to secure the pipeline.

#### Gen. Compliance With Mine Plan:

The Operator has continued to demolish and remove structures from the mine site. To date the Operator has removed the following structures from the site: former office trailer, concrete containment ponds, and steel tanks adjacent to the old water treatment plant (OWTP). The OWTP has been fully decommissioned and all equipment has been removed. During the inspection, the contractors were removing insulation from the building and they anticipated the structure would be demolished within several days following the inspection.

The north waste rock dump was visited during the inspection. The Division and the Operator discussed the stormwater diversion ditch approved under Technical Revision No. 23. The stormwater diversion ditch has not been installed and the current Operator is considering a change to the approved design. Potential options include utilizing a pipe to divert water off the waste rock pile, rather than an open channel. In addition, the Operator is exploring whether the ditch can be routed off the east side of the waste rock pile, rather the west side as currently approved. The waste rock pile and associated stormwater conveyances are considered to be Environmental Protection Facilities, any changes to the approved design must be submitted for review under the appropriate revision application.

The Division made observations at the gulch above the north waste rock pile; no water was flowing through the gulch at the time of the inspection. In addition, no standing water was observed on top of the waste rock pile and no signs of erosion were noted on the side slopes.

PERMIT #: M-1977-300 INSPECTOR'S INITIALS: MAC INSPECTION DATE: November 19, 2018

# **PHOTOGRAPHS**



<sup>1.</sup> Jeffrey Air Shaft.



2. Location of former concrete containment ponds, photo taken facing east.



3. Inside view of Old Water Treatment Plant.



4. Inside view of Old Water Treatment Plant.



5. Location of former steel tanks, adjacent to Old Water Treatment Plant.



6. Ralston Creek, upstream of cut-off wall.



7. Ralston Creek, downstream of cut-off wall.

Inspection Contact Address Jim Harrington Colorado Legacy Land, LLC 4601 DTC Blvd. - Suite 130 Denver, CO 80237

CC: Billy Ray, Colorado Legacy Land, LLC