

**STATE OF  
COLORADO****Gagnon - DNR, Nikie** <nikie.gagnon@state.co.us>

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## Pit 29 M 1980183 Inspection Report

1 message

**Gagnon - DNR, Nikie** <nikie.gagnon@state.co.us>

Thu, Nov 16, 2023 at 3:07 PM

To: Emily Schallenkamp &lt;eSchallenkamp@brannan1.com&gt;

Cc: Fred Marvel &lt;fmarvel@brannan1.com&gt;, Scott Legg &lt;slegg@brannan1.com&gt;

Hi Emily.

Please see the attached report for the September 27 inspection of Pit 29. There are two problems cited in the report that will need to be addressed within 30 days. Once you review the report, feel free to contact me if you have any questions.

Kind regards,

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**Nikie Gagnon****Environmental Protection Specialist****COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

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**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> Pit 29	<b>MINE/PROSPECTING ID#:</b> M-1980-183	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Adams
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Clear	<b>INSP. DATE:</b> September 27, 2023	<b>INSP. TIME:</b> 11:00
<b>OPERATOR:</b> Brannan Sand and Gravel Company, L.L.C.	<b>OPERATOR REPRESENTATIVE:</b> Steve Kelton and Alex Schatz	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> None	<b>BOND AMOUNT:</b> \$592,700.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>INSPECTOR(S):</b> Nikie Gagnon Amy Eschberger	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> November 16, 2023

**The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.**

**INSPECTION TOPIC:** Signs & Markers

**PROBLEM/POSSIBLE VIOLATION:** Problem #1: The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Rule 3.1.12(1).

**CORRECTIVE ACTIONS:** Per Rule 3.1.12(1), the Operator shall, at the entrance of the mine site post a sign, which shall be clearly visible from the access road, with a minimum size equaling one hundred and eighty-seven (187) square inches, such as eleven (11) inches in height and seventeen (17) inches in width, with appropriate font size, with the following: the name of the Operator; the operation name; a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number. The operator shall submit photo documentation that a proper sign has been posted by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 12/16/23

**INSPECTION TOPIC:** Gen. Compliance With Mine Plan

**PROBLEM/POSSIBLE VIOLATION:** Problem #2: Trash and refuse was noticed on the site. This is a problem at this time for failure to dispose of refuse in a manner that controls unsightliness or deleterious effects of such refuse pursuant to C.R.S. 34-32.5-116(4)(e).

**CORRECTIVE ACTIONS:** The operator shall submit a written notice to the Division with photo documentation, that the trash has been removed from the site by the corrective action date.

**CORRECTIVE ACTION DUE DATE:** 12/16/23

**OBSERVATIONS**

This inspection was conducted as part of the Division of Reclamation, Mining and Safety's (Division or DRMS) routine monitoring program for permitted operations. Nikie Gagnon and Amy Eschberger, with the Division, conducted the inspection. Steve Kelton and Alex Schatz, representing Brannan Sand and Gravel, LLC (Operator) accompanied the Division during the inspection.

The Pit 29 mine is located in Brighton, Colorado, on the east side of Brighton Road between 124<sup>th</sup> and 136<sup>th</sup> Avenues. The mine is a 112c operation permitted to affect 177.67 acres. The site is split into 3 mining areas, Mining Area I (south end), Mining Area II (center), and Mining Area III (north end). Mining is complete in Mining Areas I and II and these two areas have been reclaimed as lined water storage reservoirs. Both reservoirs were holding water at the time of inspection. Mining Area III is currently used as a stockpile storage area. No evidence of recent mining activity was observed in Area III.

#### Signs and Markers

The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Rule 3.1.12(1). As noted in Problem #1 above, the operator shall post an appropriate sign at the main entrance to the mine site and submit photo evidence to the Division of the sign in place.

#### General Compliance with Mine Plan

Trash was observed behind the stockpiles in Mining Area III. Additionally, discarded equipment and piping was observed on the north end of the permit area in Mining Area II. This is cited as a problem for failure to dispose of refuse in a manner that controls unsightliness or deleterious effects of such refuse. As noted in Problem #2 above, the operator shall submit a written notice to the Division with photo documentation, that the trash, discarded equipment, and piping has been cleaned up by the corrective action date. Additionally, the Operator stated there has been a problem with illegal dumping on the road between Mining Areas II and III and they planned to work with the city to close the road off to the public.

#### Reclamation Success:

Surface reclamation is complete in Mining Area I and the reservoir was holding water at the time of inspection. The slopes above the water line are graded to 3H:1V or flatter and vegetated with grasses and some forbs. Patches of annual weeds and sunflowers were observed around the reservoir, but these weeds did not appear to be interfering with the growth of desired vegetation. Willows and cottonwoods were also observed along the shoreline of the reservoir, particularly in the southwest corner. The surface reclamation appears to be adequately controlling erosion and the native grasses are uniform around the reservoir.

According to the Operator, Mining Area II was revegetated more recently. The slopes of the reservoir are sparsely to moderately vegetated with grasses. Annual weeds (primarily Russian thistle) currently have the upper hand, and bare ground was observed on the shoreline in the southwest corner and north of the pump house. These two areas should be reworked to break up compaction and reseeded. The revegetation is more consistent on the eastern side and in the northwest and southeast corners of the reservoir. The Operator stated the east side of the reservoir was reseeded last year. The approved reclamation plan states that weeds in re-vegetated areas will be controlled by mowing until grasses are established and post-reclamation management will be in compliance with the Adams County Weed Management Program.

The shoreline around the pumphouse has been stabilized with rip-rap. In a letter dated April 23, 2019, the Division concurred with the Operator's findings that the reclamation plan only calls for adding rip-rap to embankments above the original surface grade of the reservoir. Therefore, bank armoring is not required on the slopes around the two reservoirs.

According to the approved permit maps, the permit area for Mining Area III is 18.23 acres in size. The Division estimates the operation has disturbed the majority of Mining Area III. This area was approved for an optional reservoir; however, the pit was backfilled in 2017 and the Operator is currently using this area for stockpile storage. The stockpiles appear to have been in this location for a while. Annual weeds (Russian thistle and cheatgrass) and sunflowers dominate this area and are growing on the pit floor and the stockpiles. Some common mullein was also observed in this area. Volunteer cottonwood trees were observed growing around some of the stockpiles. It does not appear that any portion of the disturbed land in Mining Area III has been retopsoiled or seeded for reclamation. According to the annual report filed on 12/21/22, the last activity at the mine occurred on 12/17/2020. The Division reminds the Operator that per Rule 3.1.3, all reclamation shall be carried to completion by the Operator with all reasonable diligence, and each phase of the reclamation shall be completed within five years from the date the Office has evidence that mining has ceased.

Prior to seeking a release of any portion of the permit area, the Operator will need to submit a Technical Revision to update the Reclamation Plan Map to show all the structures that will remain after release of the permit. This includes all the buildings, pumps, and gages related to the operation of the water reservoirs, the boat ramp north of the pumphouse, rip-rap installed on the shoreline, paved areas, interior fencing, and any access roads that will remain after reclamation.

#### Hydrologic Balance

A French drain was installed in 2015 on the upgradient (south) side of Pit 29 to alleviate groundwater mounding and flooding on the adjacent property. The drain runs from east to west along the southwestern edge of Mining Area II. The drain pipe continues north for approximately 750 feet along the western boundary of Mining Area II before it turns west to discharge into an existing ditch that flows to the South Platt River. The final engineering certification and as-built drawing for this drain/pipe system were accepted by the Division on March 30, 2016. The adjacent property on the south side of Mining Area II was observed to be dry during this inspection, an indication that the French drain continues to control flooding south of Mining Area II.

After the inspection, the Division reviewed the 3<sup>rd</sup> Quarter groundwater monitoring data submitted on October 16, 2023. Since 2018, when the Operator repaired a leak in the slurry wall on the east side of the reservoir in Mining Area II, the Division has been increasingly concerned about groundwater mounding along the east side of the permit boundary. The Division sent a letter to the Operator on October 26, 2023 requesting additional information, including a groundwater model mounding and shadowing analysis, in order to evaluate how the hydrologic balance has been affected by the slurry wall installation. As of the signature date of this report, the Operator has not submitted the requested information. The Division will not be able to release any portion of this permit until the Operator has sufficiently demonstrated that disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area have been minimized as required by Rule 3.1.6(1), or if needed, the appropriate mitigation has been completed.



Financial Warranty:

The Division currently holds a financial warranty in the amount of \$592,700.00. The Division will be re-evaluating the required Financial Warranty for the site in the near future and will notify the Operator under separate cover if an increase is required.

This concludes the Division's Inspection Report; a subset of photographs taken during the time of the inspection are included below. If you need additional information or have any questions, please contact me at the Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 303-866-3567 x8126, or by email at [nikie.gagnon@state.co.us](mailto:nikie.gagnon@state.co.us).

## **PHOTOGRAPHS**



Photo 1: Looking south across the reservoir in Mining Area I.



Photo 2: Western slope of reservoir in Mining Area I.





Photo 3: Looking north from the southwest corner of the reservoir in Mining Area I.



Photo 4: Looking west along the southern slope of the reservoir in Mining Area I.





Photo 5: Northeastern corner of the reservoir in Mining Area I. Algae bloom observed in the water.



Photo 6: Property on the south side of Mining Area II. French drain installed below the berm.





Photo 7: Southwest corner of the reservoir in Mining Area II.



Photo 8: Southern shoreline of the reservoir in Mining Area II.





Photo 9: Southeast corner of Mining Area II.



Photo 10: Looking north along the eastern shoreline of the reservoir in Mining Area II.





Photo 11: Northeast corner of the reservoir in Mining Area II.



Photo 12: Western shoreline of the reservoir in Mining Area II.





Photo 13: Boat ramp installed near the pumphouse in Mining Area II.



Photo 14: Looking north across Mining Area III. Stockpiles of material in background.





Photo 15: Stockpiled material in Mining Area III. Trash observed behind the stockpiles.



Photo 16: Stockpiled material in Mining Area III. Annual weeds, sunflowers and common mullein, and volunteer cottonwoods are growing around the piles.





Photo 17: Illegal dumping area observed at the entrance to Mining Area III.



Photo 18: Discarded pipes and equipment observed in the permit area along the north end of Mining Area II.





Figure 1: Google Earth imagery from May 24, 2023. Permit boundary is shown by the red line. Blue line on Mining Area II represents the French drain.

## GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</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>PB</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>PB</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

### Inspection Contact Address

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Denver, CO 80229

Enclosure

CC: Fred Marvel, Brannan Sand and Gravel  
Amy Eschberger, DRMS