




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: Superior S&G Pit	MINE/PROSPECTING ID#: M-1979-189	MINERAL: Sand and gravel	COUNTY: Arapahoe
INSPECTION TYPE: Monitoring	INSPECTOR(S): Jared L. Ebert	INSP. DATE: July 19, 2018	INSP. TIME: 12:50
OPERATOR: City of Aurora	OPERATOR REPRESENTATIVE: Brian Green, City of Aurora	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: August 8, 2018	

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

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

OBSERVATIONS

This was an on-site meeting of the Superior S& G Pit, Division of Reclamation, Mining and Safety (DRMS or Division) permit number M-1979-189 operated by City of Aurora (Aurora). Brian Green, John Gebhart, Trent Woolley with Aurora and Mike Holweger with Applied Design Services were in attendance. This is a 65.2 acre 112c operation in Arapahoe County. This site was originally permitted by Superior S & G Company. The permit was transferred to Rio Grande Company in 2004. Then in 2015 the permit was transferred to Aurora. The post mine land use approved for the site is primarily recreational centered around wetland/wildlife habitat creation.

DRMS conducted a monitoring inspection of this site on September 20, 2017. At that time based on the history of the site and the observations made during the inspection, it was cited that mining appears to have been completed and that reclamation had not been completed in accordance with Rule 3.1.3 and that the site had not been approved for temporary cessation in accordance with Rule 1.13.5. The Operator was given several options to either initiate mining or reclamation or to apply for temporary cessation from the Mined Land Reclamation Board. Since that time, the Operator has decided to complete reclamation. Aurora has hired a project manager to oversee the activity at the site and has retained Mike Holweger as a consultant to design the final site configuration. This meeting and site visit was conducted to observe the site and discuss Aurora's plan as it relates to the approved reclamation plan and possible modifications to be made to that plan.

Overall, it appears Aurora's plan is to enhance and maintain the wildlife habitat at the site to allow for passive observation based recreation. One of the goals discussed was limiting the amount of disturbance to the established vegetation while conducting the necessary site work. As cited on the last DRMS inspection report a significant amount of earth work remains to be completed at the site as the final pit slopes were not backfilled and graded in accordance with the approved plan. The approved reclamation plan for the site calls for leaving the pit slopes at a 3H:1V ratio. Also Rule 3.1.5(7) states "In all cases where a lake or pond is produced as a portion of the Reclamation Plan, all slopes, unless otherwise approved by the Board or Office, shall be no steeper than a ratio of 2H:1V, except from 5 feet above to 10 feet below the expected waterline where slopes shall be not steeper than 3H:1V." Aurora would like to modify the reclamation plan to allow for portions of the pit slopes to remain steeper than a 3H:1V ratio. It was discussed DRMS would entertain such a revision if the Operator would grade portions of the pit slopes to a 3H:1V ratio near where the public will have access to the shore. For example, Aurora plans on having a trail/path run east and west on the south side of the site with small branches of the trail leading visitors to observation points near the pit/ponds where dense wetland vegetation has established. The slopes near where the public will be allowed access to the pit slopes should be graded to a 3H:1V ratio. Several large stockpiles of material exists along the south side of the former pits. Aurora would like to smooth these piles out to give the area a more natural look. In these areas, Aurora is encouraged to use this material to create 3H:1V slopes. Many small ponds have been created at the site and each of these should have portions of the pond slopes where the slopes are graded to a 3H:1V ratio to allow for egress from the pond should a person fall into the pond.

It was discussed Aurora would have to file a Technical Revision to the reclamation plan to revise the final site configuration. The requirements for a reclamation plan is outlined in Rule 6.4.5. Also, the Operator will need to revise the reclamation plan map. The reclamation plan map requirements are outlined in Rule 6.4.6 and Rule 6.2.1(2). An electronic copy of the Rules can be found on our website at

<http://mining.state.co.us/Pages/Home.aspx>. It was discussed that some of Aurora's proposed revisions will be conceptual and final locations of trails and such may not be exact. DRMS understands this and as long as the final site configuration is not significantly different than what will be proposed, small variations are acceptable.

Given the Operator intends to begin reclamation in the near future, the problem cited in the last DRMS inspection report will be considered resolved at this time.

PHOTOGRAPHS



Figure 1. Bald eagles on the east side of the site.



Figure 2. Stockpile of material on the south end of the site near the entrance.

Inspection Contact Address

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Enclosure: None

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