

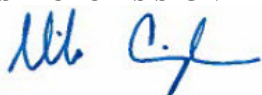
**COLORADO**Division of Reclamation,
Mining and Safety

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: Leyden Pit	MINE/PROSPECTING ID#: M-1983-139	MINERAL: Sand and gravel	COUNTY: Jefferson
INSPECTION TYPE: Monitoring	INSPECTOR(S): Michael A. Cunningham	INSP. DATE: May 30, 2017	INSP. TIME: 09:00
OPERATOR: City of Arvada	OPERATOR REPRESENTATIVE: Jason O'Keefe	TYPE OF OPERATION: 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$0.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: July 15, 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: Availability Of Records

PROBLEM/POSSIBLE VIOLATION: Problem: The Division does not have a record the current Operator has a structure agreement with the owner of the electrical line. This is a problem pursuant to C.R.S. 34-32.5-115(4)(e) and Rule 6.4.19.

CORRECTIVE ACTIONS: Prior to conducting any mining or reclamation activities within 200 feet of the electric power line infrastructure, the Operator shall provide a notarized agreement with the person(s) having an interest in the structure, that the Operator is to provide compensation for any damage to the structure.

CORRECTIVE ACTION DUE DATE: 9/15/17

INSPECTION TOPIC: Hydrologic Balance

PROBLEM/POSSIBLE VIOLATION: Problem: The Division has no evidence the operator has a valid well permit, substitute water supply plan, or approved water augmentation plan for the exposed groundwater at the site. This is a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights.

CORRECTIVE ACTIONS: The operator shall demonstrate the operation is in compliance with the Office of the State Engineer, show evidence that the operator is taking measures to bring the site into compliance with the SEO, or backfill the pits to at least two feet above the groundwater surface by the corrective action date specified.

CORRECTIVE ACTION DUE DATE: 9/15/17

OBSERVATIONS

The inspection was conducted by Michael Cunningham of the Division of Reclamation, Mining and Safety (Division). Jason O'Keefe was present on behalf of the City of Arvada and Mike Applegate and Katy Bilisoly were present on behalf of Applegate Group, Inc. The Leyden Pit is located on the east side of Highway 93 in Jefferson County. The purpose of the inspection was to evaluate the reclamation tasks which remain to be completed.

Pioneer Sand and Gravel (Pioneer) maintains a lease for 20 acres within the Leyden Pit to operate a product sales yard. A small stockpile product stockpile remains to the west of the office building which must be removed during final reclamation. In addition, Pioneer has a large sand stockpile located near the western permit boundary which will need to be removed. The approved post-mining land use for the Leyden Pit is rangeland, which would require reclamation of the sales yard and removal of all associated structures. In order for the sales yard to remain, an Amendment application would need to be filed to add a secondary post-mining land use for industrial/commercial use.

The northeastern portion of the permit area was inspected and the Division observed three ponds located in the East Pit. The three ponds contained water at the time of the inspection. Water was flowing through the ponds from north to south and discharged from a channel in the southernmost pond. The Division could not identify a source of surface water which fed into the ponds and it is assumed groundwater is being exposed within the ponds. The presence of hydrophytic vegetation indicates the ponds contain water throughout most of the year. The presence of water in these ponds was identified as a problem in an inspection conducted on July 6, 1994 and subsequently in an inspection conducted on November 21, 2013. The Division has previously requested the Operator submit documentation which demonstrates the ponds are in compliance with the Office of the State Engineer (SEO). If it is determined the water within the ponds is groundwater, then the Operator will need to either demonstrate compliance with the SEO or will need to backfill the pits to two feet above the static groundwater level. Alternately, the Operator may demonstrate the water within the ponds is the result of surface runoff, in which case the ponds can remain in their current condition. This matter has been cited as a problem and will require corrective action by the Operator, please see the first page of this report for additional information.

The Division observed several large product stockpiles located to the west of the above discussed ponds. These stockpiles must be removed or graded out during final reclamation of the site. The Division observed that mining which occurred adjacent to the power poles on site left small mounds with steep slopes. The approved Mining Plan specified mining would come no closer than 100 ft. to the power poles. The power pole mounds will need to be backfilled to a final grade 3H:1V or flatter. In addition, the Division does not have record of a structure agreement between the current Operator and the owner of the electrical lines as required by Rule 6.4.19. This matter has been cited as a problem and will require corrective action by the Operator, please see the first page of this report for additional information.

The Division inspected the three sediment ponds located immediately east of the Pioneer office which were the subject of Technical Revision No. 3. The sediment ponds were breached to maintain positive drainage and to restore the natural drainage pattern in this area. All of the ponds were dry at the time of the inspection. The northern pond is in need of additional grading and currently has minimal vegetation. The center pond has a constructed channel which allows surface water to discharge to the Coors pond located just outside of the

northern permit boundary. The southern pond has stable banks with dense willow establishment along the bottom of the pond, minor grading is required on the west side of this pond. The Division also inspected several pits located within the South Pit area and found the side slopes to be stable with adequate vegetation establishment. Minor areas of grading along the access road were identified.

The Operator continues to perform weed control at the site. The Division observed substantially less diffuse knapweed around the sales yard, than what was observed during the previous inspection.

This concluded the inspection.

PHOTOGRAPHS



1. East Pit ponds.



2. Canal draining East Pit ponds.



3. Product stockpiles located north of the sales yard.



4. Sediment pond breach.



5. South Pit.



6. Product stockpile adjacent to western 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>PB</u>	(FN) FINANCIAL WARRANTY-----	<u>NA</u>	(RD) ROADS-----	<u>N</u>
(HB) HYDROLOGIC BALANCE-----	<u>PB</u>	(BG) BACKFILL & GRADING-----	<u>Y</u>	(EX) EXPLOSIVES-----	<u>NA</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>Y</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>Y</u>	(RS) RECL PLAN/COMP--	<u>Y</u>
(AT) ACID OR TOXIC MATERIALS-----	<u>N</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

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CC: Wally Erickson, DRMS