



## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

November 13, 2018

Mr. Mark Yevoli  
Yevoli Cobblestone Inc  
8347 S Carr St  
Littleton, CO 80128

**Re: Yevoli Cobblestone Pit, Permit No. M-2007-003; Preliminary Adequacy Review for 110 to 112 Construction Materials Reclamation Permit Conversion Application Package (CN-1)**

Dear Mr. Yevoli:

The Division of Reclamation, Mining and Safety (Division) has completed its preliminary adequacy review of your 110 to 112 Construction Materials Reclamation Permit Conversion Application package for the Yevoli Cobblestone Pit, Permit No. M-2007-003. The application was received on September 18, 2018 and called complete for review on September 19, 2018. **The decision date for this application is December 18, 2018.** 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 Division will 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:

### APPLICATION

The application form is adequate as submitted.

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

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

1. Map information: Pursuant to Rule 6.4.3, the Exhibit C maps are required to portray the following information:
  - a. Names of creeks and roads. Please revise maps C-1 and C-2 to label roads and creeks referenced in other exhibits, including but not limited to Siloam Road, Mineral Creek, and Hardscrabble Creek (referenced in Exhibit H).



- b. Owner's name of significant, valuable and permanent man-made structures within 200 feet of the affected area boundary. This includes fences and County Road 29.
  - c. Type of present vegetation (Rule 6.4.3(e)). The legend suggests the "dimple shaded" area in the vicinity of the creeks might be classified as "freshwater emergent" vegetation, but the scale used for the hatch pattern on the drawing compared to that in the legend makes it difficult to confirm. No other type of vegetation is identified on any of the Exhibit C maps. Existing vegetation information is also required by Rule 6.4.10 (Exhibit J – see Comment 13 below) Please revise maps C-1 and/or C-2 to portray vegetation information.
2. Potential stream capture: Map C-2 shows mining to extend very near and in some cases overlapping the "Intermittent stream/ditch" boundary line on the west side of the east pit (Areas 1 – 6). Furthermore, nearly the entire proposed pit appears to be within the 100-year floodplain. The Division is concerned that a 100-year flood event would erode the highwall next to the stream and as the pit is deeper than the stream invert, the stream would be captured by the pit and have not way to drain to the cutthroat trout habitat downstream. Please describe how stream capture is to be avoided.
3. Area 7: Area 7 shown on Exhibit C-1 does not appear to have any access/haul roads. Access and haul roads are considered affected area. Furthermore, it appears highly probable Area 7 access will require crossing the drainage (Mineral Creek?) for access. If the creek is to be crossed, the Division will require engineering designs based upon appropriate hydrologic and hydraulic analyses for these crossings. Please provide the following:
  - a. Haul/access road routes on Map C-1,
  - b. Engineering designs and analyses to support the crossing design(s).

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

4. Depth of mining vs. groundwater: The second paragraph indicates mining may go as deep as 35 feet below ground. The well (No. 0513192) shown on Exhibits C and F indicates groundwater is as close as 10 feet below the surface. The last paragraph on page D-2 states groundwater is 17 – 24 feet below the surface. Given the mine plan also states if any groundwater exposed, it will be backfilled to two feet above the elevation of the groundwater. This information suggests mining should not extend more than 15 – 22 feet below grade. Please provide some clarification and/or edits to the text in Exhibit D and maps in Exhibits C and F.
5. Topsoil and overburden handling: Section 4 on page D-5 provides maximum heights and side slopes (2H:1V) for topsoil and overburden stockpiles. However, unless these stockpiles are to be one-sided (the flat topography of the site suggests this is unlikely), these stockpiles will need to be twice as wide as stated in the text. For example, the 20-foot high topsoil stockpile will extend 40 feet in both directions from the crest, making it 80 feet wide, not 40 feet as indicated. Please revise the text for the widths of the topsoil and overburden stockpiles.

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

6. Highwall length limit: The first paragraph states no more than 200 feet of highwall will remain unbackfilled at any given time. This approach seems highly impractical. First, when considering the initial cut into a new area, the advancing highwall could be no shorter than 150 feet in order for the left and right highwalls to be backfilled to 3H:1V as the highwall advances (assuming a 25-foot height – leading to 75 feet of backfill on either side). This would limit the length of unbackfilled left and right highwalls to 25 feet each to keep the length of highwall to 200 feet. Furthermore, this configuration would not leave any width between the backfilled left and right highwalls for equipment access.

Secondly, this approach would likely require nearly constant moving of previously replaced backfill material as the highwall advances in the direction of previously backfill left and/or right highwalls. Thus making the approach economically infeasible. Please reconsider this approach and provide a more practical highwall length limit. As this is a critical component of the financial warranty estimate, the Division will require a commitment for the Permittee to limit the highwall length and if found to exceed this limit during a future inspection, a surety increase will be issued.

7. Revegetation plan: Drilled vs broadcast seeding. This first paragraph on p. E-2 indicates seed drills can be used on both the flat and reclaimed slopes, then states broadcast seeding will be used “where reclaimed perimeter slopes do not allow drilling.” The Division doubles the seed rate for broadcast seeding, which impacts the bond estimate. Please explain where the proposed 3H:1V reclaimed slopes will be too steep for seed drill application.
8. Seed mixes: Section 3 on page E-2 indicates different seed mixes will be used on the slopes and pit floor. The provided seed mix on page E-3 appears to be for the slopes only and is completely different than what was approved by the Division for the original permit application and appears light with respect to the estimated seeds per square foot (roughly 50). In order to estimate a bond, the Division also requires a seed mix for the pit floor (irrigated pasture).
  - a. Please explain why the change in seed mix. It is very light on grasses. The Division would expect more grasses for a rangeland post-mine land use. Was the new one provided as a recommendation from the Fremont Conservation District?
  - b. Please provide a seed mix for the irrigated pasture.
9. Post-Reclamation site drainage: Rule 6.4.5(2)(c) requires the Applicant to explain how the reclamation plan meets the applicable requirements of Rule 3.1. Rules 3.1.5(1). Appropriate final grading topography and Rule 3.1.6(1), disturbance to the prevailing hydrologic balance do not appear to be adequately addressed. The proximity of highwalls shown on the referenced Map F-1 which extend below the thalweg of the adjacent ephemeral drainage and which are in the 100-year floodplain is likely to have a significant impact on the hydrologic balance should a flood overtop the highwall crest. Please discuss how stream capture by the pit will be protected.

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

10. Proposed topography: Please see Comment No. 9 above.
11. Proposed final land use: As discussed in Comment No. 8 above, there appears to be two proposed post-mine land uses: rangeland on the slopes, and irrigated pasture on the flats. Rule 6.4.6(b) requires all proposed final land uses be portrayed on the Exhibit F map. Please delineate the rangeland and irrigated pasture on the reclamation map.

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

12. Cutthroat trout habitat: Maps in Exhibits C and F delineate cutthroat trout habitat.
  - a. What agency designated this area as such?
  - b. Were they contacted regarding the proposed mining activity?
  - c. Did they provide any guidance?

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

13. Rule 6.4.10: This exhibit is required to provide: Descriptions of present vegetation types; the relationship of present vegetation types to soil types; rangeland carrying capacity; and the relation of

types of vegetation to existing topography. Most, if not all this information can be obtained with the available soil survey queries used to develop Exhibit I. Please provide this information.

**6.4.12 EXHIBIT L – Reclamation Costs**

14. Reclamation costs: As mention in Comment No. 6 above, the Division's position on the 200-foot limit on active highwall length is impractical. We also require a seed mix for the irrigated pasture. The Division will estimate a bond based on your responses to the adequacy comments herein after they are received.

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

15. Other permits: There is no mention of a stormwater permit in Exhibit M. Please explain why a stormwater permit is not required or add it to the list of required permits.

**6.4.14 EXHIBIT S – Permanent Man-made Structures**

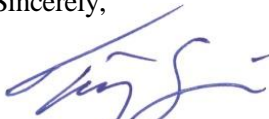
16. Structure Agreements: The county road (CR 29) on the east side of the site is considered a valuable man-made structure. The affected area highwall is portrayed as being within 200 feet of the right-of-way. As such, pursuant to Rule 6.4.19, the Applicant is required attempt to obtain a structure damage compensation agreement from Fremont County. Also, if the fences shown on Exhibit C-1 are not owned by the Applicant, you must demonstrate an attempt to obtain a structure damage compensation agreement(s) from the fence owner(s). If agreements cannot be obtained, appropriate engineering evaluations are required to demonstrate these structures shall not be damaged by the proposed mining activities.

**6.5 GEOTECHNICAL STABILITY EXHIBIT**

17. Geotechnical Stability Exhibit: Given the proposed near vertical highwalls proposed within 50 feet of CR 29 and in some areas right up to the ephemeral drainage on the west side (Mineral Creek?), the Division requires engineering stability analyses (for both saturated and rapid drawdown conditions – given the highwalls are in the floodplain) for CR 29 and the ephemeral drainage which reflect the mining limits shown on Exhibit C-2 with near vertical highwalls as proposed in Exhibit D.

**Please remember that the decision date for this application is December 18, 2018.** 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 will be denied. If you have any questions, please contact me at (303) 866-3567, ext. 8169.

Sincerely,



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

ec: DRMS file  
Ben Langenfeld, Greg Lewicki And Associates