

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

M2024023, Brown Quarry Application, Fourth Adequacy Review

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

Fri, Aug 1, 2025 at 2:23 PM

To: Robert Congdon <defiancestone11@gmail.com>, Ben Langenfeld <benl@lewicki.biz>, Jessica King <jess@lewicki.biz>, "Cocina, Brittany A" <bcocina@blm.gov>

[Re-sent to include Ben, Jessica and Brittany]

Leigh Simmons Environmental Protection Specialist



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

P 720.220.1180

Physical address: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing address: Colorado Division of Reclamation, Mining and Safety, Room 215, 1001 E 62nd Avenue, Denver, CO 80216

leigh.simmons@state.co.us | https://drms.colorado.gov

On Fri, Aug 1, 2025 at 2:20 PM Simmons - DNR, Leigh <leigh.simmons@state.co.us> wrote:

Robert,

Please find attached the Division's fourth adequacy review letter.

The earliest I'll be available to discuss this will be next Tuesday, but please go ahead and reply to this email to request an extension to the decision due date.

Leigh Simmons

Environmental Protection Specialist



COLORADO

Division of Reclamation, Mining and Safety

Department of Natural Resources

P 720.220.1180

Physical address: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing address: Colorado Division of Reclamation, Mining and Safety, Room 215, 1001 E 62nd Avenue, Denver, CO

80216

leigh.simmons@state.co.us | https://drms.colorado.gov



M2024023_Application_AdequacyReview_4_IncBEHmemo.pdf 476K



Robert Congdon Defiance Stone Company LLC. 1929 Dolores Way Carbondale, CO, 81623

August 1, 2025

Re: Brown Quarry Application (M-2024-023)
Fourth Adequacy Review

Dear Mr. Congdon,

Upon further review the Division has identified several issues that were not previously adequately addressed, and several that need further attention.

The comments below are organized by rule citation. Please review the following comments and address the numbered items in bold.

Rule 6.3.1 Exhibit A - Legal Description and Location Map

1. Exhibit A was revised to describe a single contiguous permit area, including all lands to be affected by the operation. A table of coordinates with vertices of the permit area is given in the text. The permit boundary was digitized from the location map. The area described by the permit boundary is approximately 4.44 acres, which matches the area given on the application form. However, the actual permit area is not explicitly stated in the text.

Please revise the text of Exhibit A to state the total permit area. Please also break out the acreage of each part of the permit area in Table A-1.

Rule 6.3.2 Exhibit B - Site Description

- 2. [Response is sufficient]
- 3. [Response is sufficient]
- 4. [Response is sufficient]

Rule 6.3.3 Exhibit C - Mining Plan

- 5. [Response is sufficient]
- 6. [Response is sufficient]
- 7. [Response is sufficient]
- 8. [Response is sufficient]



- 9. [Response is sufficient]
- 10. [Response is sufficient]
- 11. [Response is sufficient]
- 12. [Response is sufficient]
- 13. [Response is sufficient]
- 14. [Response is sufficient]
- 15. [Response is sufficient]
- 16. [Response is sufficient]
- 17. Natural drainages are shown on Map G-1. Surface water at the quarry will be directed toward the natural drainages on either side of the disturbed area through grading of the mining benches; flows will be directed into sediment traps made of anchored straw bales or other sediment trapping devices before discharging to the ephemeral drainage to the west. The ephemeral drainage itself will be diverted through a culvert (actually three parallel 18" diameter culverts) designed to pass the 100y24h event, under the access road. Finally, a rock check dam will be used to control sediment before leaving the site design details are shown on a figure called "Exhibit C-2", which is given in Exhibit E, Maps.

Surface water at the yard will be contained by a berm and allowed to infiltrate; if infiltration does not occur within 24 hours it will be pumped and discharged through a CDPS outfall.

The response is sufficient.

- 18. [Response is sufficient]
- 19. [Response is sufficient]
- 20. [Response is sufficient]
- 21. [Response is sufficient]
- 22. <u>Upon further review, the Geotechnical Stability Exhibit was not properly revised to address the issues raised in the last adequacy review.</u> Nevertheless, the Division's geotechnical expert wrote a follow-up memo that helps to clarify the Division's major concerns (see attached). The following question is taken from that memo:

Within section GS-1 of the application, the operator states "there are no known geologic hazards on the proposed site." It is unclear to the Division that any geologic inspection and evaluation of the site has been conducted that would confirm this statement. Please have the operator provide additional information further confirming that no significant discontinuities or faults are present within the slope surface which may contribute to a slope failure.

Rule 6.3.4 Exhibit D – Reclamation Plan

- 23. [Response is sufficient]
- 24. [Response is sufficient]
- 25. [Response is sufficient]
- 26. [Response is sufficient]
- 27. A reclamation cost estimate is provided in Exhibit D (2). The Division will prepare its own reclamation cost estimate, based on standardized unit values for equipment, material, labor and indirect costs, and will seek concurrence of the BLM before finalizing. This process is ongoing, and will likely be the last item to be agreed before the permit can be approved. Specific questions to aid in the preparation of the cost estimate are listed below:
 - a. Please describe the construction and dimensions of the fence to be installed at the Yard (materials, height, length, type of poles, spacing of poles, etc.)
 - b. Please clarify the number, height and location of power poles to be installed at the Yard

Rule 6.3(5) Exhibit E – Maps

28. The general location map is adequate, however other maps provided in Exhibit E do not meet the requirements of the Rules. Maps must be in plan view and may be supplemented with section views; screenshots from Google Earth are not acceptable. Rules 6.2.1(2) and 6.3.5 specify the requirements for maps. For clarity the text of these rules is copied below in italics:

6.2 GENERAL REQUIREMENTS OF EXHIBITS

6.2.1 General Requirements

(1) This Rule provides for the guidelines for, and information requirements of, each Exhibit required to be submitted with the permit application, as specified according to Rule 6.1.

(2) Maps and Exhibits

Maps, except the index map, must conform to the following criteria:

- (a) show name of Applicant;
- (b) must be prepared and signed by a registered land surveyor, professional engineer, or other qualified person;
 - (c) give date prepared;
 - (d) identify and outline the area which corresponds with the application;
 - (e) with the exception of the map of the affected lands required in Section 34-
- 32.5-112(2)(d), C.R.S. 1984, as amended, shall be prepared at a scale that is appropriate to clearly show all elements that are required to be delineated by the Act and these Rules. The acceptable range of map scales shall not be larger than 1 inch = 50 feet nor

smaller than 1 inch = 660 feet. Also, that a map scale, appropriate legend, map title, date and a north arrow shall be included.

6.3.5 EXHIBIT E – Map

(1) In addition to the requirements of Rule 6.2.1(2), the Operator/Applicant must provide a map that clearly describes the features associated with the mining plan and the components of the Reclamation Plan. Include one (1) map for the mine plan and one (1) map for the Reclamation Plan. The map(s) must be drawn to a scale no smaller than appropriate to clearly show all elements that are required to be delineated by the Act and these Rules; show a north arrow, note any section corners adjacent to the proposed operation, and indicate the date illustrated. At a minimum, maps must include the following information:

(2) Mining Plan Map

- (a) outline and label the permit boundaries, described in Exhibit A Legal Description; for all 110 Limited Impact and 111 Special Operations, the Office considers the area bounded by the permit boundary to be analogous to the affected area;
- (b) label the names of owner(s) of record of the surface of the affected area and of the land within two hundred (200) feet of the affected area, identify the owner of the substance to be mined, and the type of structure and owners of record of any permanent or man-made structures within two hundred (200) feet of the affected area;
- (c) outline and label all major surface features to be used in connection with the proposed operation such as: existing and proposed roads, pit boundary, topsoil stockpiles, overburden stockpiles, product stockpiles, waste rock fills, stream channels, buildings, processing plant, underground openings such as adits or ventilation facilities, ponds, impoundments, dewatering pumps, diversions or waste disposal areas;
 - (d) indicate the direction that construction material extraction will proceed;
- (e) note the location of any significant, valuable, and permanent man-made structures within two hundred (200) feet of the affected area. A narrative description must be provided in Exhibit B Site Description; and
- (f) outline and label existing disturbance within and/or adjacent to the permit boundary (e.g., previously mined areas, roads or excavations resulting from utility construction). Re-disturbance of previously disturbed areas, by the proposed mining operation, must be included in the permit area and addressed in Exhibit D Reclamation Plan.

(3) Reclamation Plan Map

- (a) show the gradient of all reclaimed slopes (horizontal:vertical) sufficient to describe the post mine topography;
- (b) indicate where vegetation will not be established and the general area(s) for shrub or tree planting;
- (c) if ponds are a part of the Reclamation Plan, outline the final shore configuration of the ponds and shallow areas if the future land use is for wildlife;

- (d) state the average thickness of replaced overburden by reclamation area or phase; and
 - (e) state the average thickness of replaced topsoil by reclamation area or phase.

Please provide a Mine Plan Map and Reclamation Plan to cover the Yard, the Quarry and the improved Road. Please include the following features on the maps:

- The permit boundary
- Topographic contour lines
- Topsoil storage piles
- Surface water control structures AND proposed discharge permit outfall locations (these may need to be updated if they are changed with the discharge permit)
- Existing and improved roads, with labels
- All facilities described in Exhibit C(e)
- All features discussed in item 27, above.

Five maps were submitted by email at 6:56 PM on July 24, labelled E-1, E-2, E-3, G-1 and G-2. Detailed comments are given for each of these maps:

E-1 Baseline Map

- It is noted that the USGS topo map used as a basemap does not accurately show the location of the BLM road, but the permit area polygon does connect to the <u>actual</u> location of the road. The road is labelled "8466" but is labelled as "8460" on other maps and described that way in the permit text as well. **Please verify the actual road number and correct map labels as appropriate.**
- Please label the map with the permit acreage.
- There is a discrepancy between the 200 ft offset and the 200 ft distance shown on the scale bar. Please verify the offset and the scale bar and correct as necessary.

E-2 Mining Plan Map

- Please verify the accuracy of the scale bar (it appears to be the same as the E-1 map, even though that scale should be smaller)
- Please label the map with names of owners of record of surface of affected area and of land within 200 ft of affected area
- Please identify the owner of substance to be mined, and type of structures and owners of record of any permanent or man-made structures on or within 200 ft of affected area (the BLM 8466 road and the powerline).
- Please show the locations of any topsoil and overburden stockpiles in all proposed affected areas (yard, road and quarry).
- Will there be a truck scale? If so, please show it on the map and provide dimensions.
- What will be stockpiled in Yard "stockpile area"? Just product?
- It is hard to differentiate the symbol used for the stormwater control berm please use a different color or symbology.

- Please show all proposed structures to be installed for the operation - check dams, culverts, gates, fences, power poles, buildings, etc.

E-3 Reclamation Plan Map

- Please verify the accuracy of the scale bar (it appears to be the same as the E-1 map, even though that scale should be smaller)
- Please label the map with names of owners of record of surface of affected area and of land within 200 ft of affected area
- Please show the gradient of all reclaimed slopes (horizontal:vertical) sufficient to describe the post mine topography for Yard and Quarry and Rd.
- Please specify and label areas that will be revegetated for reclamation.
- Please state the average thickness of replaced overburden and topsoil on reclaimed areas.
- Please show any structures that will remain after reclamation (e.g., utilities, roads, gates, stormwater management structures)
- Quarry map shows a "Two Track Road" it is understood that this road is to be reclaimed, so please label as such on the map.
- Will BLM Rd 8460/8466 within the permit area remain as-is after reclamation?

G-1 Hydrology Map

Maps G-1 and G-2 are part of Appendix 1 (not stand-alone Exhibits).

- Please show the permit area as a contiguous polygon.
- Please show the location of the culvert at road crossing over drainage. (Note that any structures to be installed for the operation need to be located within the proposed permit area)

G-2 Access Road Culvert Map

- Map G-2 shows "disturbance area" rather than "permit area", but it has the same symbology as used for permit area on other maps. For clarity, please either show the full permit area as shown on E-1 map, and label as such, or use alternative symbology to show disturbed area only.
- At the Yard area there is a skewed red polygon (which is not shown in the legend), and overlapping pink polygon please clarify this area of the map.
- A gray line is labelled "access road" that doesn't match the proposed road from yard to quarry and is outside of the permit area. Please remove or correct.
- The labelled "Culvert at road crossing over drainage" must be inside the permit area and shown on other maps.

Rule 6.3(6) Exhibit F - Other permits

29. [Response is sufficient]

Rule 6.3(7) Exhibit G – Source of Legal Right to Enter

30. [Response is sufficient]

Rule 6.3(9) Exhibit I – Proof of Filing with County Clerk

31. [Response is sufficient]

Rule 6.3(12) Exhibit L – Permanent Man-Made Structures

32. [Response is sufficient]

The decision due date for the Brown Quarry application is August 5, 2025. Please request an extension to this date that will give you sufficient time to respond to this adequacy review, and for the Division to review your response.

Sincerely,

Leigh Simmons

Environmental Protection Specialist

cc: Ben Langenfeld; benl@lewicki.biz Jessica King; jess@lewicki.biz

Brittany Cocina; bcocina@blm.gov



Date: August 1, 2025

To: Leigh Simmons

CC: Amy Eschberger

From: Ben Hammar

RE: Brown Quarry File No. M2024023

Third Adequacy Review

Leigh,

As requested, I have reviewed the requested sections of the Brown Quarry application, DRMS permit No. M2024023, created by Lewicki & Associates (Lewicki) on behalf of Defiance Stone Company LLC. The purpose of this memo is to reiterate or otherwise amend the previous comments provided on the geotechnical analysis and reclamation plan which were inadequate based on Rules 3.1.5(3) and 6.5.

Recommendations

As mentioned in the memo which review the first adequacy response, in general, the analysis performed by Lewicki was performed using acceptable assumptions for the case that was studied. However, this case does not appear to be relevant to the conditions currently agreed upon for final reclamation. Lewicki states that this was done due to the difficulty of performing a slope stability analysis on the current proposed reclamation plan. Previously, it was the opinion of the Division that the case used in place appears to be different enough from the current plan to be irrelevant. Upon further discussion within the Geotech task force and based upon that the provided case is more conservative than the final reclaimed conditions, the analysis provided is sufficient given that all assumptions made hold true. In addition, justification was provided within the text for the differences in cases. Due to these reasons, the original comment related to this issue can be omitted from further adequacy letters and can be considered addressed.

Lewicki also states "there are no known geologic hazards" on the proposed site. It is still the Division's understanding that this statement serves to state that no significant faulting or other discontinuities that may contribute to a slope failure within the limestone rock face are present. Given that no acknowledgement of the previous comment was provided by the applicant, and no further geologic study has been performed and SME Handbook values were used in their analysis, additional justification regarding the stability of the rock face should still be requested.

As such, the following comments should be incorporated into an adequacy letter:

1. Within section GS-1 of the application, the operator states "there are no known geologic hazards on the proposed site." It is unclear to the Division that any geologic inspection and evaluation of



the site has been conducted that would confirm this statement. Please have the operator provide additional information further confirming that no significant discontinuities or faults are present within the slope surface which may contribute to a slope failure.

This concludes my review of the requested sections of the Brown Quarry Application, created by Lewicki & Associates on behalf of Defiance Stone Company LLC. If you have any questions feel free to contact me.

Sincerely,

Ben Hammar

Environmental Protection Specialist

Mmar

(720) 793-2988

ben.hammar@state.co.us