




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: Strang Gravel Pit	MINE/PROSPECTING ID#: M-1977-425	MINERAL: Sand and gravel	COUNTY: Larimer
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: April 9, 2024	INSP. TIME: 10:00
OPERATOR: Larimer County	OPERATOR REPRESENTATIVE: Todd Juergens	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: NA	BOND AMOUNT: NA – County Government	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Nikie Gagnon	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: May 17, 2024	

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>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>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</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>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 was a routine monitoring inspection of the Strang Gravel Pit conducted by Nikie Gagnon of the Division of Reclamation, Mining and Safety (Division). Todd Juergens representing Larimer County Road and Bridge (Operator) accompanied the Division during the inspection. The mine site is a 112c operation permitted to affect 160 acres. The post mining land use is recreation in an open space area. The mine is located approximately 0.5 mile north of Harmony Road on Strauss Cabin Road, east of Fort Collins.

Gen. Compliance With Mine Plan:

Mining is ongoing at this Larimer County operation. The site consists of nine mining cells and a staging area next to the entrance on the east side. Mining is complete in Cells A-G on the south and west sides of the permit area (See Figure 1). The Division observed active mining and processing operations in Cell I on the north side of the permit area (Photo 1). The Operator indicated that when they are done mining Cell I they will move into Cell H, which is the final undisturbed cell in the permit area. Overburden is stored in vegetated berms around the north and east sides of Cells H & I (Photo 20). Topsoil storage was observed east of the active mining area in Cell I.

Backfill and Grading

The slopes of the previously mined cells are graded to a 3H:1V slope. During this inspection, the Division observed material being placed into Cell C on the south side of the permit area (Photos 9-11). The Operator stated that they were bringing in fill from County projects to backfill Cells C & F to reduce the groundwater exposure and increase the open space area for the park. After the inspection, the Division reviewed the permit file and determined the Operator had not submitted an inert fill notification prior to importing fill. Following the inspection, on May 7, 2024, Larimer County submitted a Technical Revision (TR2) for the Importation of Inert fill. This revision was approved on May 17, 2024.

Hydrologic Balance

The permit area is located west of the Cache La Poudre River. The Boxelder Ditch bisects the permit area running northwest-southeast across the property (Photo 4). As noted in previous inspection reports, mining areas are dewatered via ditches constructed at the perimeter of each cell and water is discharged into a lower sediment pond (Photo 2) or into the Boxelder Ditch. The discharge point into the ditch is regulated under a CDPHE permit (Photos 3).

At the time of inspection, the Division estimates the groundwater exposure is approximately 27 acres in the open water ponds, and dewatering trenches and forebays (see Figure 1). The site is covered under the operator's well permit obtained on October 25, 2010 which covers a total exposed groundwater surface area up to 98.7 acres. The pond in Cell A (3.45 acres) was exposed prior to January 1, 1981 and does not require replacement of evaporative depletions (Photo 7).

Reclamation and Revegetation

The post-mining land use of this site is recreation within an open space park plan. The Operator indicated the permanent plan for the site will include open space, trails, bicycle paths and the unlined ponds. During this inspection, the Division observed the vegetation established in the previously mined cells on the south and west sides. Three are open water ponds with wetland vegetation along the shoreline. The drier pits are vegetated with grasses with some wetland species growing in the bottom of the pits. The Division also

observed established grasses around the perimeter of the permit area. Mature trees are planted along the southern permit boundary. Per the approved Technical Revision 3, Cells C and F will be backfilled with inert material to 3H:1V or flatter, covered with 36 inches of overburden and plated with 6 inches of topsoil. When topsoiling is complete, these areas will be seeded in accordance with the seed mix approved in 2014. under Technical Revision 2.

Mr. Juergens stated that once they complete mining operations, the County will determine how each cell within the park will be utilized and reclaim as necessary per the approved backfilling, topsoiling and seeding requirements. **Note:** Prior to seeking a release, a Technical Revision will be required to update the reclamation plan and map to show the final configuration and use for each cell within the permit area, i.e., unlined groundwater ponds (currently Cells A & B), wetlands, and open space areas. Additionally, the reclamation plan should show any buried pipelines and culverts and clarify whether the silos will remain on site and indicate if any roads or parking areas will remain after release.

Signs and Markers:

During the inspection, the Division observed mine signs at both entrances as required by Rule 3.1.12(1) (Photo 21) and fencing is installed around the entire permit area (Photos 17, 18, & 20).

This concludes this inspection report. A subset of the photographs taken during inspection are attached. Please contact Nikie Gagnon (303)866-3567 ext. 8126 or email at nikie.gagnon@state.co.us if you have any questions regarding this report.

PHOTOGRAPHS



Photo 1: Looking at processing area and stockpiled material in the active mining area of Cell I on the north side of the permit area.



Photo 2: Looking at dewatering basin in Cell I on the north side of the permit area.



Photo 3: CDPHE monitoring and sampling location on the Boxelder ditch.



Photo 4: View looking northwest down the Box Elder Ditch that bisects the permit area.



Photo 5: Looking across the eastern side of Cell I. Operator plans to address silo on site prior to release. The County may keep it on site for the park.



Photo 6: Looking north across unmined Cell H.



Photo 7: Unlined pond in Cell A.



Photo 8: Unlined pond in Cell B.



Photo 9: Looking northwest across inert fill area in Cell C. Sediment ponds on the east side noted by arrow.



Photo 10: Closer look at inert fill in Cell C. Stockpiled imported material circled.



Photo 11: Looking at the center of Cell C. Fill placed in the area circled.



Photo 12: Looking northwest across unfilled portion of Cell C.



Photo 13: Wetlands and open water observed in Cell D.



Photo 14: View looking southwest across Cell E on the western edge of the permit area.



Photo 15: View of Cell F. Operator intends to backfill this cell.



Photo 16: View of Cell G in the northwest corner of the previously mined pits.



Photo 17: View looking down the southern boundary of the permit area. The boundary is marked by stakes and a barbed wire fence.



Photo 18: View looking down the western boundary of the permit area.



Photo 20: View of the vegetated overburden berm and barbed wire fence running along the northern edge of the permit area.



Photo 21: Mine sign and gate posted at the entrance on the north side of the permit area.



Figure 1: Permit Boundary shown in red. Operator submitted an inert fill application to fill Cells F and C, including the sediment pond. Google imagery dated 5/22/23.

Inspection Contact Address

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