

# 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:		
Cresson Project		M-1980-244	Gold	Teller		
INSPECTION TYPE:		INSPECTOR(S):	INSP. DATE:	INSP. TIME:		
Monitoring		Brock Bowles	July 28, 2021	09:00		
OPERATOR:		<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:			
Cripple Creek & Victor Gold Mining Company		Jeana Ratcliff	112d-3 - Designated Mining Operation			
<b>REASON FOR INSPECTION:</b>		BOND CALCULATION TYPE:	BOND AMOUNT:			
Normal I&E Program		None	\$159,491,188.00			
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:			
NA		None	None			
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DAT	E:		
Clear	Brah Jambs September 13, 2		September 13, 2021			

#### **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 <u>Y</u>	(BG) BACKFILL & GRADING Y	(EX) EXPLOSIVES <u>N</u>
(PW) PROCESSING WASTE/TAILING <u>N</u>	(SF) PROCESSING FACILITIES <u>N</u>	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>N</u>	(SP) STORM WATER MGT PLAN Y	(RS) RECL PLAN/COMP <u>N</u>
(ES) OVERBURDEN/DEV. WASTE Y	(SC) EROSION/SEDIMENTATION <u>N</u>	(ST) STIPULATIONS <u>N</u>
(AT) ACID OR TOXIC MATERIALS <u>N</u>	(OD) OFF-SITE DAMAGE <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 by Brock Bowles of the Division of Reclamation, Mining and Safety (Division). Jeana Ratcliff and Maria Bujenovic of Cripple Creek & Victor Gold Mining Company (Operator) were present for the inspection. The Cresson Project is located between the towns of Cripple Creek and Victor in Teller County. This site is a 112d-3 Designated Mining Operation (DMO) permitted for 6,007 acres to mine and process gold ore. At the time of the inspection it was warm, clear, and the ground was damp.

This inspection included the following facilities and areas:

-Growth medium piles 19, 32, 33, 37 and 38 -Schist Island Overlook -ECOSA toe road

-Bull Cliffs area, South ECOSA

-Altman Backfill

## -Growth medium piles 19, 32, 33, 37 and 38

- -GM 19 Location: south of ADR 1. The pile had a dense vegetation cover of grasses and wildflower and overall looked really good (photo 1). There were a couple of small patches of Canada thistle that need to be treated as part of the regular treatment regimen. A gully had formed along the northeast access road and needs to be repaired (photo 2). This was the only erosion feature noted and the rest of the pile appeared to be stable.
- -GM 32 Location: NE of crusher. This pile was not walked because of potential void danger. Several weed patches were seen from a safe distance. This pile has not been treated in several years because of the potential danger. When this area is cleared of void danger or the soil is removed, special attention needs to be given to this soil because of the density of weeds on the pile.
- -GM 33 Location: NE of crusher. This pile is almost gone. It is being reapplied to the ECOSA reclamation.
- -GM 37 Location: east of the main Cresson Pit. The pile had a dense vegetation cover and appeared to be stable (photo 3). There were a few thistles (Canada and musk) that need to be treated as part of the regular treatment regimen.
- -GM 38 Location: East of WHEX pit. The pile had a dense vegetation cover of grasses and wildflower and overall looked really good (photo 4). There were a couple of small patches of Canada thistle that need to be treated as part of the regular treatment regimen.

#### -Schist Island Overlook

The Schist Island area was still being mined. A blast occurred in the bottom of the pit earlier in the day (photo 5) and another blast is expected tomorrow morning. Backfilling is expected to start later in August.

#### -ECOSA toe road

The southern area was being mined again for clay for the Schist Island expansion. No mining was taking place during this inspection; however, an excavator was onsite. Ms. Ratcliff said CC&V conducted an engineering evaluation which determined that the continued mining of clay in this area did not compromise the integrity of the backfill.

Water was seeping from under the ECOSA and flowing into the catch pond (photo 6). The water had a very dark brown/red color. No water was discharging from the pond. The pump was set up to drain the pond but was

not running at the time.

### -Bull Cliffs area, South ECOSA

The west side of the Bull Cliffs area is mostly backfilled, but it appears about a 35-40 foot high section of the highwall has not been backfilled (photo 7). The Operator is reminded that a fence is required to be placed above all remaining highwalls at final reclamation as required by AM13.

The south side of the ECOSA area was graded and seeded last year. A perimeter ditch was installed on the south side of the ECOSA next to the undisturbed hillside (photo 8). This ditch directs runoff water to the toe of the ECOSA into the area that is being mine for clay for the VLF2. Two contour ditches were installed on the reclaimed area to direct runoff to the south perimeter ditch. The upper contour ditch does not connect to the perimeter ditch. Water flows to the end of the upper ditch, then down the face of the backfilled material where a gully has formed (photo 9).

A significant number of rills and gullies have formed on the reclaimed area (photo 10). The rills originate at the upper contour ditch indicating that the ditch is blocked, forcing water out of the ditch. The rills/gullies continue down the reclamation through the lower contour ditch to the bottom of the ECOSA (photo 11).

The formation of rills and gullies is contributing to growth medium loss. The water flowing through the rills transports and deposits the growth medium at the toe of the ECOSA, which is the same area being mined for clay for the VLF2 liner. The growth medium budget for the reclamation of the entire Cresson Project is tight. Growth medium needs to be protected better as per Rule 3.1.9(5).

The ditches installed on the ECOSA have not been reviewed by the Division, are incomplete in construction, the contour ditches are blocked and excessive erosion gullies have formed. For these reasons, a stormwater management plan needs to be developed and implemented to better control runoff with the goal of controlling erosion and the loss of growth medium. A maintenance plan also needs to be developed and implemented to routinely inspect and clean ditches to ensure their continued proper operation. Additionally, the rills and gullies will need to be repaired and reseeded.

The vegetation that was seeded last year on the ECOSA looked good. The cover crop was well established and the perennial species looked really good for the first year of growth.

## -Altman Backfill

The vegetation on most of the backfilled areas was well established and appeared to be stable (photo 12).

Several rills and gullies have formed on the east side of the reclamation of the Altman Backfill (photo 13). Growth medium and subsoil have eroded off the reclamation and has been deposited in the contour ditch effectively blocking the water flow in the ditch. The water is forced out of the ditch and flows down reclamation below the ditch where small rills have started to form.

A stormwater management plan needs to be developed and implemented to better control runoff with the goal of controlling erosion and the loss of growth medium. A maintenance plan also needs to be developed and implemented to routinely inspect and clean ditches to ensure their continued proper operation. Additionally, the rills and gullies will need to be repaired and reseeded.

On the east side of the Altman Backfill, there is a large hole that has not been reclaimed (photo 14), although

the area around the hole has been reclaimed. Blast holes can be seen in the east wall of the hole indicating it is a mine related disturbance. Volunteer vegetation is growing in the hole indicating that this area has not been disturbed in a long time. CC&V staff did not know why it was not backfilled/reclaimed, if there is a possible future use or if it is scheduled to be reclaimed. The hole did not contained water and appeared to be stable in its present state, however, the Operator will ultimately need to backfill and reclaim this hole.

# **PHOTOGRAPHS**



Photo 1 – Growth Medium Pile 19



Photo 2 – Gully on GM-19 on northeast access road



Photo 3 – GM-37, facing north





Photo 5 - Schist Island overlook, facing west



Photo 6 – ECOSA seep catch pond



Photo 7 – Highwall area that has not been backfilled and needs a fence.



Photo 8 - Perimeter ditch on southern end of ECOSA



Photo 9 – Gully at the end of the upper contour ditch, perimeter ditch in background



Photo 10 - South ECOAS, rills originate at contour ditches



Photo 11 – Rills at toe of ECOSA



Photo 12 – Vegetation on the Altman Backfill



Photo 13 – Erosion and gullies on the east side of the Altman Backfill



Photo 14 – Altman Backfill hole facing south, with blast holes

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