




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: Cresson Project	MINE/PROSPECTING ID#: M-1980-244	MINERAL: Gold	COUNTY: Teller
INSPECTION TYPE: Monitoring	INSPECTOR(S): Patrick Lennberg	INSP. DATE: October 28, 2021	INSP. TIME: 08:00
OPERATOR: Cripple Creek & Victor Gold Mining Co.	OPERATOR REPRESENTATIVE: Jeana Ratcliff	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$209,491,188.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: November 29, 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>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</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---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</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 was a normal monitoring inspection of the Cresson Project (Permit No. M-1980-244) conducted by Patrick Lennberg of the Division of Reclamation, Mining and Safety (Division). The Division was accompanied by Jeana Ratcliff and others during the inspection. This is a 112d-3 Designated Mining Operation (DMO) permitted for 6,007 acres to mine and process gold ore. The site is located between the towns of Cripple Creek and Victor in Teller County. The approved post-mining land use is a combination of rangeland and wildlife habitat. Photos 1-24 taken during the inspection are included with this report.

This inspection included the following facilities and areas:

- Schist Island Pit and Backfill Area
- ECOSA
- and, Arequa Gulch CRMW-3 Series Monitoring Wells and Pump-back System

Schist Island Pit and Backfill Area

The Division received notification on October 28th that high compaction backfilling began earlier in the week. High compaction backfill consists 5 foot thick lifts comprised of -2.5 foot diameter material. The material is visually screened by the shovel operator loading trucks and again by the dozer operator that is spreading the material. If the shovel operator notes material too big has been loaded into a truck will direct the truck to dump elsewhere. If oversized material is observed by the dozer operator the operator will separate the material to be removed from the backfill area. In addition to the visual observations gradation check are done using photographs two times per shift. Finally, physical gradation samples are collected every 50,000 cubic yards (cy) and processed onsite by NewFields personnel.

Compaction of the 5 foot lift is completed using the loaded haul trucks and heavy equipment traffic over the lift. NewFields is using a method placement specification that is checked using pre-determined survey points and visual observations. The survey points are picked at random at the beginning of the lift. After material has been placed and compacted a point is resurveyed to determine the material is no longer compressing. Visual observations will look for potential soft spots or other indications the material is not sufficiently compacted. Haul truck drivers have been directed to split-tracks and spread travel out over the lift. Each truck weighs approximately 850,000 pounds loaded. During the inspection it was noted the haul trucks were splitting tracks and varying travel patterns over the lift.

The edges of the lift were being compacted with a loader with a full bucket of material. The loader was chosen because of safety considerations for the operator. Using the loader enables the operator to see potential falling hazards and the cab protected better in the event of a falling object.

Also noted was a pile of oversized material was being loaded into a haul truck for transport and disposal outside of the backfill area.

NewFields stated they were in the process of developing a cold weather placement specification now that winter weather conditions can be expected during the backfill process.

ECOSA

The ECOSA is designed to allow stormwater infiltrating through the waste rock to drain into the underlying volcanic diatreme structure which buffers and neutralizes the impacted stormwater before eventually being discharged at the Carlton Tunnel, a mining district wide drainage tunnel located approximately 3,000 feet lower and 7 miles to the southwest. During the inspection, the Division observed the location of the new seep, located approximately 2,500 feet to the northwest from the first seep.

In August 2021 the Operator notified the Division a new seep had developed at the ECOSA due to the amount of precipitation that fell in region during that time. The Operator stated during this inspection, a contract had recently been signed with a consultant to begin developing a management plan for both seeps.

Currently, the new seep is emptied every shift and the other is emptied based on observations made in the field. The waste is pumped into a water truck which then takes and sprays the water onto a VLF.

Also noted was the drill pad was in the process of being reclaimed and were waiting to broadcast seed the area. Straw wattles had been placed downgradient of the disturbed area for erosion control. The material that was up against the wildlife fence, observed in August 10th inspection, had been removed.

Basin EMP-20 was noted to have some water in it but the water had receded since August through infiltration.

While in the area groundwater monitoring wells in Grassy Valley were observed, GVMW-8A, -8B, -22A, -22B, and -25.

Arequa Gulch CRMW-3 Series Monitoring Wells

The Division inspected the CRMW-3 series monitoring wells in Arequa Gulch immediately down gradient from the underdrain collection basin. In July 2011 the Division began collecting split samples to verify groundwater exceedances of numeric protection limits (NPL), set in November 1998, for sulfate in CRMW-3B. The NPL was set to warn of potential adverse effects to the environment coming from the mine disturbance areas above. In December 2011 a new well, CRMW-3C, had been installed and the pumpback system was shown to be functioning. The pumpback system removes groundwater from the shallow alluvial system and shallow bedrock aquifers. Initially, all three wells removed water but over time 3A went dry and now only 3B and 3C are pumping. The system removes water to the underdrain collection basin and then conveyed back onsite and used for make-up water.

Upon arrival at the site the Division was informed the pump in CRMW-3C had stopped functioning earlier in the month. It was stated that a new pump and control unit would be installed the following week. The Operator explained supply chain issues were part of the problem that led to a delay in installing a new pump and control unit. The Operator is reminded that the pumpback system was installed to protect the environment from groundwater impacted from mining activities, an environmental protection facility. The Operator is required to notify the Division of a failure of an environmental protection facility. In 2019-2020 the Operator and Division had discussions of this manner when CRMW-3B ceased to function when it became biofouled and the Division found out through review of an exceedance notification for 3B.

At the time of writing this inspection report CRMW-3C had resumed operation on November 17, 2021.

Inspection Contact Address

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PHOTOGRAPHS



Photo 1: Loading of material to be hauled to the Schist Island backfill area



Photo 2: Schist Island high compaction area first 5 foot lift



Photo 3: Dozer grading out material



Photo 4: Haul truck leaving dump area, note even spread of tire tracks across lift area



Photo 5: End dumping of material



Photo 6: Removal of oversized material from lift



Photo 7: Upper ponding area of seep 2 at the ECOSA



Photo 8: Pumping set up to remove seep water from the seep 2 area



Photo 9: Lower ponding area of the seep 2 area



Photo 10: Seep 1 area of the ECOSA, soon after this picture was taken a truck arrived to pump out sump



Photo 11: Reclaimed drill pad area with stormwater controls in place downgradient of pad and sediment has been removed from wildlife fence

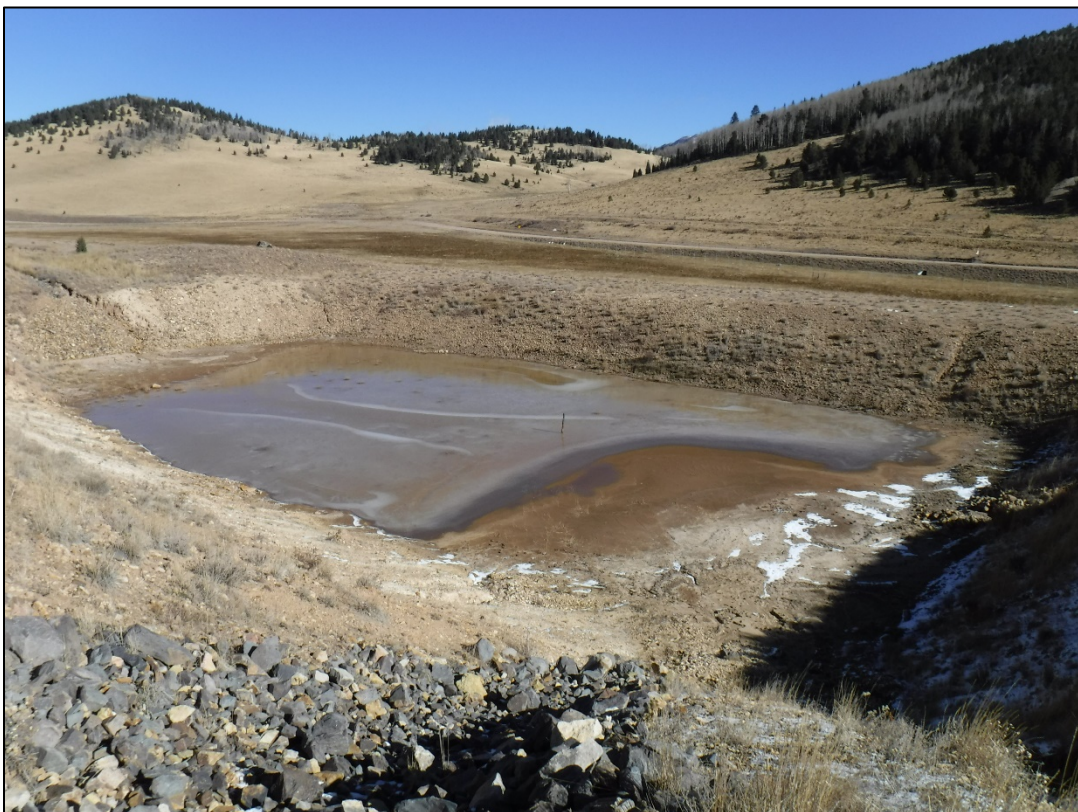


Photo 12: Detention pond EMP-20



Photo 13: GVMW-25, ECOSA in the background looking west



Photo 14: GVMW-25, ECOSA in the background looking northwest



Photo 15: Looking north from GVMW-25 towards GVMW-8A and 8B



Photo 16: Looking west from GVMW-22B towards the ECOSA



Photo 17: Looking west from GVMW-8A, -8B, and OSABH-14 towards the ECOSA



Photo 18: Looking south from GVMW-8A yellow arrow marks location of GVMW-25



Photo 19: CRMW-3B with a pump currently working



Photo 20: CRMW-3A and 3B looking upgradient, yellow arrow marks underdrain collection basin location



Photo 21: CRMW-3 series wells with pump control panel



Photo 22: CRMW-3 series wells discharge tubing and electrical conduits



Photo 23: Underdrain collection basin shed



Photo 24: Inside underdrain collection shed discharge tubing in the center right of picture is for CRMW 3B and 3C