

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:
Riverside Pit	M-1976-056	Sand and gravel	Logan
INSPECTION TYPE:	INSPECTOR(S):	INSP. DATE:	INSP. TIME:
Monitoring	Jared L. Ebert	April 19, 2018	08:00
OPERATOR:	OPERATOR REPRESENTATIVE:	TYPE OF OPERATION:	
McAtee Construction Company	Jeff Harms	112c - Construction Regular Operation	

REASON FOR INSPECTION:		BOND CALCULATION TYPE:	BOND AMOUNT:
Normal I&E Program		Complete Bond	\$131,200.00
DATE OF COMPLAINT:		POST INSP. CONTACTS:	JOINT INSP. AGENCY:
NA		None	None
WEATHER:	INSPECTOR'S SIGNATURE:		SIGNATURE DATE:
Clear	Jane Ebeth		May 8, 2018

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: Off-site Damage, Processing Facilities, General Compliance with Mine Plan

POSSIBLE VIOLATION: About 15 acres of land has been affected outside of the approved permit boundary. This is a possible violation at this time pursuant to C.R.S. 34-32.5-109(1) for failure to first obtain from the Board or Office a reclamation permit prior to engaging in a new operation.

CORRECTIVE ACTIONS: This possible violation will require a hearing before the Mined Land Reclamation Board. The schedule and other details for the MLRB hearing will be provided under a separate document to be sent via certified mail to the operator.

CORRECTIVE ACTION DUE DATE: 6/27/18 (MLRB Hearing Date)

INSPECTION TOPIC: Signs & Markers

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: 6/11/18

OBSERVATIONS

This was a monitoring inspection of the Riverside Pit, DRMS Permit No. M-1976-056 operated by McAtee Construction Company (McAtee or Operator). I, Jared Ebert with the Colorado Division of Reclamation, Mining and Safety (DRMS or Division) conducted the inspection. Mr. Jeff Harms with McAtee accompanied me during the inspection. This is an 86.40 acre 112c mining operation located in Logan County within the City of Sterling. The post mining land use approved for the site is recreation. Through the mining operation, the Operator is approved to create four open water lakes.

Backfilling and Grading:

The site is split into two distinct parcels. The first parcel was the original permit area, this is the north eastern parcel. The second parcel is the area that was added with the approval of Amendment No. 1 (AM01), this is the southwest area.

The original permit area consists of two lakes, Lake Marjorie and Lake Robert. Lake Marjorie is located on the west side of the parcel and Lake Robert is located on the east side of the parcel. During the 2013 flood, this area was flooded allowing about half of Lake Robert to fill up with sediment. This area does not appear to have changed significantly since the flood waters subsided. The slopes around both lakes were stable with vegetation and it appears a portion of the slopes have been armored with rip-rapped. The Operator has constructed a spillway at the north end of Lake Robert in accordance with the approval of Technical Revision No. 4 (TR04). The southern end of the Lake Marjorie area is being used for processing of mined material and material the Operator is recycling on-site. A concrete and/or asphalt batch plant is set up in the southwest corner of the original permit area. This is a relatively level area with a number of stockpiles stored on the site.

The AM01 mine area consists of a 10 acre pit where it appears the most recent mining activity has occurred. The north end consists of a fairly large beach area where fines from the operation have been placed. The slopes in this area appear fairly gentle. The western, eastern and southern pit slopes appear to be excavated to a 1.5 to 1.7 H:1V or steeper slope in areas above the waterline. It is difficult to tell below the waterline what the angle of the slope is.

Explosives:

The Operator was not conducting blasting operations at the time of the inspection.

Financial Warranty:

The Division currently holds a bond in the amount of \$131,200.00 for the site. The Division has evaluated the financial warranty and has found it to be adequate to complete reclamation of the site at this time.

Hydrologic Balance:

The Division estimates about 21 acres of ground water is exposed at the site between the pits located in the AM01 area, the Lake Marjorie area and Lake Robert area. According to the Colorado Division of Water Resources, the groundwater exposed at the site is covered by a water decree (2007CW300).

Gen. Compliance With Mine Plan:

Mining was not occurring at the time of the inspection. However, there are a large number of stockpiles at the site the Operator is utilizing.

Off-site Damage:

The Division estimates about 15 acres has been affected outside of the permit boundary. Please see the map at the end of this report that depicts the areas the Division believes are outside of the approved permit boundary.

About 14 acres appear to be affected outside of the permit boundary north of the AM01 permit area and west of the original permit area. A processing plant consisting of a building and conveyors is located in this area as well as stockpiles of mined material and recycle material. Also located in this area is the scale, scale house, fuel storage area and parking area. Also a small portion of the pit excavation appears to extend into this area.

About 1 acre of land appears to be affected south of the AM01 permit area. This area consists of two roads and an area stripped in advance of mining.

The disturbance observed outside of the approved permit boundary meets the definition of Affected Land in accordance with Rule 1.1(3) and is part of the Mining Operation as defined by Rule 1.1(27). This is a possible violation at this time pursuant to C.R.S. 34-32.5-109(1) for failure to first obtain from the Board or Office a reclamation permit prior to engaging in a new operation. This issue is cited as a possible violation at the beginning of this report.

Processing Waste:

It appears processing fines are being backfilled into the 10 acre pit located in the AM01 permit area.

Reclamation Success:

The Lake Robert area was reclaimed until the flood of 2013. With the approval of TR04, the Operator agreed to monitor the area for five years (ending December 31, 2020) to determine what additional reclamation activity should occur in this area. The remainder of the Lake Robert area appears stable and vegetated with the outlet spillway at the north end of the lake in place.

The Lake Marjorie area around the western, northern and eastern pit slopes appear vegetated and stable. The area south of the lake is being utilized as a material storage area and a processing area.

Revegetation:

Vegetation has established around the reclaimed portions of Lake Robert and Lake Marjorie. Apple and peach trees were planted on the northeast corner of Lake Marjorie.

Sediment Control:

The sediment generated by the mining operations appears to be directed towards the pit area. However as discussed above, mining related disturbance was observed outside of the approved permit area.

Topsoil:

It does appears some limited topsoil has been stripped and is place in berms around the excavated areas. According to the AM01 application, very limited topsoil existed within the AM01 permit area prior to mining.





Figure 1. From the Southwest corner of the original permit area looking north.



Figure 2. From the southwest corner of the original permit area looking east.



Figure 3. Beach area on the north end of the pit within the AMO1 area.



Figure 4. From the northwest corner of the pit within the AM01 area looking south.



Figure 5. From the south end of the pit within the AM01 area looking northwest.



Figure 6. From the south end of the pit within the AM01 area looking north.



Figure 7. From the southeast corner of the Lake Robert area looking north.



Figure 8. Midway along the Lake Robert eastern slope looking north.



Figure 9. Spillway at the north end of Lake Robert.



Figure 10. From the north end of Lake Robert looking east.



Figure 11. From the northwest corner of Lake Marjorie looking south.



Figure 12. From the northwest corner of Lake Marjorie looking east.



Figure 13. Peach and apple trees planted in the northeast corner of Lake Marjorie.



Figure 14. From the scale house looking west. Area affected outside of the permit boundary.

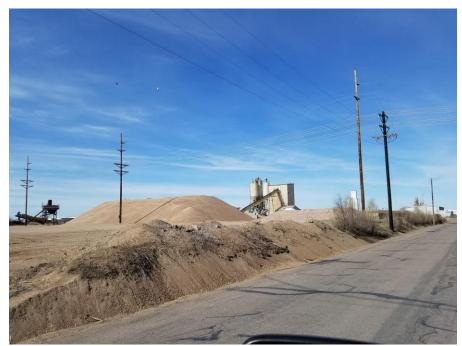
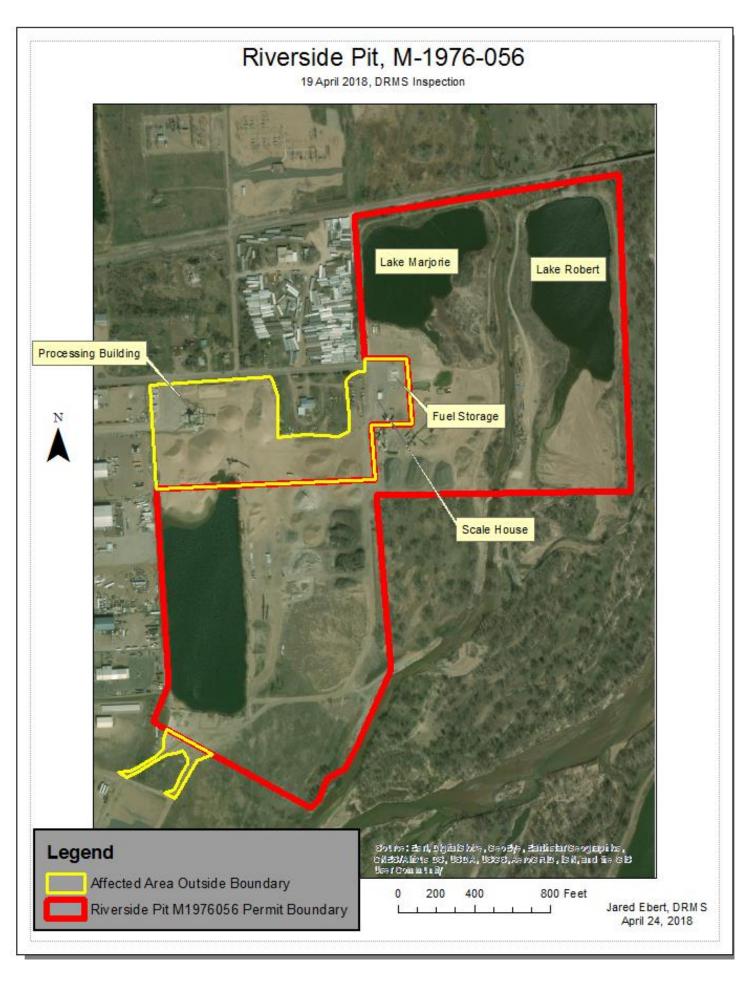


Figure 15. From Riverside Drive northwest of the permit area looking southwest. Area affected outside of permit boundary.



Figure 16. From Riverside Drive northwest of the permit area looking southeast. Area affected outside of permit boundary.



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>Y</u>	(RD) ROADS <u>Y</u>
(HB) HYDROLOGIC BALANCE <u>Y</u>	(BG) BACKFILL & GRADING <u>Y</u>	(EX) EXPLOSIVES \underline{Y}
(PW) PROCESSING WASTE/TAILING <u>Y</u>	(SF) PROCESSING FACILITIES PV	(TS) TOPSOIL <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- PV	(FW) FISH & WILDLIFE <u>Y</u>	(RV) REVEGETATION <u>Y</u>
(SM) SIGNS AND MARKERS PB	(SP) STORM WATER MGT PLAN NA	(RS) RECL PLAN/COMP Y
(ES) OVERBURDEN/DEV. WASTE NA	(SC) EROSION/SEDIMENTATION Y	(ST) STIPULATIONS <u>NA</u>
(AT) ACID OR TOXIC MATERIALS NA	(OD) OFF-SITE DAMAGE <u>PV</u>	

Inspection Contact Address

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EC: Jeff Harms, McAtee Construction Company, jharms@simonteam.com

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