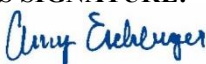




## MINERALS PROGRAM INSPECTION REPORT

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> Jenkins Site	<b>MINE/PROSPECTING ID#:</b> M-1977-393	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Boulder
<b>INSPECTION TYPE:</b> Monitoring	<b>INSPECTOR(S):</b> Amy Eschberger	<b>INSP. DATE:</b> October 28, 2021	<b>INSP. TIME:</b> 13:30
<b>OPERATOR:</b> City of Boulder	<b>OPERATOR REPRESENTATIVE(S):</b> Chris Lawlor, Megan Bowes	<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> \$0.00	
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None	
<b>WEATHER:</b> Clear	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> October 29, 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>NA</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>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>Y</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>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 Jenkins Site (Permit No. M-1977-393) conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division). The operator was represented by Chris Lawlor and Megan Bowes during the inspection. The site is located approximately 2.5 miles southwest of Superior, CO in Boulder County. Access to the site is from the northeast off of S. 66<sup>th</sup> Street. The affected lands are owned by the operator. **Photos 1-12** taken during the inspection are included with this report.

This is a 112c operation permitted for 233.60 acres (see enclosed Google Earth image of site showing approved permit area) to mine sand, gravel, and clay. The permit area is bisected by Coal Creek, an ephemeral creek which flows northeast across the site when carrying water. The approved mining plan includes mining sand and gravel from the top of the mesa located north of the creek (north mining area), and mining clay in the flatter area located south of the creek (south mining area). The maximum mining depth is approximately 30 feet. The operation was approved for on-site processing (e.g., crushing, screening), and for potentially operating a small asphalt and/or concrete batch plant in the north mining area. Any available topsoil and overburden was to be salvaged and stored separately on site for use in reclamation. On August 7, 2000, the Division accepted an inert backfill notice submitted by the operator in accordance with Rule 3.4.5(9) to import approximately 30,000-40,000 cubic yards of inert material from the City's Sombrero Marsh and other Open Space projects to use as reclamation backfill material at the site. This notice also included plans to import filter fines from the City's water treatment plant to the site for use as a topsoil amendment.

The approved post-mining land use for the site is rangeland. The approved reclamation plan calls for grading all disturbed slopes to 3H:1V or flatter, replacing a minimum of 10 inches of growth medium (a combination of topsoil and non-clay overburden) over disturbed areas where heavy clay is exposed at the surface (mainly in the south mining area), replacing 6-10 inches of growth medium over disturbed areas where sufficient non-clay material already covers the heavy clays, and revegetating the site with a grass seed mixture consisting of Intermediate Wheatgrass, Tall Wheatgrass, Pubescent Wheatgrass, Blue Grama, and Smooth Brome. The main access roads to the site will remain after reclamation. Due to the presence of a bald eagle nest on site (in a tree along the northern creek bank), the property is closed down from November 1<sup>st</sup> through July 31<sup>st</sup> of every year (since 2002) to protect nesting bald eagles. For this reason, the operator only has a 3-month window every year (from August 1<sup>st</sup> through October 31<sup>st</sup>) to conduct activities on site.

Reclamation of the south mining area was completed in 2000. The Division confirmed this area was reclaimed during its November 5, 2019 inspection. Disturbed slopes in this area were graded to 3H:1V or flatter, and there was an established vegetative cover in this area consisting primarily of grasses, with some mature trees growing in lower areas. At that time, the Division encouraged the operator to submit an Acreage Reduction request to release the south mining area from the permit area. The operator has decided to complete reclamation of the north mining area and then request a full release of the entire permit all at once.

The only portion of the permit area requiring reclamation at this time, is the pit area at the top of the mesa in the north mining area (approximately 8 acres in size; see enclosed Google Earth image of site showing closer view of disturbed area). The pit is elongated roughly east-west and opens up to the east. The approved reclamation plan does not require the operator to completely backfill the pit. However, the operator was under the impression this was the case, and had been slowly backfilling the pit since they took over the permit from Varra Companies in 2000. The pit was being backfilled from west to east in two primary lifts, each approximately 15-20 feet in height, with side slopes of approximately 1.5H:1V. During its last inspection, conducted on October 29, 2020, the Division informed the operator that final reclamation of the north mining area (in its current condition) would require grading the side slopes of the lifts to 3H:1V or flatter, replacing 6-10 inches of growth medium on the disturbed area, and revegetating this land with the approved rangeland grass mixture.

Considering the area is used for livestock grazing, the operator will most likely need to install fencing to protect areas undergoing revegetation, or work with the rancher to keep livestock out of this area until the desired vegetation is established.

Given the amount of time that has passed since mining activities last occurred at this site, the Division strongly encouraged the operator in its two previous inspection reports to complete reclamation of the site as soon as possible and request release of the permit. Since the operator learned (in 2019) the pit does not have to be completely backfilled, they have been working to reclaim the site in accordance with the approved plan. However, the Covid-19 pandemic caused some delays in being able to mobilize the necessary equipment and personnel to the site during the 2020 construction season. The operator was able to conduct reclamation activities during the 2021 construction season.

During the inspection, the Division observed the side slopes of the two backfill lifts have been graded to 3H:1V or flatter. The operator has also mixed in some compost with the soil and scarified the disturbed areas. The disturbed areas were seeded with a temporary cover crop composed of two varieties of sterile wheatgrass to protect these areas from erosion over the winter. The Division discussed with the operator a small seepage area present at the toe of the lower backfill lift which may require additional backfill to mitigate. The operator indicated they will most likely use some additional material from the side slopes of the lift to backfill this area. This would have a bonus effect of creating an even flatter side slope on the backfill lift. A small pile of boulders was stored on top of the lower backfill lift, which the operator indicated would be utilized for an off-site project.

The operator has plans to submit a Technical Revision to revise the approved growth medium, soil amendment(s), and seed mixture for the site. This revision might also include a proposal to leave a small (approximately one acre in size) staging area at the top of the backfilled portion of the pit for continued use by the City. This revision would need to include a revised reclamation plan map which specifies the area to remain as a staging area. The operator intends to utilize the 2022 construction season to complete final reclamation of the site, after which time, the operator would only be waiting for successful revegetation in order to submit a full release request. The operator should be aware that Rule 3.1.10 requires land to be revegetated in such a way as to establish a diverse, and long lasting vegetative cover that is capable of self-regeneration without dependence on irrigation, soil amendments or fertilizer, and is at least equal in extent of cover to the natural vegetation of the surrounding area. This typically requires at least two growing seasons.

Reclamation of the north mining area is off to a great start. The Division recommends the operator request a site inspection toward the end of the 2022 construction season so any additional reclamation work can be evaluated.

The operator informed the Division they will need to change the permit contacts and ePermitting Administrator (for submitting annual reports and fees) for this site at the start of next year. These contacts can be updated via our website at <https://drms.colorado.gov/>. Specifically, the permit contacts can be changed through the ePermitting system at [https://dnrlaserfiche.state.co.us/Forms/DRMSeForms\\_LandingPage](https://dnrlaserfiche.state.co.us/Forms/DRMSeForms_LandingPage), and the ePermitting Administrator can be changed at [https://docs.google.com/forms/d/e/1FAIpQLSeeD-K1j4ZJjwOCn\\_UUW0XDxBNceZdU3HMFz333Y-JjWn2i5w/viewform](https://docs.google.com/forms/d/e/1FAIpQLSeeD-K1j4ZJjwOCn_UUW0XDxBNceZdU3HMFz333Y-JjWn2i5w/viewform).

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](mailto:amy.eschberger@state.co.us).*



## **PHOTOGRAPHS**



**Photo 1.** View looking southwest from access road at eastern side slope of lower backfill lift, graded to 3H:1V or flatter and scarified.



**Photo 2.** View looking southwest across top of upper backfill lift graded nearly flat and scarified.





**Photo 3.** View looking west across southwestern side slope of upper backfill lift, graded to 3H:1V or flatter and scarified.



**Photo 4.** View looking east across southeastern side slope of upper backfill lift, graded to 3H:1V or flatter and scarified. Note small pile of boulders (on top of lower lift) to be removed from the site.





**Photo 5.** View looking south across eastern side slope of upper backfill lift, graded to 3H:1V or flatter and scarified.



**Photo 6.** View looking north across eastern side slope of upper backfill lift, graded to 3H:1V or flatter and scarified.





**Photo 7.** View looking south across eastern side slope of lower backfill lift, graded to 3H:1V or flatter and scarified.



**Photo 8.** View looking southeast at eastern toe of lower backfill lift, showing small seepage area (circled) which may require additional backfill to mitigate.





**Photo 9.** View looking west across top of lower backfill lift graded nearly flat and scarified. Eastern side slope of upper backfill lift visible in background.



**Photo 10.** View looking north across eastern side slope of lower backfill lift, graded to 3H:1V or flatter and scarified. Note small seepage area at toe of lift (at left) which may require additional backfill to mitigate.





**Photo 11.** View looking southwest across top of lower backfill lift, graded nearly flat and scarified.



**Photo 12.** View looking west, showing access road to lower lift (left) and access road to upper lift (right) which will remain for reclamation.



**Inspection Contact Address**

Chris Lawlor  
City of Boulder  
P.O. Box 791  
Boulder, CO 80306

Encls: Google Earth image of site showing approved permit area  
Google Earth image of site showing closer view of disturbed area

CC: Michael Cunningham, DRMS



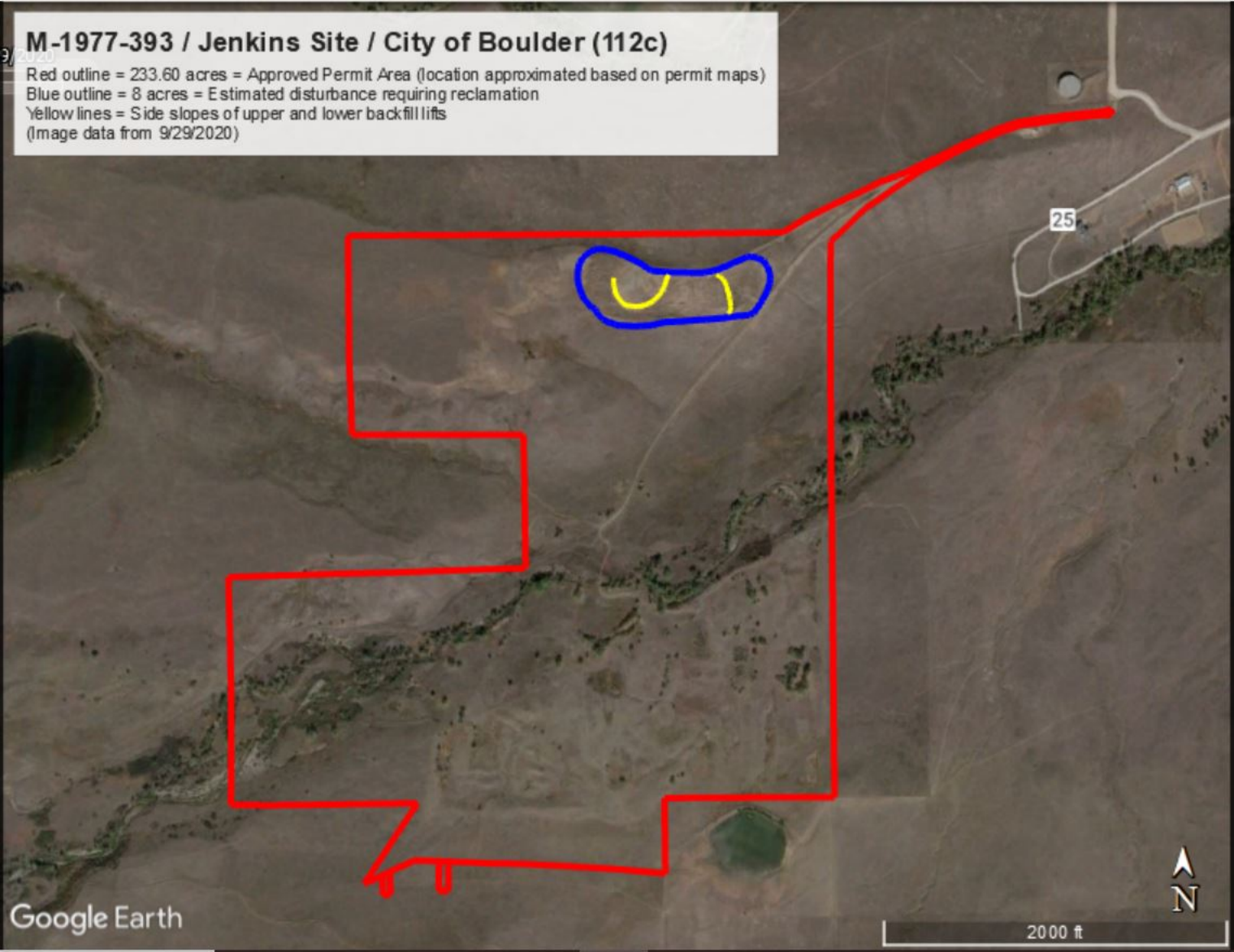
# M-1977-393 / Jenkins Site / City of Boulder (112c)

Red outline = 233.60 acres = Approved Permit Area (location approximated based on permit maps)

Blue outline = 8 acres = Estimated disturbance requiring reclamation

Yellow lines = Side slopes of upper and lower backfill lifts

(Image data from 9/29/2020)





## M-1977-393 / Jenkins Site / City of Boulder (112c)

Closer view of disturbed area.

Red outline = 233.60 acres = Approved Permit Area (location approximated based on permit maps)

Blue outline = 8 acres = Estimated disturbance requiring reclamation

Yellow lines = Side slopes of upper and lower backfill lifts  
(Image data from 9/29/2020)

