

November 30, 2023

Michael B. Toelle  
Holcim (US) Inc.  
3500 Highway 120  
Florence, CO 81226

**Re: Portland Limestone Quarry - File No. M-1977-344;  
Preliminary Adequacy Review for 112 Construction Materials Reclamation Permit  
Amendment Application (AM-2)**

Dear Mr. Toelle:

The Division of Reclamation, Mining and Safety (DRMS) has completed its preliminary adequacy review of your 112 Construction Materials Reclamation Permit Amendment Application (AM-2) for the Portland Limestone Quarry, Permit No. M-1977-344. The application was received on October 3, 2023 and called complete for review on October 10, 2023. **The decision date for this application is January 8, 2024.** 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 review consisted of comparing the application content with specific requirements of Rules 3.1, 6.4 and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials. Any inadequacies are identified under the respective exhibit heading along with suggested actions to correct them.

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. **Proof of Required Notices:** Newspaper publication of a notice (published once a week for four consecutive weeks) regarding the filing of your application and transmittal of a copy of the notice to all owners of record of surface and mineral rights, holders of any recorded easements, and all owners of record of lands that are within 200 feet of the boundary of the



affected land (this includes the additional proposed affected area, as well as the existing affected area) is required within 10 days of submittal. You must submit proof of the notice and mailings, such as Certified Mail Return Receipt Requested, to the Division prior to the decision date. Please provide this documentation demonstrating: a) proof of publishing the notice in the local newspaper, and b) proof of mailing the notice to all owners of record of lands that are within 200 feet of the boundary of the affected land.

### **APPLICATION**

2. Permit Number: There is a typo in the listed permit number. It should be M-1977-344. If the form is resubmitted (see Comment 3 below), please ensure the correct permit number is used.
3. Change of Site Name: The Operation name listed on the AM-2 Application Form is “Red Creek Quarry aka Bear Creek Quarry”. During our November 2<sup>nd</sup> inspection, a shorter site name was discussed. Please confirm the name Holcim wants to use for this site going forward. If the name is to be different from that on the amendment application form, please resubmit the application form with the new Operation name.
4. Location Elevation: Item No. 9 on p. 2 of the AM-2 Application Form requests an approximate elevation in the general description. Please provide an approximate elevation for the Red Creek Quarry.
5. Primary present land use: Item No. 13 on p. 4 of the AM-2 Application Form indicates the present land use is “Forestry”. As the Red Creek Quarry area has very few trees, this appears to be an error. Please explain the selection of forestry or submit a revised form with a more appropriate present land use, such as rangeland.
6. Responsibilities as a Permittee: Item No. 10 on p. 6 of the Application Form was initialed by “H.M”. Item 10 is for joint ventures. Please clarify if this amendment application is under a joint venture/partnership. If it is, a power of attorney (provided by the partner(s)) authorizing the signature of the representative must be provided for H.M.
7. Proof of Newspaper publication: Rule 1.6.5(2) requires the Applicant provide proof of publishing the required notice in a newspaper of general circulation within 10 days of the last date of publication or as soon thereafter as proof has been obtained. Please provide proof of the newspaper publication.

## **6.4 SPECIFIC EXHIBIT REQUIREMENTS – REGULAR 112 OPERATIONS**

### **6.4.1 EXHIBIT A - Legal Description**

8. Affected Area Boundary: The second sentence of section 2.1 references Figure 2.1-1 indicating the boundary and affected area are as shown in the figure. The boundary shown in the figure for the plant and Bear Creek Quarry encompasses a far greater area than is currently permitted. Please revise Figure 2.1-1 accordingly.

#### **6.4.2 EXHIBIT B - Index Map**

Exhibit B is adequate as submitted.

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

9. Exhibit C General Requirements: Rule 6.2.1(2)(b) requires the maps be signed by the preparer and Rule 6.2.1(2)(e) requires the scale be between 1 inch = 50 feet and 1 inch = 660 ft. None of the Exhibit C maps are signed. Exhibit C2 maps scale bar (in miles) show the scale is 1 inch = 916.67 feet; and Exhibit C3 maps scale bar (in miles) show the scale is 1 inch = 960 feet. Because of the linear nature of the Material Transport and Access Corridor (MTAC) and that electronic files were provided to the DRMS, there would be no real benefit in adhering to the map scale requirements. However, the maps do need to be signed by the preparer such as that included in the tile block on the Exhibit F map. Please resubmit the Exhibit C maps with the preparer's signature. The scale bar should be in feet rather than miles.
10. Boundary Buffer irregularities: The tan boundary buffer line on the Exhibit C maps has some irregularities on Maps C2-1 and C3-1 near the plant area. In addition to the MTAC corridor being much narrower near the plant, the "Mining Permit and Affected Area Boundary" is not centered in the buffer area. These two drawings also need to reflect the recent Acreage Reduction (AR-2, which will be final on December 18<sup>th</sup>) Please confirm the MTAC buffer is intended to be 200 feet in the vicinity of the plant as it is elsewhere. Also, Exhibit C3-1 does not show the MTAC road and belt fence in the straight segment just south of the plant. Does the conveyor configuration and/or road change here? Please revise Maps C2-1 and C3-1 as necessary, including the permit boundary as revised under AR-2.
11. Structure owners: Rule 6.4.3(g) requires the structure (e.g., Minnequa Canal, utilities and fences) owner's name be shown or identified on the Exhibit C maps. Please update the maps accordingly.
12. KMZ Files: During our November 2<sup>nd</sup> inspection, the DRMS requested KMZ/KML files for the proposed MTAC and Red Creek Quarry boundaries. We received KMZ files for the plant area and one segment of the MTAC (the straight segment shown in Exhibit C2-1). Please provide KMZ/KML files for all the MTAC and Red Creek Quarry boundaries.

#### **6.4.4 EXHIBIT D – Mining Plan**

13. Bear Creek Quarry and Plant Area: No information was provided for the current mine plan related to the Bear Creek Quarry or the Plant Area. Pursuant to Rule 1.10.1(2) the Applicant may avoid the requirement to submit all site-wide mine plan information if it is clearly described in the amendment application where in the original application and supporting documents the information not included in the amendment may be found.
14. Underlying Strata: Section 2.4.3 indicates Codell sandstone will be mined to a depth of 15 feet. The geologic narrative does not discuss any strata below the Codell sandstone. Rule 6.4.4(f)(ii) requires a description of the nature of the stratum immediately beneath the

material to be mined in sedimentary deposits. Please describe the stratum below the Codell sandstone.

15. MTAC Layout: Section 2.4.4.1 states the access road will lie east of the conveyor fence. Exhibit C3 maps indicate the access road is on the west side of the conveyor. In addition, Exhibit L lists only five miles of fence. Please address the following:
  - a. Confirm on which side of the conveyor fence the road will be placed.
  - b. From a wildlife protection perspective, will the fence be on both sides of the conveyor?
16. Salvaged Growth Material: The second paragraph on p. 47 states plant growth material will be salvaged and stockpiled in the bottom lift of a two-lift stockpile, and that overburden will be stockpiled on top of the growth media. Rule 3.1.9 requires growth media be segregated for other spoil. Placing overburden on top of growth media will make it difficult to distinguish between the two over a period of time. Please commit to stockpiling the two materials separately (side-by-side would be acceptable if the growth media is labeled with signage).

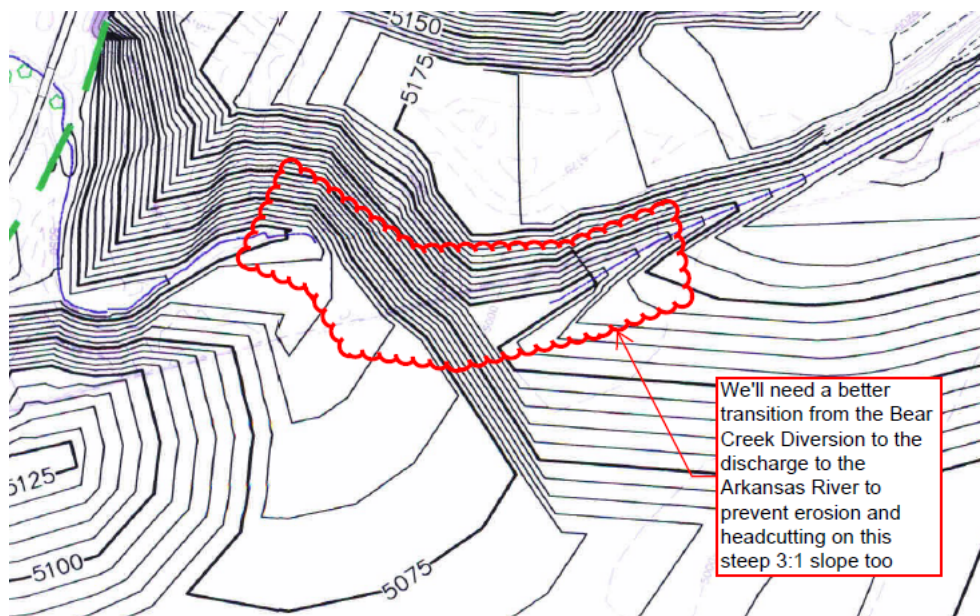
#### **6.4.5 EXHIBIT E – Reclamation Plan**

17. Bear Creek Quarry and Plant Area: No information was provided for the current reclamation plan related to the Bear Creek Quarry or the Plant Area. Pursuant to Rule 1.10.1(2) the Applicant may avoid the requirement to submit all site-wide reclamation plan information if it is clearly described in the amendment application where in the original application and supporting documents the information not included in the amendment may be found.
18. Overburden use: The fourth paragraph under Section 2.5 states “An abundance of overburden exists to the extent that benches will be sloped with ample overburden to raise the mine floor elevation.” Please explain how sloping the benches will raise the mine floor elevation.
19. Appropriate grading: Rule 3.1.5(1) requires the final grading be evaluated as appropriate for the post mine land use. The Exhibit F grading plan shows the smaller pit on the north side of Red Creek and the much larger pit on the south side have no drainage outlets. By contrast the Bear Creek Quarry has a reclamation plan allowing stormwater to drain to the Arkansas River. The DRMS is concerned that significant precipitation events may lead to ponded stormwater in the lowest portions of the pits that will not infiltrate within the 72 hours required by the Colorado Division of Water Resources. Please describe how the 72-hour drain down requirement will be met after reclamation is completed.

#### **6.4.6 EXHIBIT F – Reclamation Plan Map**

20. Exhibit F General Requirements: Rule 6.2.1(2)(e) requires an appropriate scale on the map(s) be provided. As the submittal was received in electronic format, a scale bar is needed. Please include a scale bar on Exhibit F.

21. Drainage Concern: Please see Comment No. 19 above. If a change in the final grading plan is necessary, please provide an updated Exhibit F to reflect the change(s).
22. Canyon Walls: Exhibit F shows a “thin” wall to remain between the existing Red Creek canyon and the excavated quarry. Please provide rationale for the width of the material to be left in place. The DRMS is also concerned about the potential impact on the geotechnical stability of the wall after reclamation (*see Comment No. 35 below*)
23. Bear Creek Quarry Diversion: During our July 19, 2023 inspection, we discussed the “outfall” of the Bear Creek Diversion in the approved Exhibit F-1 from AM-1 (see image capture below). Please address this as part of AM-2 or provide a written commitment to address this change as part of the technical revision process by May 30, 2024.



#### **6.4.7 EXHIBIT G – Water Information**

24. PJD date clarification: Section 2.7.2 states a preliminary jurisdictional determination (PJD) request was submitted to the USACE on May 21, 202 [sic]. Please clarify the year the request was submitted.
25. Water impacts: Rule 6.4.7 requires if the operation “is not expected to directly affect surface or groundwater systems, a statement and sufficient demonstration of that expectation shall be submitted”. The modeling results presented in Appendix 4.6 indicate groundwater may be exposed in Mine Plan Blocks 0-10 and 20-30 (*see first Condition for Approval in the enclosed Division of Water Resources letter*). Section 2.7.5 (Exhibit G) discusses SWSP/16CW3102 which covers cover depletions from both the Holcim Bear Creek Quarry and the Holcim Wetlands; but it does not specifically address any depletions from the Red

Creek Quarry. In addition, surface water may be impacted as discussed in Comment No. 19 above. Please address the following:

- a. If the current SWSP is to cover depletions at the proposed RCQ, it must be explicitly stated in the SWSP and approved by the Colorado Division of Water Resources prior to exposing groundwater. Please provide a commitment in writing to obtaining such an approval prior to exposing groundwater in the RCQ.
  - b. Ensure the response to Comment No. 19 includes an expected infiltration rate and how much water could be expected to infiltrate within the 72-hour time frame (*see second Condition for Approval in the enclosed Division of Water Resources letter*), relative to a given frequency storm event (e.g., could the runoff volume captured within the reclaimed pit from a 25-year [*or other frequency*], 24-hour storm event infiltrate within 72 hours?).
26. Well Locations: Paragraph 2.7.3 references Appendix 4.3 for the well permits and indicates the five monitoring wells were “spatially distributed”. A review of the UTM coordinates for Well Permits 326171 and 326172 show they are less than 2 meters apart. A map of the monitoring well locations was not found during the review of the other application Exhibits and appendices. Please:
- a. Confirm the coordinates for Well Permits 326171 and 326172 are correct on the monitoring well permits, or correct the coordinates in the permit documents, and
  - b. Provide a reference map showing the locations of the monitoring wells.
27. Groundwater and Surface Water Baseline Study: Paragraph 2.7.3.1 references the baseline water investigation in Appendix 4.5. Paragraph 7.1 (App. 4.5), Summary of Findings states “Analysis of water quality data indicated the surface water and groundwater on the Site has naturally occurring concentrations of constituents that exceed water quality standards”. Please provide a summary table of these naturally occurring exceedances.
28. Sampling and Analysis Plan: The DRMS is continuing to review the SAP (App. 4.4). Should there be any comments, we will provide them before December 22, 2023.

#### **6.4.8 EXHIBIT H – Wildlife Information**

29. Wildlife Impacts: The DRMS received a comment letter (enclosed) from Colorado Parks and Wildlife (CPW). The letter acknowledges a meeting and site visit on October 19, 2023, which was after the receipt of this amendment application. The CPW letter provides a bullet list of eight recommendations. Pursuant to Rules 3.1.8 and 6.4.8(2), please provide a response to each of CPW’s eight recommendations.

#### **6.4.9 EXHIBIT I – Soils Information**

Exhibit I is adequate as submitted.

#### **6.4.10 EXHIBIT J – Vegetation Information**

30. Appendix Reference: The second paragraph of Section 2.10 references Appendix 4.10 as containing the vegetation survey report. Appendix 4.10 is the Integrated Weed Management Plan. Appendix 4.9 contains a Brown and Caldwell Technical Memorandum on the subject of Red Creek Quarry, Vegetation Information. If Appendix 4.9 is not the intended reference appendix, please clarify which appendix it should be. If Appendix 4.9 is correct, no response is necessary.

#### **6.4.11 EXHIBIT K – Climate**

Exhibit K is adequate as submitted.

#### **6.4.12 EXHIBIT L – Reclamation Costs**

31. Reclamation cost omissions: Due to long-term discussions as to whether the Plant is to be fully demolished as part of the site final reclamation plan, the bond for this site has not been fully updated since the approval of AM-1. With the recent approval of the acreage reduction request (AR-2) to remove all but the Scrubber on the south side of the plant and the Cement Mill Dust Collector on the north side of the plant from the affected area, the demolition aspect can be finalized as discussed during our November 2<sup>nd</sup> inspection. In order to fully flesh out a site-wide reclamation cost, the DRMS will need to know what reclamation Holcim deems is still required for the Bear Creek Quarry. Pursuant to Rule 6.4.12(1), please provide reclamation costs for the two aforementioned facilities at the Plant and for the remaining Bear Creek Quarry reclamation tasks, including the conveyors and other structures north of and crossing the Arkansas River. (*Note, this will be dependent on your response to Comment No. 23 above*).
32. Chain Linked Fence: Task 002 lists five miles of chain linked fence and posts to be removed, presumably along the MTAC. Task 002 also lists 6.5 miles of conveyor system to be removed/demolished. As a follow-on to Comment No. 15 above, it would seem the length of fence would either be 6.5 miles or 13 miles (if on both sides of the conveyor). Please explain why only five miles of fence require removal.

#### **6.4.13 EXHIBIT M – Other Permits and Licenses**

33. Red Creek Crossing: As discussed during the November 2<sup>nd</sup> inspection, and as indicated in Exhibit M, permitting requirements for the MTAC crossing Red Creek are in process with the US Army Corps of Engineers. Depending on USACE requirements a technical revision or amendment will be required to finalize the creek crossing. No response is required at this time.

#### **6.4.14 EXHIBIT N – Source of Legal Right to Enter**

Exhibit N is adequate as submitted.

**6.4.15 EXHIBIT O – Owners of Record of Affected Land (Surface Area) and Owners of Substance to be Mined**

Exhibit O is adequate as submitted.

**6.4.16 EXHIBIT P – Municipalities Within a Two-mile Radius**

Exhibit P is adequate as submitted.

**6.4.17 EXHIBIT Q – Proof of Mailing of Notices to Board of County Commissioners and Soil Conservation District**

Exhibit Q is adequate as submitted.

**6.4.18 EXHIBIT R – Proof of Filing with County Clerk and Recorder**

Exhibit R is adequate as submitted.

**6.4.19 EXHIBIT S – Permanent Man-Made Structures**

34. Hwy 96: Rule 6.4.19 requires a damage compensation agreement for permanent man-made structures within 200 feet of the affected area boundary. As the access road from Hwy 96 is to be improved, it qualifies as affected area. The State Highway Access Permit Application may serve as notice to CDOT as the owner of Hwy 96, but does not address potential damages related to mining activities. If no damage compensation agreement can be obtained from CDOT, Rule 6.4.19(a) requires an “an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation”. As no excavation or blasting are planned for over a mile from Hwy 96, a short paragraph explaining the separation distance from mining and blasting should be sufficient.

**RULE 6.5 GEOTECHNICAL STABILITY EXHIBIT**

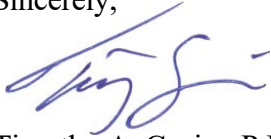
35. Blasting Impacts: Rules 6.5(3) and (4) require the DRMS to evaluate potential geotechnical risks to highwalls where blasting might affect the stability of geological structures during mining and after reclamation. As discussed in Comment No. 22, please provide an assessment of the effect of quarry blasting on the stability of the existing Red Creek canyon walls.

**Please remember that the decision date for this application is January 8, 2024.** 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,

A handwritten signature in blue ink, appearing to read 'Tim Cazier', with a stylized flourish at the end.

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

Enclosure: CPW Comment Letter  
DWR Comment Letter

ec: Michael Cunningham, DRMS  
DRMS file  
Dr. Angela Bellantoni, EAI