



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Revenue Mine	MINE/PROSPECTING ID#: M-2012-032	MINERAL: Pb, Ag, Au	COUNTY: Ouray
INSPECTION TYPE: Monitoring	INSPECTOR(S): Bob Oswald	INSP. DATE: July 1, 2014	INSP. TIME: 09:30
OPERATOR: Star Mine Operations LLC	OPERATOR REPRESENTATIVE: John E Trujillo	TYPE OF OPERATION: 112d-1 - Designated Mining Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$277,078.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: <i>Bob Oswald</i>	SIGNATURE DATE: July 22, 2014

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----- <u>Y</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>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>NA</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION--- <u>NA</u>
(SM) SIGNS AND MARKERS----- <u>Y</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--- <u>Y</u>	(RS) RECL PLAN/COMP- <u>NA</u>
(AT) ACID OR TOXIC MATERIALS----- <u>Y</u>	(OD) OFF-SITE DAMAGE----- <u>NA</u>	(ST) STIPULATIONS--- <u>Y</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 112d-1 permits. The operator named on page one was present throughout the inspection. In addition, several other persons were present at the inspection: Dianna Stoopnikoff, representing Fortune Minerals (the upcoming successor operator of the permit); Greg Lewicki, technical consultant to the operator; and Russ Means of DRMS. The site was active on the day of the inspection: including mill facility construction, surface area surveying, mine water handling structures, and underground development. No underground or mill facility areas were inspected at this time.

The required permit ID sign was observed posted at the entrance gate to the permitted area. Numerous boundary markers, consisting of tall white 2-inch PVC pipes, were observed at several of the affected area boundary corners. All activities were within the approved affected area. [Note: The permit boundary and affected area boundary are important delineations, and marking them on the ground is a permit requirement (per Rule 3.1.12). Therefore, as additional storage areas for tails and waste rock are affected, and as the planned construction of the new bridge to access the Atlas area disturbs new land, it is especially important that the boundary markers are installed in a visible and durable manner. The operator is reminded that offsite disturbance may be a possible violation.]

Initially the parties present met in the mine office to discuss ongoing activities, the upcoming succession of operator and transfer of the permit, and several anticipated changes to the permit. These topics included: monitoring well installation, mine water pond and leach field installation, re-opening a shaft at the Virginius Mine for ventilation, and new bridge construction for access to the Atlas tails area. There is much surface activity to perform this 2014 construction season, of which the operator is well aware. Some of the construction involves "environmental protection facilities" (EPFs) so a construction/inspection timeline has been carefully written. Mr. Trujillo delivered a copy of the schedule to this inspector.

The monitoring wells have been installed and sampling has begun. The wells have been completed as planned and are protected by capped steel sleeves around the PVC risers. Initially the operator may implement a sampling frequency that is shorter than the required quarterly schedule. As samples are analyzed, the operator is reminded to forward the reports to the Division in a timely manner.

Underground rehabilitation is progressing, and there is a need for ventilation and escapeways. The opening of approved vent shafts was discussed, in particular the shaft up at the Virginius Mine. The Virginius Mine location was inspected in upper Governor Basin. Several areas of historic disturbances were observed, including one of the actual Virginius Mine portals. The vent shaft to be constructed, however, is much lower than the portal; it will be adjacent to the road that crosses the lower tails, very near the anticipated location depicted on the permit maps. The vent shaft was already approved and its closure is already bonded. As such, the development may commence immediately. The operator must provide as-built details of the shaft as well as final maps of the location. Finally, since the 100 ft x 100 ft area is a part of the affected area, it must be marked on the ground with visible and durable markers.

[Note: The Virginius vent location is included in the permitted area, but it is only for a 100 ft x 100 ft area (10,000 sq ft). The operator wishes to eventually remove much of the old tails and/or low-grade ore from the basin, and process it at the mill. Even though this activity involves cleaning up pre-law disturbances, and by removing those materials from the basin it will improve the water quality, it nevertheless constitutes mining-

related disturbance. The operator was cautioned that prior to engaging in activities at the Virginius (or other locations that are not currently in the permit) those lands must be amended into the permit before any disturbances may occur.]

Technical Revision TR-03 has been approved (revising the monitoring well plan). Further modifications to the monitoring wells, and other changes to the site and activities, are proposed in Technical Revision TR-04, which is under review as of this writing. It also includes the bridge to the Atlas tails area, temporary tailings storage, and equipment/parts storage area. A bond increase will be necessary, the final figure yet to be determined.

The location of the buried lines and the planned leach field was observed, but no excavation has begun. Portions of the lean ore pile and other items stored on the pad are on the area to be excavated and must be moved first. A significant amount of fill material has been placed in the eastern end of the depression (which was formerly the mine pond). Portal discharge has been piped to the new mine pond (as-yet unlined) via un-perforated 8-inch PE pipe, but as of the date of this inspection, the mine water is being conveyed to Atlas Creek. Upon proper construction of the mine pond and leach field (plus their inspection and certification) the mine pond will receive the discharge water.

The mill and filter operation has been undergoing small test runs by the operator. The operator has improved the liquid and solids catchments in the filter building, and is anticipating further catchments outside the building, through use of concrete aprons and sumps. No final plans have yet been formally submitted to the Division for review. The result of these test runs of the mill has been the production of a limited amount of tails. The tails have been somewhat dewatered and placed temporarily on the dump next to the lean ore pile. This is not a problem since this is not long-term or permanent storage, but the operator should provide to the Division whatever information it has concerning moisture content and chemical analysis.

The operator has placed several steel "zircon" storage containers on the pad north of the filter building. These will be configured and connected such that they provide sufficient storage space for electrical, wood and metal parts and equipment. These will replace the planned steel storage building, will be in approximately the same location, and will be easier to dismantle and move if needed. Consolidating the items that are currently stored into one structure will allow the operator to grade the NE lobe of the waste rock to a stable 3:1 slope.

There were no problems noted and the bond amount is currently adequate. For questions related to this report, please contact this inspector at the Division's Durango Field Office: telephone 970-247-5193, or 303-866-3567 ext 8175.

All written correspondence should be sent directly to the Division's Denver Office: Division of Reclamation, Mining & Safety, 1313 Sherman Street, Room 215, Denver, CO 80203

Inspection Contact Address

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Greg Lewicki, Greg Lewicki and Assoc.

PHOTOGRAPHS



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