

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:
Pitch Project	M-1977-004	Uranium and borrow	Saguache
		construction	
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Bob Oswald	September 5, 2013	09:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Homestake Mining Company	Dale Davis	112d-1 - Designated Mining Operation	
REASON FOR INSPECTION:	BOND CALCULATION TYPE:	BOND AMOUNT:	

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Normal I&E Program	None	\$2,291,000.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	U.S. Forest Service	None
WEATHER:	INSPECTOR'S SIGNATORE:	SIGNATURE DATE:
Clear	Dob Know	October 15, 2013

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

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

OBSERVATIONS

This was a routine inspection conducted by the Division as part of its monitoring of Hard Rock and Metals 112 DMO permits. Present during the inspection were the operator's representative named on page one, as well as Russ Means of DRMS and Julie Murphy of the state Attorney General's Office. The entrance gate to the permitted area was locked to prevent unauthorized access. The permit ID sign was posted near the gate.

The site is in one of the phases of final reclamation. However, the US Forest Service recently proceeded with an exchange of land ownership with the operator, so that the operator could obtain ownership of certain permitted lands where implementation of the full final reclamation was not possible before. This exchange will provide the ability to the operator to perform the required final reclamation, but first a technical revision to define the reclamation plan will be required, and further reclamation plan phases will commence. The permitted areas affected by the exchange are the non-patented claims located around the periphery of the patented claims, and particularly include the unstable slope and scarp above the east wall of the North Pit Lake. (See additional discussion below)

Tie Camp Creek Waste Dump. The dump slopes below the main access road are stable and well vegetated. An area of slumping several years ago on the lower slope has been repaired and the site continues to be monitored. The upper surface of the dump exhibits generally good revegetation, including the topsoil stockpile; the most robust species observed during this inspection is the sainfoin. There are a couple small areas on the top of the dump with thin vegetation. There is a very small patch of Scentless Chamomile (List B noxious weed species) that the operator is treating and monitoring. Elk have been grazing onsite during 2013.

South Pit. The slope surfaces are stable and becoming vegetated, though there is a bit of minor erosion at the southernmost end of the east wall. The riprapped channel along the bottom of the pit is in good condition. The piezometer/well locations are present and functional.

Main Building and Facilities Complex. The building is in good condition and secured. The diesel and gasoline fuel tanks were in the lined containment area; the liner looked fine, with no breaches and sufficient capacity. The equipment parked at the complex included flatbed trailer, wheeled loader, excavator, and buildozer.

North Pit Lake and Pinnacle Portal. The outflow was through the valve and culvert as designed. The operator measures the flow with a 90-degree V-notch weir installed immediately below the outlet culvert. The Pinnacle portal continues to discharge water, which is also measured through a V-notch weir. The discharge from the lake and Pinnacle workings report to a series of constructed wetland cells, which catch the sediment. The planted wetland plants, such as cattail, sedge, and senecio, are becoming well established, despite the short growing season at this elevation.

Indian Creek Dump. The Indian Creek Dump is extensive, and is located mainly above the elevation of the main facilities complex. It has remained fairly stable during the past few years, as the roads and lined ditches are requiring less maintenance and repair, and stormwater is controlled and conveyed well. The stormwater runoff from a large portion of the Indian Creek Dump collects and reports to one point on the north shore of the North Pit Lake. This runoff can carry a large amount of sediment. The operator stated that he would like to grade down a protruding point on the north side of the lake, to reduce drainage conveyance slopes and spread out the drainage volume. The fill generated by the grading would be used to backfill part of the lake.

The operator must not initiate this project without review and approval by the Division. Overall the revegetation of this part of the permit looks good, and this year the sainfoin is dominant, as noted elsewhere. The operator continues to plant seedling trees and shrubs and scatter lodgepole slash, but the prevalent elk continue to take a large toll on tree survival and growth. Piezometers continue to be monitored, and indicate that the depth to water under the dump remains consistent with depths from past years. There is still a small stockpile of sericite clay (+/- 300 cy) to be used to cap any radioactive waste materials (such as sediment from the sediment pond when it is decommissioned).

East Wall of North Pit Lake. Improvements were made in controlling run-on and drainage of seeps several years ago. Those areas of improvements have mostly become established with little need to maintain them. An area of uncontrolled drainage from upper Indian Creek, above the graded slope but possibly affected by unstable slope movement near the scarp, has recently become a maintenance issue. Concentrated runoff has gullied a portion of the east slope. The operator has begun addressing the issue by diverting some of the runoff to more stable ground and has installed straw bales and boulder riprap. This erosional feature must continue to be monitored and treated as allowed under the existing reclamation plan. If more extensive earthwork or mitigation becomes needed, the operator must inquire to this office regarding the need for a technical revision. The small areas of Canada thistle, which have not spread, continue to be monitored and treated and the names, application rates and dates of the herbicides used, and effectiveness, in the annual reports.)

Scarp Feature above East Wall. The scarp feature has existed and caused slope stability problems since the 1980s. Very little could be undertaken by the operator to improve drainage, close tension cracks, grade the surface or revegetate, due to not owning the land surface (as explained above). The headwall ranges from 10 to 50 feet tall, and runs for hundreds of feet in length, with deep cracks crossing the soil surface below the scarp. Mature lodgepole pine exists throughout the area, though many trees are down or leaning. Seedlings are growing in all openings. Discussion onsite included the operator's plan for ultimately stabilizing this part of the permitted area, possibly to include: cut large trees as needed, remove woody debris from the area to be graded, grade surface to drain in controlled and positive manner, divert upland drainage, install sediment control, and replant. Faces of competent rock may be left with benches below them, though safety fences may be needed above them. Equipment can access this area via the roads through levels of the the Indian Creek Dump as well as the forest road on the ridge above the east side of the permit. The plan will be detailed in the upcoming required revision to the permit.

Sediment Pond. The pond remains functional and cattails are growing well here also. A surface filter boom has been placed toward the upper end of the pond to catch initial sediment. The filter plant building is still present but has not been used. The dam is in good condition. The operator indicated the location of surface water compliance point SW-33 below the dam.

The bond is considered sufficient at this time, but will be recalculated at the time of submittal of the revision or amendment for reclaiming former USFS-owned lands within the permit. There were no problems noted.

For questions related to this report, please contact this inspector at the Division's **Durango Field Office:** DRMS – Durango Field Office, 691 CR 233, Room A-2, Durango, CO 81301; telephone 970-247-5193.

Inspection Contact Address: Dale Davis, Homestake Mining Company, Reclamation Office, P.O. Box 40, Sargents, CO 81248

CC: USFS, Gunnison, CO 81230

PERMIT #: M-1977-004 INSPECTOR'S INITIALS: RCO INSPECTION DATE: September 5, 2013

PHOTOGRAPHS













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