



STATE OF  
COLORADO

Carter - DNR, Jocelyn <jocelyn.carter@state.co.us>

---

## Two Rivers Pit M-1998-038 AM-1 Adequacy Review #4

1 message

---

**Carter - DNR, Jocelyn** <jocelyn.carter@state.co.us>

Mon, Aug 5, 2024 at 6:10 AM

To: Jodi Schreiber <jodi@arycorp.com>

Cc: Amy Eschberger - DNR <amy.eschberger@state.co.us>, John Paul Ary <Jp@arycorp.com>

Hi Jodi,

Please see the attached adequacy review letter. The decision date for the AM-1 application is today, August 5, 2024, please submit a decision date extension request to avoid the denial of the application.

Thanks,  
Jocelyn



**20240805\_TwoRivers\_AM1\_FourthAdequacyReview.pdf**

496K



August 5, 2024

Jodi Schreiber  
Fremont Paving & Redi-Mix Inc.  
839 Mackenzie Ave.  
Canon City, CO 81215

**RE: Fremont Paving and Redi Mix, Inc. Two Rivers Pit M-1998-038 Amendment Application (AM-1), Fourth Adequacy Review**

Dear Jodi Schreiber,

The Division of Reclamation, Mining, and Safety (the Division/DRMS) received the amendment application (AM-1) from Fremont Paving and Redi Mix, Inc. (Fremont/FPRM), submitted on January 22, 2024, and completed and filed it with the Division on February 8, 2024. The response to the third adequacy review was received on July 31, 2024. There are remaining items that require clarification. Please address the following adequacy review items and include a cover letter with a response to each of the items listed below.

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

1. There is an inconsistency with the permit boundary shown on the map titled “Existing Conditions – Land Owners Exhibit C.4”. The northwest and southwest boundary lines are not the same as that shown on the “Exhibit B – Legal Map”. Revise this map to show the corresponding permit boundary as given in the “Exhibit B – Legal Map” in accordance with Rule 6.2.1(2)(d).
2. The “Existing Conditions – Land Owners Exhibit C.4” map has the permit boundary labeled as “Pit Boundary”. It was stated in the third adequacy review response, item #10, that mining operations would not be within 400 feet of the Arkansas River. However, this map implies that the pit boundary of the mining operation would be within 400 feet and within the river channel. Revise this map with the proper boundary label.

**Rule 6.4.4 Exhibit D – Mining Plan**

3. The “Phase Map” is a part of Exhibit D, revise the title to include “Exhibit D”.
4. The area north of Phase 7 labeled as “Unaffected” on the “Phase Map” does not meet the Division’s definition of “Affected Lands”, Rule 1.1(3); the area will have a structure resulting from the mining operation. The area located to the west of Phase two with the same label will also have the proposed monitoring well #1 and therefore will also be considered to be affected land. Revise the map to indicate that the areas will be unmined rather than unaffected.



5. In “Note” text box of the “Phase Map”, under 1) Mine Phases 1 & 2, item h) states that the number of acres mined and reclaimed will never exceed 100 acres at any one time. The 6.4.4 Exhibit D – Mining Plan narrative states that the maximum acreage that will be disturbed at any one time will not exceed 112 acres. Revise the text box of the map to reflect what is stated in the narrative.
6. During the March 28, 2023, inspection, the Division concluded the total disturbed area as given in the below image; the blue polygon is the current permit boundary, and the yellow polygon represents the affected area. The currently disturbed area includes portions of future Phases 4, 5, 6, and 9. Revise the “Phase Map” to include a breakdown of the currently disturbed area, the undisturbed area, and the total area for these phases.



**Rule 6.4.5 Exhibit E – Reclamation Plan**

7. The Exhibit E – Reclamation Plan states that 6 inches of topsoil will be replaced. However, this may not be sufficient to support the post mine land use of cropland. According to Exhibit D – Mining Plan, there is 18 inches of topsoil being removed. Please commit to replacing a minimum of 18 inches of topsoil during reclamation operations and revise Exhibit E – Reclamation Plan narrative accordingly.
8. The groundwater monitoring plan submitted require the following items to be addressed:
  - a. Under the Proposed Mining Operations section, it states “Exposed groundwater on-site will not exceed 1 acre.” The cross section of the settling pond on the “Phase Map” states that the footprint of the proposed settling pond will be 2 acres. Please revise the plan and the narrative for Exhibit D – Mining Plan to account for the settling pond and the maximum area of the dewatering ditch.
  - b. The map titled “Two Rivers Pit General Location: Alluvial Aquifer and

Surrounding Wells” has a text box referring to Water Table Contour lines and the interval associated with the contour lines. The contour lines are not apparent, and the map does not clearly indicate the depth of the water table over the affected area. Revise the map to clearly identify the water table depth and the direction of flow in the area in accordance with Section 1.1 – Site Description of the Groundwater Monitoring: Sampling and Analysis Plan Guidance Construction Materials and hard Rock September 2023 (GWM SAP 2023).

- c. In the Task 1.3 – Establishing Baseline Groundwater Quality section it is stated “To establish baseline groundwater quality, water quality samples will be collected quarterly from the monitoring wells for five quarters, or a total of five times.” According to the GWM SAP 2023 under section 1.2 Baseline Groundwater Characterization, it states that the minimum requirements for characterization of groundwater quality is for five consecutive quarters of data to be collected. Revise the statement to reflect the minimum requirements for establishing baseline groundwater quality standards for the affected area.

#### **Rule 6.4.6 Exhibit F – Reclamation Map**

9. The permit boundary shown in “Exhibit F – Reclamation Map” does not match the permit boundary given in “Exhibit B – Legal Map”. Revise the map to correct the permit boundary, in accordance with Rule 6.2.1(2)(d), and to include the expected reclaimed topography of any missing portions, in accordance with Rule 6.4.6(a).

#### **Rule 6.4.12 Exhibit L – Reclamation Costs**

10. The estimate for reclamation costs provided in Exhibit L does not reflect the 112 acres that need to be reclaimed and does not have any information regarding the estimated cost for placing topsoil/fines. The previous estimation of requiring a 33-foot depth for backfill is not accurate for Phase 7, according to the Groundwater Monitoring Plan information provided. Well 478-R-R, the proposed monitoring well #2, has a water table depth of 10 feet. The estimated depth for backfilling Phase 7, measuring 30 acres, is 37 feet prior to replacing 18 inches of topsoil. According to the responses pertaining to the necessary areas for backfilling, the north side of the affected area will need more significant backfilling tasks completed for reclamation operations. Please provide details on the extent of the 112 acres of disturbed area, including a maximum pit size that will require backfilling above exposed groundwater at any one time and update the reclamation cost estimate to show a complete direct task list and associated cost in addition to the estimated indirect costs. As stated before, the DRMS reclamation cost estimate will include a 1000-foot long highwall at 46 feet in height being knocked down to a 3H:1V slope, 112 acres needing to be ripped and topsoiled at a depth of 18 inches, revegetating 112 acres, and a pit needing to be backfilled to a depth of 33 feet to 37 feet, depending on the depth of the water table where groundwater is exposed.

August 5, 2024  
Jodi Schreiber  
Fremont Paving & Redi-Mix, Inc.  
Page 4 of 4

This concludes the Division fourth adequacy review of the AM-1 application. The Division reserves the right to further supplement this document with additional adequacy items and/or details as necessary.

The decision date for the AM-1 application is August 5, 2024. Please respond with sufficient time to allow the Division to completely review the submitted responses to the above items. If additional time is needed, please submit an extension request to the Division prior to the decision date.

If you have any question or concerns, I can be reached by email at [Jocelyn.carter@state.co.us](mailto:Jocelyn.carter@state.co.us) or by phone at (720) 666-1065. Please don't hesitate to contact me.

Sincerely,



Jocelyn Carter  
Environmental Protection Specialist

Ec: Amy Eschberger, DRMS  
Cc: John Ary, Fremont Paving & Redi-Mix, Inc.