

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:
Riverside Pit	M-1976-056	Sand and gravel	Logan
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Surety Release Inspection	Elliott R. Russell	March 24, 2014	14:00
OPERATOR:	<b>OPERATOR REPRESENTATIVE:</b>	TYPE OF OPERATION:	
McAtee Construction Company	Darren Gebhart	112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b>	BOND CALCULATION TYPE:	<b>BOND AMOUNT:</b>
Surety Release Requested	None	\$131,200.00
DATE OF COMPLAINT:	POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA	None	None
WEATHER: Cloudy	INSPECTOR'S SIGNATURE:	SIGNATURE DATE: May 16, 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>NA</u>	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES <u>NA</u>
(PW) PROCESSING WASTE/TAILING <u>NA</u>	(SF) PROCESSING FACILITIES <u>NA</u>	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION Y
(SM) SIGNS AND MARKERS <u>Y</u>	(SP) STORM WATER MGT PLAN <u>NA</u>	(SB) COMPLETE INSP <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE <u>NA</u>	(SC) EROSION/SEDIMENTATION Y	(RS) RECL PLAN/COMP Y
(AT) ACID OR TOXIC MATERIALS <u>NA</u>	(OD) OFF-SITE DAMAGE <u>NA</u>	(ST) STIPULATIONS <u>NA</u>

Y = Inspected and found in compliance / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

# **OBSERVATIONS**

The inspection was conducted by Elliott Russell of the Division of Reclamation, Mining and Safety (Division). Tom Kaldenbach, also of the Division, and Darren Gebhart of McAtee Construction Company were present for the inspection. The Riverside Pit is adjacent to the South Plate River in Sterling, Colorado. The site is permitted for 86.4 acres and the post-mining land use is wildlife habitat. This inspection was carried out after McAtee Construction Company submitted an acreage release request for Lake Robert (the eastern lake of the Riverside Pit).

Background:

- On October 20, 2009 the Division received an acreage release request for the reclamation completed on Lake Robert and a portion of Lake Marjorie.
- This request was denied by the Division after an inspection conducted on October 27, 2009 and the partial release request was withdrawn by the operator on November 2, 2009. The request was denied by the Division because shoreline sloping, topsoil, and vegetation requirements.
- A routine monitoring inspection was conducted by the Division on July 17, 2012. A noxious weed infestation was noted and the operator was required to submit a noxious weed control plan with a Technical Revision to the permit.
- On October 27, 2013 the Division received a letter from the operator explaining the status of the Lake Robert area after the South Platte River had flooded the Sterling area on September 16, 2013. The letter discussed that the flooding had damaged the Low-line Ditch and had caused the river to enter Lake Robert and had yet to return to the natural channel. They requested information on how to proceed.
- On March 5, 2014 the Division received another letter from the operator explaining the same situation and that the river was still flowing through the damaged Lake Robert. This letter requested the release of the reclamation responsibility for 22.72 acres, which included the entire area east of the Low-line Ditch.

At the time of the inspection it was partly cloudy and the ground was dry. At 14:00, the Division met Mr. Gebhart at McAtee Construction Company's office located at 220 Edwards Ave in Sterling, Colorado. Mr. Gebhart took the inspectors on a brief tour of the site to inspect the areas proposed for release. The mine site identification sign was observed at the entrance to the site.

The area proposed for release is located on the eastern side of the permit and includes Lake Robert. After a flooding event, it appeared that two channels were cut into Lake Robert's southern shoreline and had destroyed the road that was used to access the east portion of the lake. One channel on the southwest side had been backfilled by the Operator but the larger of the two, near the southeast corner of the lake, still had water running through it. This remaining channel was approximately 80 feet wide and 10 feet deep. After further investigation, the water that was flowing into Lake Robert was traced back to a breach in the Low-line Ditch (approximately 800 feet upstream). At the time of the inspection, none of the water was continuing down the ditch and all of it was flowing through the breach; this breach was located adjacent to a concrete-armored spillway structure that appears to be designed to allow for high flows from the ditch to release water in a natural channel which originally flowed around the east side of Lake Robert and returned to the South Platte River.

A large sand bar is now developing in the southeast portion of the lake as a result of the new inflow of water. The entire middle half of the east shoreline has been damaged and undercut from the flood waters. This shoreline appears to be unstable and the slope of the shoreline does not meet the requirements of Rule 3.1.5(7). During the inspection the Division observed several stretches of Lake Robert's shoreline having recycled concrete armoring.

On the north shoreline of Lake Robert, the flood waters had cut a channel approximately 15 feet wide and 8 feet deep which allows water to leave the lake and return back to the South Platte River. The operator had stated that this area was where the original spillway/outlet was located for the lake prior to the flooding and was approximately 1-2 feet deep.

Other Observations:

- On the west side of the lake is a large equipment storage area and parking lot.
- The southwest portion of the lake area has two stockpiles of material.
- Also in the southwest portion of the lake area, remains a bridge which spans the Low-line Ditch.

Although the vegetation in the release area may have been close to satisfying the requirements for final release prior to the flood, the area does not qualify for release now because, as a result of the flood, conditions in the release area no longer meet the requirements of the reclamation plan. The largest change caused by the flood in the release area is that much of the flow of the Low-line Ditch now flows through Lake Robert in the release area. The Operator may apply for a Technical Revision that modifies the reclamation plan to include significant flow of the Low-line Ditch/South Platte River through Lake Robert. The Revision would need to include designs for the inlet and outlet of Lake Robert that will accommodate river flows and protect the channel. If the Revision is approved, the operator could re-apply for release of the Lake Robert area.

Prior to approval of a release, all equipment and stockpiled material would need to be removed from the release area and the access roads, as wells as the equipment parking area, would need to be adequately revegetated; in addition the southern and eastern shoreline would need to be resloped and revegeated. The Division would allow the use recycled concrete (similar to that already in place) along this shoreline to protect it from future undercutting. If the landowner requests the access roads and parking area to remain after final release of the area, the Operator should include this in the Technical Revision mentioned above and a signed letter from the landowner. In addition, the bridge that spans the Low-line Ditch should be included as well or it will need to be removed prior to final release.

Photographs taken during the inspection are attached.

Inspection Contact Address Darren Gebhart McAtee Construction Company P.O. Box 1908 Sterling, CO 80751

CC: Tom Kaldenbach; DRMS Steve O'Brian; Environment Inc.

### PERMIT #: M-1976-056 INSPECTOR'S INITIALS: ERR INSPECTION DATE: March 24, 2014

## **PHOTOGRAPHS**



Permit sign at site entrance; looking east



Stockpiles and equipment storage area; looking west



Breach in the Lowline-Ditch; looking northeast



Damaged shoreline and access road; looking east



New channel on southeast corner of Lake Robert; looking north (downstream)



Sandbars in southeast corner of Lake Robert; looking southeast

#### PERMIT #: M-1976-056 INSPECTOR'S INITIALS: ERR INSPECTION DATE: March 24, 2014



Damaged mid-lake shoreline; looking east



New channel on northern shoreline of Lake Robert; looking north (downstream)



Northern shoreline; looking east