



**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.

<b>MINE NAME:</b> Hazeltine Mine	<b>MINE/PROSPECTING ID#:</b> M-2004-031	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Adams
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Tyler V. O'Donnell	<b>INSP. DATE:</b> March 27, 2014	<b>INSP. TIME:</b> 16:00
<b>OPERATOR:</b> Aggregate Industries - WCR, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Connie Davis	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Citizen Complaint	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$670,602.00
<b>DATE OF COMPLAINT:</b> March 19, 2014	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> <i>Tyler O'Donnell</i>	<b>SIGNATURE DATE:</b> April 11, 2014

**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: Failure to minimize the disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area pursuant to 34-32.5-116(4)(h), and failure to protect areas outside of the affected land from slides or damage occurring during the mining operation pursuant to 34-32.5-116(4)(i). The Division cannot evaluate the effectiveness of TR-02 at mitigating the damage done to the prevailing hydrologic balance if the Agridrain is not operating properly.

**CORRECTIVE ACTIONS:** The Operator shall submit a Technical Revision within 30 days of the date of this report. The Operator must provide a plan to the Division with a weekly monitoring and maintenance plan for the Agridrain which will be reported annually to the Division. The revision shall also include a revised inlet screen design to prevent the Agridrain from excessive clogging. The monitoring plan must also contain an evaluation of the Agridrain's performance at relieving impacts to the prevailing hydrologic balance.

**CORRECTIVE ACTION DUE DATE:** 5/09/2014

## **OBSERVATIONS**

This inspection was conducted by Tyler O'Donnell and Tom Kaldenbach of the Division of Reclamation, Mining and Safety (Division/DRMS). The inspection was conducted as a follow-up to a citizen complaint about flooding on the adjacent landowner's property, owned by Fred Orr. The Division received an initial written complaint from Mr. Orr on September 14, 2011. The complaint explained that the Orr's property has been flooded since a slurry wall was constructed at the Hazeltine Mine in 2005. The Division received a more recent complaint from Mr. Orr by phone on or about March 19, 2014 explaining the property he owned was still submerged. Aggregate Industries - WCR, Inc., The Operator, was represented by Connie Davis during the inspection. Aggregate Industries - WCR, Inc.'s Contractor, Nick Silbaugh was present during the inspection. Fred Orr was present during the majority of the inspection. Steve O'Brian with Environment, Inc., the consultant representing Fred Orr, was present during the inspection. The inspection was conducted to observe conditions on Mr. Orr's property and observe the operation of an Agridrain that the Operator installed in August 2013 in an effort to drain Mr. Orr's Property.

The Hazeltine Mine is located in Adams County approximately 3 miles south of Henderson Colorado, just north of 104th Ave. and east of the South Platte River. The Hazeltine Mine is a 203.90-acre 112 Construction Materials Reclamation Permit. The approved post-mining land use is developed water resource. At the time of the inspection it was sunny. The majority of the mine was dry, the northeastern corner of the Hazeltine Mine had water stored in the pit.

The Division cited a problem in the October 5, 2011 inspection report for failure to minimize disturbance to the prevailing hydrologic balance pursuant to C.R.S. 34-32.5-116(4)(h). The Operator submitted TR-01 to provide a method of mitigating the effects to the prevailing hydrologic balance. TR-01 was submitted May 4, 2012 and was approved January 1, 2013. TR-02 was submitted to incorporate the Agridrain which is a permanent structure. The Agridrain is located in the northeastern part of the reservoir, in mining phase 1B. The Agridrain was installed as a surface water control structure. TR-02 proposed that the Agridrain would lower the water level near the Orr property to an elevation of 5038.59 feet above sea level. TR-02 was approved on July 1, 2013; the approval of TR-02 supersedes TR-01. The Operator's representative stated that the construction of the Agridrain was completed in August 2013. Exhibit A of TR-02 identifies the following elevations:

Location	Elevation (ft) above sea level
Highest point of the Orr property	5042.5
Lowest point of the Orr property	5038.5
Proposed water elevation outside of the surly wall	5038.59

The inspection began at the Orr property. The inspection consisted of a visual examination of the Orr property and a discussion of the ongoing issues detailed in the written complaint. The visual inspection of the Orr property found that the land surface was wet. Portions of the Orr property were supporting hydrophytic vegetation. The Division believes the lowest point of the Orr property is located in the northwest corner with an approximate elevation of 5038.5 feet. The northwest corner of the Orr property was submerged (see photo 1). Based on visual estimates portions of the Orr property was covered by 1 to 2 feet of water

Following the investigation at the Orr property, the Division entered the mine site to observe the operation of the Agridrain. Water was flowing through the Agridrain, but the screen on the inlet pipe was clogged. The Operator's contractor cleared debris from the inlet screen of the Agridrain, resulting in an increased flow through the Agridrain. The Operator's contractor stated that the Agridrain would function better when the inlet screen is cleared of debris. The Operator's contractor committed to providing photos to the Division of the water level at the inlet pipe within a few days after the inspection. The contractor stated that a lower water level will be evident in the photos he plans to provide to the Division. The photos will be compared to the photos the Division took during the inspection (see photos 5 and 6.)

### **CONCLUSION**

At the present time it appears that the Agridrain has not lowered the water level to the elevation predicted in TR-02. The Division believes the Operator has failed to resolve the problem cited in the October 5, 2011 inspection report. That problem was failure to minimize the disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area pursuant to 34-32.5-116(4)(h), and failure to protect areas outside of the affected land from slides or damage occurring during the mining operation pursuant to 34-32.5-116(4)(i). The Operator shall submit an application for a Technical Revision, which sets forth a weekly monitoring and maintenance plan for the Agridrain, with annual reporting of the monitoring results to the Division. The revision shall also include a revised inlet screen design to prevent the Agridrain from becoming blocked by debris. The Operator shall submit the technical revision by May 9, 2014. The Division will conduct a follow up inspection in mid May, 2014 to observe water levels at the Orr property and observe the water level at the Agridrain Inlet.



## **PHOTOGRAPHS**



**Photo 1:** View looking east/southeast from the west side of the bull seep. The tree in the center of the photo is near the northwest corner of the Orr property.



**Photo 2:** View looking west from north central part of the Orr property.





**Photo 3:** View looking northwest from the ditch access road. The Agridrain is near the center of the photo.



**Photo 4:** The Agridrain outlet on the inside of the Slurry wall.





**Photo 5:** Agridrain inlet on the outside of the slurry wall. This photo was taken after the inlet was cleared of debris. Water depth is estimated to be 2 to 4 inches above the inlet pipe.



**Photo 6:** Agridrain inlet close up. This photo was taken after the inlet was cleared of debris.

### 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>N</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</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>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(SB) COMPLETE INSP---- <u>N</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>Y</u>	(OD) OFF-SITE DAMAGE----- <u>Y</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

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