

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:
Gloria Z Mine	M-1984-094	Sand & gravel, gold	Park
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Michael A. Cunningham	May 17, 2017	12:30
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
Sanborn Sand and Gravel/dba Golden Cross	Mike Pfister	112c - Construction Regular Operation	
Aggregates, Inc.			

REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:
Citizen Complaint		None	\$108,234.00
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA		None	None
WEATHER:	INSPE	CTOR'S SIGNATURE:	SIGNATURE DATE:
Clear	U	il C.f	June 9, 2017

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Hydrologic Balance

PROBLEM/POSSIBLE VIOLATION: Problem: The stormwater collection ditches were not being properly maintained. This is a problem pursuant to C.R.S. 34-32.5-124 for failure to comply with the conditions of an order, permit or regulation.

CORRECTIVE ACTIONS: The Operator shall perform maintenance on the stormwater collection ditches on or before the corrective action date. The stormwater collection ditches shall be cleared of soil, vegetation and any other obstructions so there is positive drainage to allow stormwater to flow from the collection ditches to the stormwater collection area.

CORRECTIVE ACTION DUE DATE: 6/20/17

INSPECTION TOPIC: Signs & Markers

PROBLEM/POSSIBLE VIOLATION: Problem: The affected area boundary markers are missing or incorrectly placed. This is a problem for failure to maintain boundary markers around the affected area as required by Section 3.1.12(2) of the rule.

CORRECTIVE ACTIONS: The operator shall conduct a survey and replace the boundary markers in the correct location(s). The operator shall provide proof to the Division that this has been done by the corrective action date.

CORRECTIVE ACTION DUE DATE: 6/20/17

OBSERVATIONS

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Mike Pfister was present on behalf the Permittee. The Gloria Z Mine is located approximately one mile northwest of Fairplay, CO on the south side of the Middle Fork of the South Platte River. The site is permitted for 45.04 acres and the post-mining land use is rangeland and developed water resource.

Citizen Complaints:

The inspection was conducted in response to two citizen complaints that were received by the Division. Copies of the complaint letters are in the public file and have been forwarded to the Operator. The following is a list of the individual complaints and the Division's findings:

1. Complaint received April 7, 2017 from Linda Balough - Complainant stated the mining operation had created unsupported sheer walls that are many feet tall.

Response: The approved Mining Plan allows the Operator to excavate the pit with a slope of 80 degrees from horizontal for a vertical distance of 25 feet and then a horizontal bench of a minimum of 15 feet width will be installed. Below this bench, another slope of 80 degrees is allowed for a vertical distance of 25 feet. Below the 50 foot level, all slopes must be a minimum of 45 degrees. The Division found all excavated slopes to be in conformance with the requirements of the Mining Plan.

2. Complaint received May 8, 2017 from Robin Rindsig - Complainant stated the operation had exposed groundwater without a valid Substitute Water Supply Plan (SWSP).

Response: Groundwater is found between 40 ft. to 60 ft. below the ground surface in the area of the mine. Excavation and processing of gravel is currently occurring above the groundwater table. The water present on site is water which has been diverted from the Sacramento Creek onto the property for use in the wash plant and for dust suppression. Water from the Sacramento Creek was being diverted onto the mine site at the time of the inspection. The water is routed into a holding/settling pond and then is pumped to the wash plant. Water from the wash plant is allowed to gravity flow back to the holding/settling pond. The Operator holds a water right which allows up to 2 CFS to be diverted from the Sacramento Creek. In addition, the Operator holds a water right of 2.13 acre feet from the Cottage Grove Reservoir, which can be used for augmentation. The Division did not observe any signs of exposed groundwater such as inflows through the pit walls. In addition, the holding/settling pond has been used for several seasons and has filled in with silt which would minimize potential inflows of groundwater.

The Operator has exposed groundwater at the site in prior years and has had a SWSP in place to account for the evaporative depletions. The SWSP expired in 2014 and the Operator has not filed for renewal with the Office of the State Engineer. A SWSP is only required to be held when groundwater is exposed. It is the Operator's responsibility to renew the SWSP prior to any exposure of groundwater at the mine.

Financial Warranty:

The Division currently holds a financial warranty in the amount of \$108,234.00, which was last adjusted in 2016. The Division received a Succession of Operators Application on April 17, 2017. The Application was incomplete for the purpose of filing and the Operator currently has until June 17, 2017 to submit the

additional materials needed to transfer the Reclamation Permit. Once the Succession of Operators Application is complete the Division will perform a financial warranty calculation.

Hydrologic Balance:

The Division traversed the stormwater collection ditches located along the western and northern perimeters of the affected lands. The ditches were not being properly maintained and contained roots, soil and vegetation which would prevent stormwater from flowing through the ditches. This has been cited as a problem and will require corrective action from the Operator. Please see the first page of this report for additional information.

Gen. Compliance With Mine Plan:

The Operator currently has two separate crews conducting mining and each mining crew has their own gold processing plant. The gold processing plants are portable and utilize the same water holding/settling pond. A crushing and screening plant for gravel is onsite, but was not operational at the time of the inspection. In addition, the Operator sells boulders which are stockpiled near the site entrance. The western portion of the water holding/settling pond has silted in with fines from the wash plant and is no longer in use. The Operator plans to conduct final grading, topsoil replacement and revegetation on this portion of the pond during the 2017 mining season.

Signs and Markers:

The permit boundary was not delineated with markers or monuments. This is a problem pursuant to Rule 3.1.12(2). Please see the first page of this report for additional information. An appropriate permit sign was posted at the site entrance.

This concluded the inspection.

PERMIT #: M-1984-094 INSPECTOR'S INITIALS: MAC INSPECTION DATE: May 17, 2017

PHOTOGRAPHS



1. Gold processing plant.



2. Western portion of settling pond which is no longer in use.



3. Debris in the stormwater collection ditch.



4. Water holding pond.



5. Gravel plant, not in use.



6. Water flowing into the site from the Sacramento Creek.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTY <u>N</u>	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>PB</u>	(BG) BACKFILL & GRADING <u>N</u>	(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>N</u>	(FW) FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS <u>PB</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>NA</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

Inspection Contact Address Mike Pfister Sanborn Sand and Gravel/dba Golden Cross Aggregates, Inc. P O Box 1180 Alma, CO 80420

CC: Wally Erickson, DRMS