



COLORADO
Division of Reclamation,
Mining and Safety
Department of Natural Resources

November 19, 2019

Katie Todt
Greg Lewicki and Associates
3375 West Powers Circle
Littleton, CO 80123

RE: Preliminary Adequacy Review; 112c Construction Materials for a Quarry New Permit Application, Bradford Mesa Quarry, Permit No. M-2019-046

Dear Ms. Todt:

On October 3, 2019, the Division of Reclamation, Mining and Safety (Division) deemed the above referenced application complete for the purposes of filing. Pursuant to Rule 1.4 the 90-day decision date for the application has been set for January 1, 2020. Please be advised on January 1, 2020, the application may be deemed inadequate and may be denied unless the following adequacy items are addressed to the Division's satisfaction. If you are unable to satisfactorily address any concerns identified in this review before the decision date, it will be your responsibility to request an extension of the review period. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division will deny this application. In order to allow the Division adequate time to review your responses to any adequacy issues, please submit your adequacy responses to the Division no later than two weeks prior to the decision date. Subsequent to receipt and review of the Applicant/Operator's response to these items the Division may identify additional adequacy items. Please respond to this Preliminary Adequacy Review with the requested additional/updated information on permit replacement pages and summarize each response in a cover letter titled "Preliminary Adequacy Response; M-2019-046".

EXHIBIT C – Pre-mining and Mining Plan Map(s) of Affected Lands (Rule 6.4.3)

1. Please show on the maps, including the Reclamation Plan Map, the boundaries of the various phases of Conditional Use Permit (CUP) number 00-60.
2. The Division was contacted by the United States Bureau of Land Management (BLM) about the split-estate federal minerals encompassed by the proposed permit and mining boundary in the following areas:
 - Section 35 in T26S, R66W
 - Section 31 in T26S, R65W
 - Sections 1 and 2 in T27S, R66W
 - Section 6 in T27S, R65W



Please indicate on a map where these split-estate areas are located and provide a narrative on what will be done in these areas and any agreements reached with the BLM. Additionally, please provide any documentation as needed in Exhibit M.

3. Please provide an updated maps that shows the proposed location(s) of the topsoil and overburden stockpiles for the phases to show that they will be re-handled as little as possible pursuant to Rule 3.1.9(3).
4. Please provide updated maps that show the proposed location(s) of the imported material stockpiles.

EXHIBIT D – Mining Plan (Rule 6.4.4):

5. Please describe how the mining will proceed to maintain the conditions of the currently approved CUP.
6. Mining will occur in ~20 acre parcels, please identify the maximum acreage that will require reclamation at any given time during the operation. This information is necessary for the Division to calculate an accurate reclamation bond.
7. Please describe how the main processing area be prepared prior to initiating mining activities.
8. It is stated that quantities of overburden may be sold as a secondary commodity. On Page 1, Item 5.1 on the Application Form, the Applicant did not indicate any incidental commodities(s) to be mined. Please explain this discrepancy and update the Mining Plan and/or Application Form accordingly.
9. The Mining Plan states that explosives will be used. The Applicant will submit to the Division for approval a Pre-Blast Survey Plan and a Blasting Plan.
 - Pre-blast surveys must be conducted at all structures located within one-half mile of the proposed permit boundary. Written requests to conduct pre-blast surveys must be sent to owners of all structures a minimum of 30-days prior to initiation of blasting.
 - The blasting plan shall be developed to outline the procedures and methods that will be used for all blasting work. Details of the Blasting Plan shall be prepared in accordance with *MSHA CFR 30 Part 56 Section 63: Control of Blasting Operations*.
At a minimum the plan shall include the following:
 - Licensed Blaster
 - Blast Pattern Design and Drilling
 - Types of Explosives Used
 - Storage of Explosives
 - Dates and Times of Blasting
 - Transportation of Explosives
 - Loading of Explosives

- Signage
- Communications
- Blast Area Clearing and Firing Procedures
- Post Blast Inspection Procedures
- Misfire Procedures
- Blast Monitoring Procedures

10. Prior to the rail spur construction the Applicant will have to submit a Technical Revision for the Division's approval.
11. Please include a statement that the deeper depressions from the boulder pick up operations will be graded to minimize any potential hazard to wildlife.
12. Please provide a statement that the inert structural fill imported to the site will meet all the requirements of Rule 3.1.5(9) and in accordance with Rule 3.1.5(9)(c) please submit an affidavit, signed by the Applicant now, ensuring that any materials imported to the site for backfilling will be clean and inert.
13. The Mining Plan proposes to import concrete rubble to be placed in the mined out sections for backfill material. Please describe how rebar within the rubble will be handled.
14. The Applicant indicates portable concrete and asphalt batch plants with associated tanks will be located within the permit boundary. Please provide the Division with proof of the appropriate Huerfano County zoning or special use permit allowing the asphalt and/or concrete plants, the required Air Pollutant Emission Notice (APEN) permit from the Colorado Department of Public Health and Environment and all other applicable permits to operate the asphalt and/or concrete plants at the site or commit to submitting a technical revision to the permit pursuant to Rule 1.9 prior to operating the asphalt and/or concrete plants.
15. Please provide a typical cross-section of the proposed catch ditches on the final reclaimed dumps slopes.
16. Please provide cross-sectional details of the embankment/berm structures of the ponds/sumps that are proposed.
17. Please provide any details regarding any outlet structures and/or spillways for the ponds/sumps.
18. It is anticipated that over the life of mine that fine sediment will accumulate in the bottoms of the ponds/sumps decreasing the infiltration rates of collected storm water. Please provide information on how the built up sediment will be dealt with and what will be done to insure that water will not be detained for longer than 72 hours. While it is stated that water will not be detained for longer than 72 hours it is not clear what measures will be taken to insure this.

19. The Applicant states that the ponds are designed for a 100-year 24-hr event. Please clarify if this volume calculation takes into account that moisture may accumulate in the ponds/sumps prior to the storm event (wet weather preceding the 100-year event).
20. Please clarify if the topsoil stockpiles are to be separate from the overburden stockpiles.
21. The Division requests the Applicant replace clover, as cover crop for topsoil stockpiles, with a native species, or utilize the final reclamation seed mix to help establish a beneficial seed bank or contact the local office of the Natural Resource Conservation Service (NRCS) to get a formal recommendation. Please provide the updated seed mixture, in pure live seed (PLS), per acre for the topsoil stockpile stabilization.
22. What is the timeframe for the groundwater well installation?
23. The Division would like the Applicant to commit to giving the Division copies of the augmentation plan (if relevant), well drilling and construction documents, and DWR approval document for the well installation and proposed usage.
24. What is the reclamation plan for the proposed well? If it is to be left after reclamation please submit an affidavit from the land owner requesting it be left after completion of reclamation.

EXHIBIT E – Reclamation Plan (Rule 6.4.5):

25. The Division requests the Applicant replace clover, as cover crop for topsoil and overburden berms, with a native species, or utilize the final reclamation seed mix to help establish a beneficial seed bank or contact the local office of the Natural Resource Conservation Service (NRCS) to get a formal recommendation.
26. If a Technical Revision for the rail spur is submitted for Division's approval please include a signed affidavit by the landowner requesting it remains after reclamation is complete.
27. The Applicant states certified weed free mulch will be crimped into the surface at 2000 lbs. per acre. Based on the Division's experience with mulching rates, please commit to utilizing two (2) tons of mulch per acre.
28. The Applicant states fertilizer may be added as determined by a soil test at the time of seeding. Please commit to providing the Division with a copy of the soil test(s) when available.
29. Please provide a typical cross-section of what the heavy furrows will look like.
30. What is the compatibility of drill seeding and the heavy furrows, how is the Applicant propose to get vegetation established on the furrows.

31. Please indicate of the reclamation map the approximate alignment of the proposed catch ditches.

EXHIBIT G – Water Information (Rule 6.4.7):

32. Please review the DWR Comments letter, attached, and incorporate comments into the application.

33. Please provide the Division a copy of the SPCC plan for the site.

34. Has the Applicant acquired (or has applied for) a National Pollutant Discharge Elimination System (NPDES) permit from the Water Quality Control Division at the Colorado Department of Health and Environment, if necessary.

EXHIBIT H – Wildlife Information (Rule 6.4.8):

35. Please commit to providing a copy of the wildlife survey results to the Division including but not limited to; Bat and Raptor Survey and Swift Fox Survey.

EXHIBIT J – Vegetation Information (Rule 6.4.10):

36. Please provide the relationship of present vegetation types to soil types, or alternatively, the information may be presented on a map pursuant to Rule 6.4.10(1)(b).

EXHIBIT K – Climate (Rule 6.4.11):

37. Please provide the source of the information provided in this exhibit.

EXHIBIT L – Reclamation Costs (Rule 6.4.12):

38. Please update the reclamation costs to incorporate the phasing of the CUP, if warranted.

EXHIBIT M – Other Permits and Licenses (Rule 6.4.13):

39. Please commit to providing a copy of all the permits that are in progress once they are approved.

EXHIBIT S – Permanent Man-made Structures (Rule 6.4.19):

40. Please provide the notary page for the structure owners that have been received. Please indicate which structures where notary pages have not been received.

41. Please clarify if the underground water supply pipes were part of the structure agreements, if not please provide the structure agreement for them.

Rule 6.5 - Geotechnical Stability Exhibit

42. Rule 6.5(4) requires an operator who proposes blasting to provide an appropriate blasting, vibration, geotechnical and structural engineering analyses that off-site areas will not be adversely affected by blasting. While the Rules do not provide details of the exact type of analysis or demonstration that needs to be conducted, the DRMS Minerals program typically follows the protective standards accepted by the Office of Surface Mining, Reclamation and Enforcement for airblast and ground vibration. Regarding airblast, it should be controlled so that it does not exceed the values specified below at any significant structure (home, building, etc.) outside the permit area:

Lower Frequency Limit of Measuring System, Hz (3dB)	Maximum Level in dB
0.1 Hz or lower – flat response ¹	134 peak
2 Hz or lower -- flat response.....	133 peak
6 Hz or lower -- flat response.....	129 peak
C-weighted, slow response	105 C

For ground vibration, the maximum peak particle velocity should not exceed the following limits at any significant structure (home, building, etc.) outside the permit area:

Distance (D) from the Blasting Site (in feet)	Maximum Allowable Peak Particle Velocity (V max) for Ground Vibration (in inches/secondH)	Scaled-Distance Factor to be Applied without Seismic Monitoring (Dsl)
0 to 300	1.25	50
301 to 5000	1.00	55
5001 and beyond	0.75	65

H Ground velocity shall be measured as the particle velocity. Peak particle velocities shall be recorded in three mutually perpendicular directions from the blasting site. The maximum peak particle velocity shall be the largest of any of the three measurements.

The Applicant shall provide an appropriate demonstration that offsite areas will not be adversely affected by the proposed blasting operation in accordance with Rule 6.5(4).

Other Permits and Licenses (Rule 6.3.6):

43. Pursuant to Rule 1.6.2(2), please demonstrate that the Applicant's response to these adequacy issues have been placed with the application materials previously placed with the County Clerk or Records Office, and made available for public review

Objections Received:

44. Please address the request made by Michael Bigpond regarding an Environmental Impact Study for homes located ½ mile east of the proposed quarry in the Cuerno Verde Subdivision.

Please respond to these adequacy issues no later than two weeks before the decision deadline, to ensure ample time for the Division to complete its review prior to its decision deadline. The decision deadline on this application is January 1, 2020. If additional time is required to respond to these adequacy issues please submit a written request for extension of the review period. The Division reserves the right to further supplement this document with additional adequacy issues and details as necessary.

If you need additional information or have any questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at **303-866-3567 x8114**, or by email at patrick.lennberg@state.co.us.

Sincerely,



Patrick Lennberg
Environmental Protection Specialist

Enclosure: DWR Response to Reclamation Permit Amendment Application Consideration
SHPO Response to Reclamation Permit Amendment Application Consideration

cc: Jared Ebert; Division of Reclamation, Mining & Safety

Enclosures



COLORADO
Division of Water Resources
Department of Natural Resources

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OC: 29 2019

**DIVISION OF RECLAMATION,
MINING AND SAFETY**

Response to Reclamation Permit Application Consideration

DATE: October 29, 2019
TO: Patrick Lennberg, Environmental Protection Specialist
CC: Division 2 Office; District 16 Water Commissioner
FROM: Ivan Franco, P.E. *HIF*
RE: Bradford Mesa Quarry, File No. M-2019-046
Operator: Southway Construction Company, Inc.
Contact: Paul Bottini, (719) 598-5103
Sec. 36, Twp. 26S, Rng. 66W, 6th P.M., Huerfano County

CONDITIONS FOR APPROVAL

- ☒ The proposed operation does not anticipate exposing groundwater. Therefore, exposure of ground water must not occur during or after mining operations.
- ☒ If storm water is contained on-site, the applicant should be aware that, unless the storm water detention structures can meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, the structure may be subject to administration by this office. The applicant should review DWR's *Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado* (available at: <http://water.state.co.us/DWRIPub/Documents/DWR%20Storm%20Water%20Statement.pdf>) to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use *Colorado Stormwater Detention and Infiltration Facility Notification Portal*, located online at: <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>, to meet the notification requirements.
- ☒ Other: All water used on-site shall be a legal supply of water provided by an appropriate supplier. The applicant shall confirm the legality of any proposed source of water supply with the Division of Water Resources prior to use in the operation.

COMMENTS: The local Water Commissioner, Doug Brgoch, may be contacted at (719) 859-0122 or Doug.Brgoch@state.co.us regarding legal water supplies in the area.





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**DIVISION OF RECLAMATION
MINING & SAFETY**

October 15, 2019

Patrick Lennberg

Division of Reclamation, Mining and Safety
Department of Natural Resources
1313 Sherman St, Room 215
Denver, CO 80203

Re: Bradford Mesa Quarry, File No. M-2019-046 (LIC #76676)

Dear Mr. Lennberg:

We received your correspondence dated October 3, 2019 on October 7, 2019 requesting comment under the State Register of Historic Places Act (CRS 24-80-1 et seq.) for the proposed action.

A search of our database indicates that no properties of historical significance included or nominated for inclusion in the state register have been recorded within the proposed permit area. Please note, as most of Colorado has not been inventoried for cultural resources, our files contain incomplete information. Consequently there is the possibility that as yet unidentified cultural resources exist within the proposed permit area. The requirements under CRS 24-80 part 13 apply and must be followed if human remains are discovered during ground disturbing activities.

We thank you for the opportunity to comment. If we may be of further assistance, please contact Mark Tobias, Intergovernmental Services Manager, at (303) 866-4674 or mark.tobias@state.co.us.

Sincerely,

Steve Turner, AIA
State Historic Preservation Officer
ST/mt