



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: Diehl Borrow Pit	MINE/PROSPECTING ID#: M-2018-054	MINERAL: Borrow material for construction	COUNTY: Larimer
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: April 1, 2021	INSP. TIME: 14:00
OPERATOR: SEMA Construction, Inc.	OPERATOR REPRESENTATIVE: Jason Kidston	TYPE OF OPERATION: 111 - Construction by Government Agency	

REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$88,112.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: April 8, 2021

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>Y</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>NA</u>
(PW) PROCESSING WASTE/TAILING---- <u>NA</u>	(SF) PROCESSING FACILITIES----- <u>NA</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>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>NA</u>	(SC) EROSION/SEDIMENTATION--- <u>Y</u>	(ST) STIPULATIONS----- <u>NA</u>
(AT) ACID OR TOXIC MATERIALS----- <u>NA</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 normal monitoring inspection of the Diehl Borrow Pit (Permit No. M-2018-054) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator was represented by Jason Kidston during the inspection. The site is located approximately 8.5 miles north of Wellington, CO near the eastern edge of Larimer County. The site is situated directly adjacent to and east of I-25. Access to the site is off of the I-25 frontage road. **Photos 1-20** taken during the inspection are included with this report.

This is a 111c operation permitted for 26.95 acres to mine borrow material for a CDOT roadway project. The affected lands are owned by Diehl Land Enterprises. The permit area is bisected by a drainage that empties into an ephemeral stream (Indian Creek) located to the east of the site, creating two mining areas. This drainage will not be disturbed by the operation. Mining will begin in the southern half of the permit area, which was mined historically. The mining plan includes excavating material from the two mining areas at an average depth of 20-30 feet. Initial mining slopes will be at 0.5H:1V, then as the operation approaches the perimeter of the pit, slopes will be maintained at 3H:1V. Mined material will be directly hauled off site to the construction project. No on-site processing of material will occur. Salvaged topsoil will be stored along the eastern edges of the two mining areas. The original permit included construction of only one access road off the I-25 frontage road to enter through the south mining area. However, the Division's approval of Technical Revision No. 1 (on April 22, 2020) allowed for the construction of a second access road to enter the north mining area.

The approved post-mining land use for the site is rangeland. The reclamation plan includes grading all disturbed land to 3H:1V or flatter, ripping compacted areas, replacing 6 inches of topsoil on disturbed land, and revegetating the land with a rangeland grass and forb mixture. While the historically mined southern half of the site has limited topsoil available, the northern half of the site may have enough topsoil available (18 inches) to make up for this deficit. If enough topsoil is not available on site to achieve the 6 inch depth for reclamation, the operator will construct a suitable plant growth medium on site. This will be done by augmenting the available topsoil using subsoil material and applying soil amendments per the results of a composite soil sample analysis. Per the landowner's request, the two access roads constructed off the I-25 frontage road will remain after reclamation.

At the time of the inspection, the weather was clear and sunny. Some patches of snow remained on the ground from a recent storm event. The operator has completed mining activities and the site is in final reclamation. All disturbed slopes have been graded to 3H:1V or flatter. The south mining area was retopsoiled and seeded in the fall of 2019. Very little grass growth was observed along the western pit slope. However, some sparse grass growth was observed on the pit floor. Vegetative growth in the south mining area is very sparse overall and consists primarily of annual weeds at this time. No significant erosion issues were observed in this area.

The north mining area was retopsoiled and seeded in the summer of 2020. A sulfur soil amendment was applied in this area in the fall of 2020 to lower the pH of the soils per the soil test results. The operator also applied a bonded fiber matrix mulch in this area which, given the high winds in this region, should be more effective than the standard straw or hay mulch application. Very sparse grass growth was observed in this area at this time. More grass growth was present along the southern edge of this area. Fewer annual weeds were observed in this area compared with the south mining area. No erosion issues were observed in this area.

Reclamation is off to a great start at this site. The Division recommends the operator continue to monitor revegetation success at the site and reseed areas as necessary. The operator will also need to keep up with weed management and erosion control at the site until disturbed areas are stabilized with the desired vegetation.

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 southeast across southern edge of south mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.

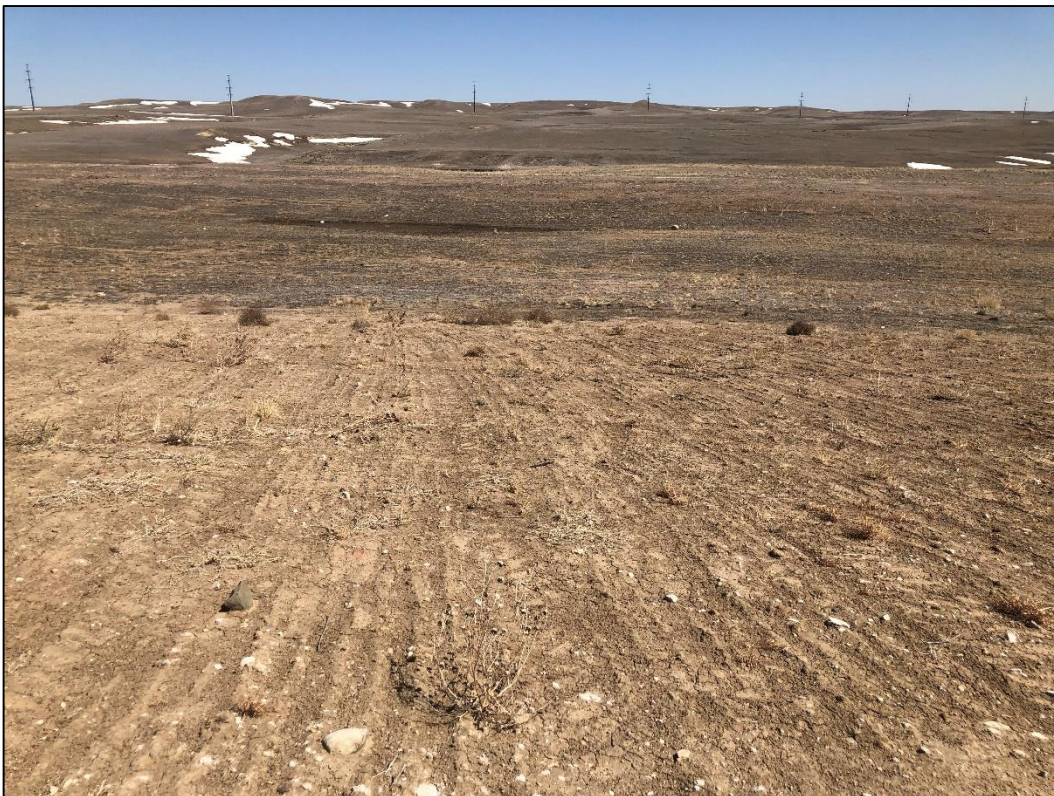


Photo 2. View looking east across central portion of south mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 3. View looking northeast across south mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 4. View looking east across pit floor in south mining area, showing more grass growth present here than on pit slopes, but still sparse overall.



Photo 5. Ground view of pit floor in north mining area, showing some grass growth present in this area.



Photo 6. View looking north across pit slope in south mining area, showing slope graded to 3H:1V or flatter. Very little grass growth is present on this slope compared with the pit floor.



Photo 7. View looking southwest at gated entrance/access road constructed off I-25 frontage road to enter south mining area. This entrance/road will remain for reclamation per the landowner's request.



Photo 8. View looking northeast across northern edge of south mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 9. View looking northeast across northern edge of south mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 10. View looking north at internal access between north and south mining areas.



Photo 11. View looking northwest at pit wall in north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time, especially on the pit slope.



Photo 12. View looking west at pit wall in north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time, especially on the pit slope.



Photo 13. View looking southwest at pit wall in north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time, especially on the pit slope.



Photo 14. View looking north across pit wall in north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present on the pit slope at this time.



Photo 15. View looking northwest across pit floor of north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 16. View looking west across pit floor of north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 17. View looking southwest across pit floor of north mining area, showing slopes graded to 3H:1V or flatter. Very little grass growth is present in this area at this time.



Photo 18. Ground view of pit floor in north mining area, showing bonded fiber matrix mulch applied in this area and very little to no grass growth at this time.



Photo 19. View looking east across southern edge of north mining area, showing slopes graded to 3H:1V or flatter and a bit more grass growth in this area.



Photo 20. View looking northwest at gated entrance/access road constructed off I-25 frontage road to enter north mining area. This entrance/road will remain for reclamation per the landowner's request

Inspection Contact Address

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Encls: Google Earth image of site

CC: Justin Kidston, SEMA Construction, Inc.
Michael Cunningham, DRMS

M-2018-054 / Diehl Borrow Pit / SEMA Construction, Inc.

Red Outline = 26.95 acres = Permit Area (location approximated based on approved permit maps)
(Image data from 10/2019)

