




**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.

<b>MINE NAME:</b> East Rigden Pit	<b>MINE/PROSPECTING ID#:</b> M-1979-097	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Larimer
<b>INSPECTION TYPE:</b> Surety Release Inspection	<b>WEATHER:</b> Clear	<b>INSP. DATE:</b> September 26, 2023	<b>INSP. TIME:</b> 10:00
<b>OPERATOR:</b> City of Fort Collins	<b>OPERATOR REPRESENTATIVE:</b> Matthew Parker	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	
<b>REASON FOR INSPECTION:</b> Surety Release Requested	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$0.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>INSPECTOR(S):</b> Nikie Gagnon	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> October 10, 2023	

**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>N</u>	(BG) BACKFILL & GRADING----- <u>N</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>N</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>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

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

## **OBSERVATIONS**

This inspection was completed as part of an acreage release request, submitted in accordance with Rule 4.17, received by the Division on August 8, 2023. The East Rigden Pit is a 112c operation permitted for 503 acres. The affected lands are partially owned by the City of Fort Collins and partially owned by Cottonwood Land and Farms LLC. The permit area is divided by the Great Western Railway which runs across the site from northwest to southeast. The City of Fort Collins is requesting a release of 228 acres in the southwestern portion of permit area, which is all City owned land. Matt Parker, representing the City of Fort Collins (Operator), accompanied the Division during the inspection. Representatives from Cottonwood Land and Farms LLC were present at the beginning of the inspection but did not accompany the Division for the inspection.

### **Hydrologic Balance**

In the area proposed for release, the City constructed a clay-lined reservoir which was completed in September 2014. The liner was approved by the Division of Water Resources in 2015. The approved post mining land use is developed water resources and wildlife habitat. There is a dirt trail used for recreation that encircles the reservoir that is approved to remain after reclamation and a dirt access road that will also remain for use by the City after release.

The City of Fort Collins has an active Substitute Water Supply Plan (SWSP) with the Division of Water Resources that is approved through June 30, 2024 to cover depletions caused by mining the gravel pit beyond any pre-1981 groundwater exposure. The two ponds included in the SWSP for groundwater exposure from mining after December 31, 1980 are located on land owned by Cottonwood Land and Farms, which is not included in this release request.

### **Revegetation:**

Reclamation work is complete in the proposed release area. The area northwest of the reservoir has been revegetated and contains a dense and diverse ecosystem of grasses, forbs, rabbitbrush and young cottonwoods. Weeds appeared to be well controlled in this area.

The shorelines of the pond are graded flatter than 3H:1V and are stable with established grasses, forbs, and a few volunteer cottonwood and willow trees. The land surrounding the pond is well vegetated with grasses. The northwest corner of the reservoir has been overseeded a few times to ensure uniform growth and the City installed shallow terracing and rock berms to slow water flowing down the slope.

During a previous inspection in 2020, land in the northwest corner of the reservoir, near the northern access road, had sparse vegetative cover consisting primarily of weeds. The Division inspected this area during this visit and observed patches of dense grass, annual sunflowers, and a few rabbitbrush shrubs spreading across the area that was previously bare. Some annual weeds were noted here but that is to be expected at this stage of regeneration. Cracks in the soil indicate occasional standing water in this area, however the vegetative cover is expanding, controlling erosion and capable of self-regeneration.

During this inspection, the City informed the Division that they conduct weed control at regular intervals throughout the growing season and record all the vegetation management work in GIS to show different types of treatment, dates and the areas treated over the past 7 years. The weeds throughout the release area are well controlled. The City plans to continue managing the property in the same manner after it is released.

The Division noted a few Tamarisk trees growing along the railroad right-of-way between the eastern and western permit areas. The trees appear to be outside the release area and the City stated the trees are scheduled for removal in the following week.

No comments were received on the release. Based on observations made during this inspection the request for an acreage release of 228 acres will be approved. Notice of the Division's decision regarding the release request will be sent under a separate cover letter.

Photographs taken during inspection are attached.

Any questions or comments regarding this inspection report should be forwarded to Nikie Gagnon at the Colorado Division of Reclamation, Mining and Safety via telephone at 303-866-3567, ext. 8126, or email at [nikie.gagnon@state.co.us](mailto:nikie.gagnon@state.co.us).

## PHOTOGRAPHS



Photo 1: Looking west across the meadow northwest of the reservoir.



Photo 2: Looking west down the northern boundary of the release area. The area on the left is the City owned land in the release area and the land on the right is owned by Cottonwood Farms. Arrows point to boundary markers.



Photo 3: Dense vegetation in the meadow area northwest of the reservoir.



Photo 4: Area in the northwest corner of the reservoir. Dense patches of grass and sunflowers are growing in a low/wet area outside the northwest corner of the reservoir.



Photo 5: Area just outside the northwest corner of the reservoir. Some evidence of past standing water here. Vegetation surrounds patches of bare ground where water accumulates after storms.



Photo 6: Northwest corner of reservoir. City placed berms filled with crushed rock on the slope to control water erosion. Grasses are uniform across this area.



Photo 7: Looking south down trail around reservoir from northwest corner.



Photo 8: View across reservoir from the southeastern side.



Photo 9: Looking west from the east side of the reservoir.



Photo 10: Looking at the southern corner of the reservoir. Slopes are 3H:1V or shallower above and below the water line.



Photo 11: Revegetated area just outside the southern end of the reservoir.



Photo 12: Looking at the slopes along the northwestern side of the reservoir.



Photo 13: Riparian buffer between the western and eastern mining areas. Arrow points to railway bed that runs through, parallel to the eastern side of the reservoir.

**Inspection Contact Address**

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Enclosure

CC: Amy Eschberger, Senior EPS, DRMS