




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): Patrick Lennberg	INSP. DATE: August 15, 2019	INSP. TIME: 09:00
OPERATOR: City of Aurora	OPERATOR REPRESENTATIVE: Brian Green and Mike Holweger	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 16, 2019	

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>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</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>N</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</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>N</u>	(OD) OFF-SITE DAMAGE----- <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

OBSERVATIONS

This was an on-site meeting at the Superior S & G Pit, Division of Reclamation, Mining and Safety (DRMS) permit number M-1979-189 operated by the City of Aurora (Aurora). Brian Green 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 on 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.

Since 2017 Aurora has worked extensively to develop a Reclamation Plan for the site that met the requirements of Rule 3.1.5(7) that 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.". In addition to meeting the requirement it has been discussed and agreed upon that there might be a few areas that are steeper than 3H:1V ratio and leaving some well-established Cottonwood trees along the banks. The Division concurs with this approach.

Recently, Aurora has completed both a LIDAR and bathymetric survey of the ponds and surrounding areas. These surveys will allow for a more focused remediation of the pit slopes to achieve the reclamation goals while limiting the amount of wetland disturbance as well as minimizing disturbances to the well-established wildlife habitat that exists at the site.

Aurora will have to file a Technical Revision to the Reclamation Plan to revise the final site configuration, using the drawings that were reviewed in the field during this inspection. It was discussed that some of Aurora's proposed revisions will be conceptual in nature and final configurations of some features (wildlife viewing platforms) 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.

The Division emailed a copy of the required Technical Revision form to Brian and Mike the afternoon of the inspection and a copy is also being provided with this inspection report.

The Division would like to acknowledge the significant effort that the City of Aurora has put into developing a reclamation plan for the site and the innovative ways that they have thought about preserving the habitat that currently exists at the site. We look forward to seeing the results of reclamation activities not to mention the how the site fits into the overall Open Space management plan.

Photographs taken during the inspection are attached.

Please contact Patrick Lennberg (303)866-3567 ext. 8114 or email at patrick.lennberg@state.co.us if you have any questions regarding this report.

Inspection Contact Address

Tom Barrett
City of Aurora
15151 E. Alameda Parkway
Aurora, CO 80012

Enclosure: Technical Revision Form

cc: Michael Cunningham, DRMS
ec: Patricia Schuler, City of Aurora pschuler@auroragov.org
 Brian Green, City of Aurora bcbgreen@auroragov.org
 Mike Holweger, Applied Design Services ADSLLC@aol.com

PHOTOGRAPHS



Photo 1: West most pond



Photo 2: Waste material pile that will be graded into surrounding area



Photo 3: Central pond looking north, potential wildlife viewing area



Photo 4: Central pond area looking east, center of photo is an area requiring grading with a pile of material that will be blended into the surrounding area to achieve a more natural appearance.



Photo 5: East most pond looking east.



Photo 6: East most pond looking north across the western portion of pond



Photo 7: Typical wildlife present at the site



COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- _____ Site Name: _____

County _____ TR# _____ (DRMS Use only)

Permittee: _____

Operator (If Other than Permittee): _____

Permittee Representative: _____

Please provide a brief description of the proposed revision: _____

As defined by the Minerals Rules, a Technical Revision (TR) is: “a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan.” The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered “filed for review” until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>