

**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	June 29, 2017	09:00	
OPERATOR:		<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:		
Cotter Corporation		Steve Cohen, Bruce Nordquist	112d-2 - Designated Mining Operation		
<b>REASON FOR INSPECTION:</b>		BOND CALCULATION TYPE:	BOND AMOUNT:		
Normal I&E Program		None	\$4,339,003.39		
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:		
NA		None	None		
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:		
Clear	U	il C.L	July 17, 2017		

## **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 $\underline{Y}$	(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>N</u>	(SP) STORM WATER MGT PLAN <u>N</u>	(CI) COMPLETE INSP <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE <u>N</u>	(SC) EROSION/SEDIMENTATION <u>N</u>	(RS) RECL PLAN/COMP <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <u>N</u>	(ST) STIPULATIONS <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). Steve Cohen and Bruce Nordquist were present on behalf of Cotter Corporation; Billy Ray was present on behalf of Alexco Environmental. The Schwartzwalder Mine is inspected quarterly; this inspection serves as the second quarter inspection of 2017.

Currently, the primary activities occurring at the Schwartzwalder Mine are related to water treatment. Cotter received approval to an amendment of the Radioactive Materials License, which allowed the Ion Exchange (IX) columns to be moved from the old water treatment plant (OWTP) to the new water treatment plant (NWTP). There are four IX columns at the Schwartzwalder Mine, two IX columns have been moved to the NWTP and two remain in the OWTP. The two IX columns which are in the NWTP have been plumbed in and should be online by early July. One additional IX column will be moved to the NWTP and one IX column will be retained as a back-up. Currently all treated water was being processed through the Reverse Osmosis system. The mine pool continues to be pumped and treated and is currently 70' below the Steve Level Adit.

Cotter informed the Division United Power would be moving the electrical substation from its current location to the bench where the NWTP is situated within the next week. In addition, the Operator is in the process of hiring a surveyor to set up survey points for the gamma scanning grid which is a component of the alluvial valley excavation project. The Operator informed the Division that four timbers collapsed in the Steve Adit. The repair consisted of replacing the timbers and mucking out the broken rock. The Operator has conducted minor grading and rock support within the Minnesota Adit and has installed lights. This activity was conducted in preparation of final disposal of alluvial fill through the Minnesota Adit. Also, the Operator repaired a staircase in the Sunshine Adit.

The Division inspected the North and South Waste Rock Piles. Several areas of minor erosion were identified by the Operator during their internal stormwater inspection and these areas were visited during the inspection. The Division and the Operator discussed the continued monitoring of these areas as well as required repair work. All water in Ralston Creek was being diverted through the bypass line at the time of the inspection.

This concluded the inspection.

Inspection Contact Address Steve Cohen Cotter Corporation 7800 E. Dorado Place, Suite 210 Greenwood Village, CO 80111

CC: Wally Erickson, DRMS