



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

1313 Sherman Street, Room 215
Denver, CO 80203

April 29, 2019

Jodi Schreiber
Fremont Paving and Redi Mix, Inc.
839 Mackenzie Ave.
P.O. Box 841
Canon City, CO 81212

**Re: Goodrich Pit, 112c Application Number M-2019-005
Adequacy Review No. 2**

Dear Ms. Schreiber,

The Colorado Division of Reclamation, Mining and Safety (“DRMS” or “Division”) deemed the above referenced application complete on February 5, 2019. The Division is required to issue a decision on the application by May 6, 2019. The Division received your response to the first adequacy review letter on April 26, 2019. The adequacy review items identified in the Division’s first letter are listed below, followed by a summary of Fremont Paving and Redi-Mix, Inc.’s (“FPRM”) response to the item. If additional information or clarification is need for an adequacy item, it is noted below FPRM’s response. If an adequacy review item has been resolved, it is deleted from the list. Please address the remaining items noted below:

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

1. Please provide a pre-mining plan map that depicts the existing topography of the area with contour lines of sufficient detail to portray the direction and rate of slope of the affected land.
 - a. **FPRM Response:** revised Exhibit C – Pre-Mining Map submitted.
 - b. **DRMS Response:** The revised Exhibit C, Pre-mining Plan Map submitted has contour lines, however they are not labeled and a contour interval is not provided. Given this, the direction and rate of slope cannot be ascertained. Please revise this map to adequately label the contour lines and please provide an appropriate contour interval.

Rule 6.4.4, Exhibit D – Mining Plan

7. As indicated above, there appears to be a stock pond located in the northwest corner of the permit area. The area where this pond is located will be mined through. Please confirm if this is the case. If not, please revise the mining plan accordingly. If the stock pond embankment will be removed or



mined through, please provide documentation the owner of this structure approves this activity.

- a. **FPRM Response:** A signed structure damage agreement was submitted for the stock pond.
 - b. **DRMS Response:** With the submittal of the signed structure agreement for the stock pond, FPRM is committing to compensate the owner of the stock pond should it be damaged.
The mining plan appears to include mining in the stock pond area. If mining will not occur in this area please update the mining plan to reflect this.
8. The mining plan indicates that explosives will be used. The applicant included a blasting plan and what appears to be a letter with additional details about blasting from BlackWing Blasting, Inc. These documents indicate that structures are located over one mile away and over 5,000 feet away from where blasting will occur. Based on the Division's review of the site's location, a home is located less than ½ mile to the northeast of the permit area. Also, what appears to be a stock pond embankment is located about 2,000 feet north of the permit area. Please revise the blasting plan to account for these structures.
- a. **FPRM Response:** The blasting plan has been updated to show the 2,000 feet area.
 - b. **DRMS Response:** The Division could not located the revised blasting plan with the revised material received by DRMS on April 26, 2019. Please submit the revised blasting plan.

Rule 6.5, Geotechnical Stability Exhibit

10. 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 may either provide an appropriate demonstration that offsite areas will not be adversely affected by the proposed blasting operation in accordance with Rule 6.5(4) or commit to conducting blasting in such a manner that the above referenced standards will not be exceeded. If the latter option is chosen, please provide a monitoring plan that will be used to document compliance with the above referenced standards.

- a. **FPRM Response:** Fremont Paving and Redi-Mix commits to conducting blasting in such a manner as to not exceed the referenced standards.
- b. **DRMS Response:** DRMS acknowledges FPRM's commitment to complying with the referenced standards. Please provide a monitoring plan that will be used to verify compliance with the applicable standards. This should include information on the instrumentation used to monitor for airblast and ground vibration, location information on where monitoring equipment will be placed and where records of blasting and associated monitoring will be kept.

Rule 6.4.5, Exhibit E – Reclamation Plan

13. The reclamation plan narrative indicates the site will be graded to blend in with the surrounding topography and the historic surface water flow will be restored. However, based on the Reclamation Plan Map, it appears the 3H:1V side slopes will direct all the flow to the base of the pit. The mining and reclamation as proposed will leave a basin at the top of the mesa. Please explain how the historic surface water flow will be restored?
 - a. **FPRM Response:** The reclamation plan has been updated to indicate that water will be directed to the base of the pit.
 - b. **DRMS Response:** The reclamation plan narrative was not revised, it indicated the site will be graded to blend in with the surrounding topography and the historic surface water flow will be restored. Please either explain how the surface water flow will be restored or update the reclamation plan narrative to explain that surface water will be directed to the pit.

Rule 6.4.6, Exhibit F – Reclamation Plan Map

14. Based on item #13 above, please revise the post mine topography depicted on the map to depict how the historic surface water flow will be restored.
- a. **FPRM Response:** Item 14 is not applicable, as the flow will be directed towards the base of the pit.
 - b. **DRMS Response:** Depending on how FPRM responds to item #13b discussed above will determine if this adequacy review item remains outstanding or is resolved. Please make any necessary revision to the reclamation plan map depending on the response to item #13b.

Rule 1.6.2(1)(d) and (e)

25. Please provide a copy of the proof of publication of the notice required by Rule 1.6.2(1)(d).
- a. **FPRM Response:** Proof of publication was provided.
 - b. **DRMS Response:** The Division has reviewed the proof of publication and noted that FPRM indicated the end of the public comment period is May 6th, 2019. The public comment period should have ended twenty (20) calendar days after the last date of publication which should have been March 24, 2019. However, since the publication and likely the notice included the later date, the Division will accept comments until May 6th, 2019 which is the decision date for the application. Should an objection be received, the Division is required to set the application for consideration before the Mined Land Reclamation Board in accordance with Rule 1.7.4(2).
26. Please provide documentation the notice required by Rule 1.6.2(1)(d) was mailed or personally served to:
- a. All Owners of Record of the surface and mineral rights of the affect land; and
 - b. The Owners of Record of all surface within 200 feet of the boundary of the affected lands.
 - i. **FPRM Response:** Certified mail return receipt cards were submitted for documentation of notice.
 - ii. **DRMS Response:** FPRM provided return receipts for Jeffery Allen James B Etals, Balen Seifen, Dorothy Dennis, and RC & Joanna Patterson. These parties were not identified on the Exhibit C Maps, do these individuals own land within 200 feet of the affected land? If so, please update the Exhibit C map to depict the property associated with these owners. Please label the map clarifying where these owners property is located.

This concludes the Division's review of the application. As indicated above, the Division is required to issue a decision on the application by May 6th, 2019. If you need additional time to address the items noted above please request an extension of the decision date. Please feel free to contact me if you have any questions at jared.ebert@state.co.us or (303) 866-3567 ext. 8120.

Sincerely,

A handwritten signature in blue ink, reading "Jared Ebert". The signature is fluid and cursive, with the first name "Jared" and last name "Ebert" clearly distinguishable.

Jared Ebert
Environmental Protection Specialist III