



October 22, 2021

David Bieber
Front Range Aggregates, LLC
c/o Martin Marietta Materials, Inc.
1627 Cole Boulevard, Suite 200
Lakewood, CO 80401

Re: Parkdale Quarry, Permit No. M-1997-054; Second Adequacy Review for 112 Construction Materials Reclamation Permit Amendment Application (AM-02)

Dear Mr. Bieber:

The Division of Reclamation, Mining and Safety (DRMS) has completed its review of your responses (received September 10, 2021) to our July 14, 2021 preliminary adequacy review (PAR) of your 112 Construction Materials Reclamation Permit Amendment Application (AM-02) for the Parkdale Quarry, Permit No. M-1997-054. **The current decision date for this application is November 19, 2021.** Please be advised that 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 DRMS may deny this application.

The following items must be addressed by the applicant in order to satisfy the requirements of C.R.S. 34-32.5-101 et seq. and the Mineral Rules and Regulations of the Mined Land Reclamation Board:

GENERAL COMMENTS

1. Map Exhibits: The response is adequate.
2. Figures: The response is adequate.

6.4 SPECIFIC EXHIBIT REQUIREMENTS – REGULAR 112 OPERATIONS

6.4.2 EXHIBIT B - Index Map

3. Exhibit B: The response is adequate.

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

4. Exhibit Maps: The response is adequate.



5. Overburden and Topsoil Stockpiles: The response requires some clarification. The revised Exhibits C1 through C4 show combined topsoil and overburden stockpile locations. Exhibit C6 shows only an overburden stockpile location. Only Exhibit C5 identifies separate topsoil and overburden stockpile locations. Section 6, Materials Handling suggests topsoil and overburden will be stockpiled separately as required by Rule 6.4.5(2)(d). Please confirm the intent to segregate topsoil from overburden and show separate stockpile locations for topsoil and overburden on the Exhibit C maps.

6.4.4 EXHIBIT D – Mining Plan

6. Exhibit Maps: The response is adequate.
7. Thickness of Deposit: The response is adequate.
8. Mining Limits: The response is adequate.
9. Conveyor System: The response is adequate. The DRMS will expect a technical revision to address demolition and reclamation costs for the proposed conveyor system at least 30 days prior to constructing a conveyor system.
10. Mine Phasing: The response is adequate.
11. Phase 6 Plan: The response is adequate.
12. Haul Road: The response is adequate.
13. Bench Design: The response requires additional clarification. The DRMS understands the bench configuration at the edge of the mine limits will be constructed at the 35 feet high by 30 feet wide reclamation configuration as mining progresses. However, we would expect the benches on the working face that progresses towards Phase 2, etc. will be constructed at the 60-foot high by 40 feet wide “production” configuration. As such, should the bond need to be revoked before final reclamation is completed, the DRMS needs to bond for reconfiguring the production benches to the proposed final reclamation geometry by blasting. This is what was intended to be conveyed in Attachment A of our July 14th PAR. Please consider the potential costs here and confirm you wish to proceed with a bench configuration that differs between production and reclamation.
14. Material Handling: The response is adequate.
15. Water Supply: The response is adequate.

6.4.5 EXHIBIT E – Reclamation Plan

16. Reclamation similar to Webster Park: The response is adequate.
17. Valley Floor Drainage Channels: The response was incomplete. No hydraulic design or analyses was provided. Please provide the hydraulic design / analyses for item (a):
 - a. hydrologic and **hydraulic analyses** for channel design (*note: based on our October 22, 2021 telephone conversation, the DRMS will accept a written commitment to submit a final design for the engineered channel cross-sections and*

geomorphological drainage layout, prior to initiating mining in each of Phases 1 through 5. These designs will need to be submitted as a Technical Revision.)

b. anticipated construction techniques - The response is adequate.

18. Bench Vertical Slopes: The response is adequate.

19. Bench Configuration: The response is adequate.

20. Reclamation Performance Standards: Please address item (a):

a. Rule 3.1.7(6): The DRMS has not received this revised Exhibit to date. Please see Comment No. 23 below.

b. Rule 3.1.10(6): The response is adequate.

21. Seeding: The response is adequate.

6.4.6 EXHIBIT F – Reclamation Plan Map

22. Exhibit Maps: The response is adequate.

6.4.6 EXHIBIT G – Water Information

23. Groundwater: The DRMS provided comments to Exhibit G on August 6, 2021. The DRMS has not received this revised Exhibit to date.

6.4.12 EXHIBIT L – Reclamation Costs

24. Scope of Submitted Cost Estimate: Based on our October 22, 2021 telephone conversation, the DRMS understands the 134 acres of reclamation for the Granite Area includes both the private and BLM-managed areas. No further response is necessary.

25. Seeding: Additional clarification is needed. It is unclear from the response if the 20 pounds of seeds per acre is for broadcast application or drill seeding. Exhibit E states seeding of the benches will be accomplished via hydroseeding, but no method of seeding of the pit floor is provided. Please clarify if the 20 pounds of seeds per acre is a drill rate or broadcast rate and indicate if the pit floor will be broadcast (hydroseeded) or drill seeded.

26. Tallahassee Bridge Demolition: The response is adequate.

27. Top Dressing: The DRMS accepts the 162,140 cubic yard estimate for 134 acres on the top of page 3 of the revised Exhibit L. No further response is necessary.

28. Toe Drain Construction: The response is adequate.

29. Clay liner fill: The response requires additional information. As 10% of the necessary clay liner will be imported from Martin Marietta's Penrose Pit, the DRMS requires a unit cost to purchase this material. This is because if the bond requires revocation, the State will need to purchase this material. We can estimate transportation costs given the 90-minute round trip travel, but we do not have a material cost for the clay. Please provide an estimated material cost (not to include transportation).

30. Alluvial Revegetation: The response is adequate.

31. Valley Floor Drainage Channels: The response is adequate at this time. (*Note: this volume may require changes based on the response to Comment #17a above*).
32. DRMS Estimate: The DRMS will generate a reclamation cost estimate based on this amendment application and responses to this and the previous adequacy review letter. Please be aware the bond estimate provided in Exhibit L may be modified based on our reclamation cost estimate. No response is necessary.

6.4.19 EXHIBIT S – Permanent Man-Made Structures

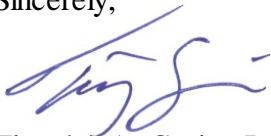
33. Eligible Structures: The response is adequate.

6.5 GEOTECHNICAL STABILITY EXHIBIT

34. Geotechnical Stability Exhibit: The DRMS has not received this revised Exhibit to date. Please submit geotechnical stability analyses to demonstrate the following:
- a. Stability of the reclaimed highwalls in the BLM expansion area will be stable Pursuant to C.R.S 34-32.5-102(1) and Rules 1.1(45), 6.5(2) post reclamation; and pursuant to Rule 6.5(4).
 - b. The area outside the permit boundary and adjacent to the southwest edge of the Phase 3 Central Pit will not be adversely affected by blasting through appropriate blasting, vibration, geotechnical, and structural engineering analyses.

Please remember that the decision date for this application is November 19, 2021. As previously mentioned if you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. If there are still unresolved issues when the decision date arrives and no extension has been requested, the application may be denied. If you have any questions, please contact me at (303) 328-5229.

Sincerely,



Timothy A. Cazier, P.E.
Environmental Protection Specialist

ec: Michael Cunningham, DRMS
Eric Scott, DRMS
DRMS file
Stephanie Carter, BLM