

STATE OF
COLORADO

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

M2024023, Brown Quarry Application, Second Adequacy Review

1 message

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

Thu, Apr 10, 2025 at 5:27 PM

To: Robert Congdon <defiancestone11@gmail.com>

Cc: Ben Langenfeld <benl@lewicki.biz>, Jessica King <jess@lewicki.biz>, Amy Eschberger - DNR <amy.eschberger@state.co.us>

Robert,

The Division's adequacy review letter is attached.

You'll see that there is one item (22) that has been left unchanged for now since the Division needs more time to review the Geotechnical Stability Analysis.

Similarly, item 27 has been left unchanged, since it is premature to calculate a reclamation cost estimate until details of the mining and reclamation plans have been finalized.

There are several other items that need your attention in the meantime, however I would encourage you to address item 30 as a matter of the highest priority, since the legal right to enter has not yet been satisfactorily demonstrated and without that the rest of the application is irrelevant.

As you put together your response it may be easier for both of us if you submit each revised exhibit as a **separate and complete** document (rather than a single document with all the exhibits and addendums to exhibits combined together). Please also feel free to submit electronic copies of each document - a paper copy is not necessary at this point. In particular, **please submit each map as a separate document, and at the highest possible resolution.**

Finally, though Amy and I will both receive your voicemail if you call us for an update on the status of the Division's review of your application, it is always easiest to contact me by email.

Leigh Simmons
Environmental Protection Specialist

**COLORADO**
Division of Reclamation,
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leigh.simmons@state.co.us | <https://drms.colorado.gov>**M2024023_Application_AdequacyReview_2.pdf**

553K



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

April 10, 2025

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

Dear Mr. Congdon,

The Division has completed a review of your response to the initial adequacy review. Comments 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 remove references to Peachblow Quarry.

The legal descriptions of The Yard and Brown Quarry were updated, to give coordinates of permit area vertices in degrees/minutes/seconds.

Screenshots from Google Earth were included in the text, also showing vertices of two polygons and a line segment.

The General Location Map given with the original submission was not included, it was replaced with Map G-2, titled "Limestone Quarry E-2 Access Road", with distinct labelling and legend, and projected section lines that allow for easy georeferencing.

- a. **[Response is sufficient]**
- b. **[Response is sufficient]**
- c. **[Response is sufficient]**
- d. **Please remove the Google Earth screenshots since they are not maps and they conflict with the text.**
- e. **Please check the coordinates given in the legal description, since there appears to be errors when they are plotted, (see Figures 1 and 2). The coordinates given must match the permit area shown on the map.**



- f. Since there is a plan to improve Road 8466, use it during operations, and reclaim it to its original contour, the road will be “affected” therefore it must be included in the permit area. Please revise the legal description of the permit area to include the affected road segment, and include its area in the calculation of the permit area acreage.



Figure 1: Plotted coordinates from legal description of The Yard



Figure 2: Plotted coordinates from legal description of Brown Quarry

Rule 6.3.2 Exhibit B - Site Description

2. Exhibit B was revised to discuss the Torriorthents-Rock outcrop complex.

[Response is sufficient]

3. Exhibit B (c) was revised to describe two ephemeral drainage channels. The text refers to "Appendix B-1", which is presumably an error, and should be Appendix G-1. An attempt was made to estimate peak discharge below the confluence of the two ephemeral drainage channels. The estimate was made using the Rational Method, based on the formula:

$$Q = CiA$$

Where Q = Discharge

C = Runoff coefficient (from ASCE table)

i = Rainfall intensity (from NOAA)

A = catchment area

The method is acceptable, and assumptions have been stated. Map G-1 Hydrology Map shows critical information but is illegible.

Please correct the typographical error in the text.

Please provide a full resolution version of Map G-1.

4. No wildlife statement has been included in the application packet. A copy of comments from Colorado Parks and Wildlife was forwarded to you on October 23, 2024. (The letter is available on in the Laserfiche document archive at https://dnrweblink.state.co.us/drms/0/edoc/1433351/2024-10-23_PERMIT%20FILE%20-%20M2024023.pdf?searchid=85e65413-061b-41cd-a8d2-2c5d1466db8d)

Please address the CPW comments in a wildlife statement and update the Mining and Reclamation plans (Exhibits C and D) accordingly.

Rule 6.3.3 Exhibit C - Mining Plan

5. Exhibit C (a) was revised to clarify that this is a limestone mine

[Response is sufficient]

6. Exhibit C (a) was revised to state “Mining operations will commence in the first or second quarter of 2025 subject to permit approval”

[Response is sufficient]

7. Exhibit C (b) describes the handling of topsoil and subsoil at the site. The depth of topsoil is given as 6 inches, and subsoil as 0 inches, calculated as the average of physical measurements.

[Response is sufficient]

8. Exhibit C was revised to specify that timber removed for operations will be cut into lumber and firewood

[Response is sufficient]

9. Topsoil will be stockpiled outside of drainages and out of the way of mine traffic. Berms will be constructed and piles will be stabilized by seeding (if they are to remain in place for 90 days or longer).

[Response is sufficient]

10. Exhibit C was revised to state that an estimated 16,000 bank cubic yards of stone will be removed, of which 90% will be usable and 10% will be used for backfill.

[Response is sufficient]

11. **[Response is sufficient]**

12. Exhibit C (e) lists major components of the mining operation.

- a. **[Response is sufficient]**
- b. **[Response is sufficient]**
- c. **[Response is sufficient]**
- d. **[Response is sufficient]**
- e. **[Response is sufficient]**
- f. **[Response is sufficient]**
- g. **[Response is sufficient]**
- h. **What will be the volume and quantity of water storage tanks at the Yard?**
- i. **How will fuel and other fluids be handled and stored at the Yard?**
- j. **[Response is sufficient]**

13. Exhibit C was revised to describe culverts proposed to be installed in greater detail. Three 18" corrugated metal culverts will be installed in the natural drainage, at the end of the quarry access road. The culverts will extend at least one foot beyond the travel surface (which is given as 12 feet in the table) and are specified in the design to be 25 feet long, with a slope of 15%. There will be a rock wall embankment at the inlet, which will give 4.25 feet of freeboard above the top of the culverts. The culverts specified would convey a maximum flow of 40 cubic feet per second, which exceeds the estimated peak discharge from the 100y24h event (modeled as 36 cubic feet per second).

[Response is sufficient]

14. Exhibit C was revised to clarify that the existing road (8460) intersects the yard, so no improvements will be made.

[Response is sufficient]

15. Exhibit C (h) describes the use of water at the site. All water will be imported to the site. The Exhibit was revised to specify that water consumption will be up to 6,000 gallons per day, for dust suppression and as a coolant for diamond saws. The text states that sawing water will be contained and reused.

Please expand Exhibit C (h) to describe how sawing water will be contained and reused, with diagrams if possible. Please also describe how wet fines generated from the saw will be handled and disposed of.

16. Exhibit C (i) states that “Groundwater will not be encountered in this operation”. An addendum was made to Exhibit B to clarify that the nearest known aquifer is the Eagle River alluvium, which is 500 feet below the site. An addendum was made to Exhibit C to specify that the nearest wells are over 3500 feet away, completed in the alluvial aquifer, and that there are no known bedrock aquifers within or near the mining area.

[Response is sufficient]

17. (This adequacy item has been left unchanged; it will be reviewed when a full resolution copy of Map G-1 has been provided)

Exhibit C (i) also describes surface water at the site. Two natural drainages are described but are not shown on any map. A plan to control runoff from the Quarry is described, where water will be diverted towards the two natural drainages and filtered through “straw bales or other sediment trapping mechanisms” before flowing to the ephemeral channel below. A rock check dam is proposed to be constructed in the ephemeral channel down-gradient of the Quarry. Details of the rock check dam are given in Exhibit C-2, including dimensions. No upland diversion is proposed, so the entire watershed is proposed to be treated as disturbed area run-off.

- a. **Please show the natural drainages on a map**
- b. **Please show all surface water control features on a map**
- c. **Please provide design criteria for the rock check dam (What is the statistical precipitation event it is designed to contain? What is the size of the watershed reporting to it? What is the up-gradient channel length and gradient? What size rip-rap will be used?)**
- d. **Please revise the text Of Exhibit C (i) to include a description of surface water control structures at the Yard**

18. Exhibit C has been revised, and an addendum added, to specify that the benches created by mining will be graded so as to drain back towards the hillside, and then to either side, from a high point in the middle of the bench. Surface water will be retained within the disturbed area and allowed to infiltrate/evaporate within 24 hours, or discharge through permitted stormwater outfalls. A spill prevention control and countermeasure (SPCC) plan will be put in place, and a Colorado Discharge Permit System (CDPS)/National Pollutant Discharge Elimination System (NPDES) permit will be obtained. Upstream of the outfall locations, sediment will be controlled through the use of anchored straw bales or similar.

The response is sufficient, pending a full resolution copy of Map G-1.

19. **[Response is sufficient]**

20. **[Response is sufficient]**

21. Exhibit C was revised to specify that no explosives will be used.

[Response is sufficient]

22. (This adequacy item has been left unchanged; the Division is going to take more time to review technical details of the revised Geotechnical Stability Exhibit)

Pursuant to Rule 6.5(4), a Geotechnical Stability Exhibit has been included with the application

Please expand the Geotechnical Stability Exhibit considerably to include:

- a. **An analysis of the likely impacts of the blasting plan described in Exhibit C (p) on loose natural rock on the steep slopes surrounding the Quarry;**
- b. **A demonstration through appropriate blasting, vibration, geotechnical and structural engineering analyses that off-site areas will not be adversely affected by blasting;**
- c. **An engineering stability analysis of the slopes in the quarry during the proposed operations and following reclamation.**

Note that the Geotechnical Stability Exhibit should be completed and certified by a Professional Engineer.

Rule 6.3.4 Exhibit D – Reclamation Plan

23. **[Response is sufficient]**

24. Exhibit D has been revised significantly, and an addendum added, to change the proposed post-mining topography at the quarry. The revised plan proposes to leave benches of limestone bedrock, with a rise of 6-8 feet and a tread of 15 feet. Loose piles of waste rock/salvaged soil will be mounded on each bench as mining proceeds and seeded in place. The new plan avoids the mass balance problem in the original application.

Please revise the text of Exhibit D to remove references to “Approximate Original Contour” in the quarry area. Please make explicit the differences in the reclamation plan between the yard and the quarry.

25. **[Response is sufficient]**

26. **[Response is sufficient]**

27. A cost estimate is provided in Exhibit D (2)

[This item is a placeholder for now, further comments on the cost estimate will be made later in the adequacy review process following clarification on aspects of the Mining and Reclamation Plans]

Rule 6.3(5) Exhibit E – Maps

28. Map G-2 satisfies the requirements of the general location map. A full resolution copy of Map G-1 will need to be submitted before it can be properly reviewed. In general, the application must include a Mine Plan Map and a Reclamation Plan Map, that show the entire permit area. Screenshots from Google Earth are not acceptable. For map requirements please review Rules 6.2.1(2) and 6.3.5.

Please revise the Mine Plan Map and Reclamation Plan Map to show changes to the plans discussed in items (9, 11, 12, 13, 17 and 24). Please also include the following features on the maps:

- **The permit boundary**

- Topographic contour lines
- Topsoil storage piles
- Surface water control structures
- Existing and improved roads, including BLM Roads 8460, 8466, the BLM designated administrative access road, and the Yard Entrance Road
- All facilities described in Exhibit C (e)

Rule 6.3(6) Exhibit F - Other permits

29. Exhibit F was revised to specify that an Eagle County special use permit and a stormwater discharge permit will be required.

[Response is sufficient]

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

30. Exhibit G provides a BLM categorical exclusion number and a Serial number as the source of Legal Right to Enter

Please provide additional documentation associated with the references given in Exhibit G that demonstrate a Legal Right to Enter. This may include a copy of a lease, deed, abstract of title, a current tax receipt, or a signed statement by the Landowner(s) and acknowledged by a Notary Public stating that the Operator/Applicant has legal right to enter to conducting mining and reclamation.

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 April 23, 2025. If necessary, 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,

A handwritten signature in blue ink, appearing to read "L. Simmons".

Leigh Simmons
Environmental Protection Specialist

cc: Ben Langenfeld; benl@lewicki.biz