




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: East Rigden Pit	MINE/PROSPECTING ID#: M-1979-097	MINERAL: Sand and gravel	COUNTY: Larimer
INSPECTION TYPE: Surety Release Inspection	INSPECTOR(S): Amy Eschberger	INSP. DATE: May 12, 2020	INSP. TIME: 13:00
OPERATOR: City of Fort Collins	OPERATOR REPRESENTATIVE: Mike Hart, Dallas "Whitey" Glasser	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Surety Release Requested	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: May 14, 2020	

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>N</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>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</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 a release inspection of the East Rigden Pit (Permit No. M-1979-097) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) in response to an Acreage Reduction request (AR-01) filed with our office on March 16, 2020. The Division was accompanied by Mike Hart and Dallas "Whitey" Glasser during the inspection. No comments or objections on AR-01 were received within the public comment period which closed on March 31, 2020. The East Rigden Pit is located at the eastern edge of Fort Collins, CO in Larimer County, just west of Interstate 25. The site is situated directly south of the Cache La Poudre River. The main access to the site is from the west off Ziegler Road, through the batch plant area operated by Martin Marietta Materials. **Photos 1-16** taken during the inspection are included with this report.

This is a 112c operation permitted for 518 acres to mine sand and gravel. The affected lands are partially owned by the operator, City of Fort Collins and partially owned by Cottonwood Land and Farms, LLC. The City took over the permit in 2014 to construct a clay-lined reservoir and a future regional park. According to the permit file, construction of the clay-lined reservoir was completed in September of 2014. On May 20, 2015, the Division of Water Resources (DWR) approved the clay liner, classifying the pit as a lined reservoir in accordance with the 1999 SEO Guidelines. The approved post-mining land use for the site is a combination of developed water resource (for the reservoir) and wildlife habitat.

The permit area is divided by the Great Western Railway which runs northwest-southeast across the northern portion of the site. The western portion of the permit area located south of the railway is crossed by the Boxelder Ditch, which also runs northwest-southeast across the site. The site has not been mined in many years. However, a concrete batch plant remains active at the western edge of the permit area. Besides the batch plant area, all disturbed portions of the permit area have been in various stages of reclamation for some time. The southwestern portion of the permit area, located south of the batch plant and west of the Boxelder Ditch, was never disturbed by the operation.

The area proposed for release in AR-01 consists of a 15-acre area located in the far southeastern portion of the permit area, east of the river and south of the railway. This portion of the permit area is owned by Cottonwood Land and Farms, LLC, and can no longer be accessed from the main permit area. One must now access the area on foot from the railway corridor along its northern edge. According to annual reports submitted by the operator, reclamation of this area was completed in 2008. A shallow pond is present in this area rimmed by abundant wetland vegetation consisting primarily of cattails. The side slopes of the pond are graded flatter than 3H:1V and are stable with established grass cover and volunteer trees (e.g., willows, cottonwoods). The land surrounding the pond/wetland area is well vegetated with grasses. No issues with state-listed noxious weed species were observed in the area. The reclaimed land appears to be a valuable wildlife habitat resource.

The Division estimates the exposed groundwater in this area to cover 2.92 acres. According to the Substitute Water Supply Plan (SWSP) approved for the site for the period of July 1, 2019 through June 30, 2020, this area had three acres of groundwater exposed prior to January 1, 1981. According to DWR, the operator does not need to replace depletions that occur due to evaporation from groundwater exposed prior to January 1, 1981 ("pre-1981"). Therefore, since the amount of groundwater currently exposed in the area proposed for release is less than the pre-1981 amount, this portion of the site is considered to be in compliance with DWR.

The Division has determined the 15-acre area proposed for release has been reclaimed in accordance with the approved reclamation plan and post-mining land use of wildlife habitat. Therefore, AR-01 was approved on May 13, 2020, leaving a total permit area of 503 acres (see enclosed Google Earth image of site showing permit area after AR-01 approval). The operator will need to ensure the revised southeastern permit boundary is appropriately delineated in accordance with Rule 3.1.12(2).

During the inspection, the Division also had discussions with Mr. Hart and Mr. Glasser regarding future plans for the remaining permit area. There are plans for the permit to be transferred back to Cottonwood Land and Farms, LLC after the City has completed reclamation of their disturbed areas. During the last inspection of the site conducted on January 31, 2019, the Division noted that some portions of the reservoir shorelines may require reseeding to achieve the desired vegetative cover. The Division also noted areas located northwest of the reservoir which would require revegetation, as these areas were re-disturbed by the underdrain system that was installed in 2017 and extended in 2018. The Division also reminded the operator in its last inspection report the approved revegetation plan calls for planting trees and shrubs adjacent to the reservoir, including Cottonwoods, Ponderosa Pines, Colorado Pinyons, Rocky Mountain Junipers, Hackberry, and Rabbitbrush. Therefore, prior to requesting release of this area, the operator will need to either plant the trees and shrubs from the approved revegetation plan, or propose a revised revegetation plan through a Technical Revision.

During its last inspection, the Division had discussions with the operator about potentially submitting an Amendment application to change the post-mining land use of the batch plant area from wildlife habitat to industrial/commercial, and to revise the reclamation plan for the plant to allow it to remain "as-is" for continued operation by Martin Marietta Materials. However, during the current inspection, Mr. Hart informed the Division the plant operations are expected to cease in July of this year and demolition of the structures to begin. At this time, the plan is to reclaim the plant area in accordance with the approved reclamation plan, including demolishing and removing all structures and revegetating the land for wildlife habitat.

The anticipated sequence of events for the site include completing final reclamation of the land owned by the City (including the reservoir) and requesting release of this area, submitting a Succession of Operators application to transfer the permit to Cottonwood Land and Farms, LLC, and completing reclamation of the batch plant area and requesting release of this area. If these releases are approved, only the land north of the river would remain in the permit area, which the new operator may continue mining prior to completing final reclamation.

During the Division's last inspection, the area north of the river was found to have approximately 18 acres of additional exposed groundwater from the 4.5 acres of exposed groundwater considered to be pre-1981. This was cited as a problem in the Division's last inspection report. However, this problem was considered to be temporarily abated after the operator provided the Division with evidence (on May 8, 2019) that a SWSP had been submitted to DWR to replace all out-of-priority depletions with The City of Fort Collins' augmentation water sources. In the most recently approved SWSP for the site, DWR states the City is in preliminary negotiations with the landowner to acquire the property and incorporate the pond(s) into their existing augmentation plan. In the event that such negotiations are unsuccessful, DWR will not support the release of this land from the mine permit unless depletions are first included in a decreed plan for augmentation or otherwise mitigated. This may require the pond(s) to be backfilled to their pre-1981 area. Cottonwood Land and Farms, LLC should be aware that taking over the permit as a private entity would require a Financial Warranty be posted for completing reclamation of the site. This would include costs for backfilling any exposed groundwater not covered by the pre-1981 exemption or by a plan for augmentation approved by Water Court.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS



Photo 1. View looking west across area proposed for release, from railroad corridor north of site.



Photo 2. View looking southwest across area proposed for release, from railroad corridor north of site.



Photo 3. View looking south across area proposed for release, from railroad corridor north of site.



Photo 4. View looking northwest across northern portion of area proposed for release.



Photo 5. View looking west across pond/wetland area in area proposed for release, from its northeastern edge.



Photo 6. View looking southwest across pond/wetland area in area proposed for release, from its northeastern edge.



Photo 7. View looking southwest across pond/wetland area in area proposed for release, from its northern edge.



Photo 8. View looking northwest across pond/wetland area in area proposed for release, from its northern edge.



Photo 9. View looking southwest across pond/wetland area in area proposed for release, from its northern edge.



Photo 10. View looking northeast across pond/wetland area in area proposed for release, from its western edge.



Photo 11. View looking east across pond/wetland area in area proposed for release, from its western edge.



Photo 12. View looking south across western portion of area proposed for release.



Photo 13. View looking east across western portion of area proposed for release.



Photo 14. View looking east across southern portion of area proposed for release.



Photo 15. View looking east across southern edge of area proposed for release, from its southwestern edge.



Photo 16. View looking north across area proposed for release, from its southwestern edge.

Inspection Contact Address

Mark Sears
City of Fort Collins
P.O. Box 580
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Encl: Google Earth image of site showing permit area after AR-01 approval

CC: Mike Hart, Hart Environmental
Dallas "Whitey" Glasser
Bill McDowell, Cottonwood Land and Farms, LLC
John Stokes, City of Fort Collins
Michael Cunningham, DRMS

M-1979-097 / East Rigden Pit / City of Fort Collins (112c)

Red Outline = 503 acres = Permit Area after AR-01 approval

Yellow Outline = 15 acres = Area released from permit through AR-01 approval

(Image data from 7/17/2019)

