



COLORADO

Division of Reclamation,
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

April 3, 2017

Randy Schaefer
40586 Co. Road 21
Haxtun, CO 80731

RE: PVRE Pit #1, M-2017-009, New 110 Construction Materials Reclamation Permit Application, Adequacy Review No. 1

Dear Mr. Schaefer:

The Colorado Division of Reclamation, Mining, and Safety (Division) received the PVRE Pit #1 application on March 14, 2017 and deemed the application complete for review on March 28, 2017. The Division is required to issue its decision for the application on April 26, 2017. The Division has identified several adequacy review issues that will need to be addressed prior to the Division's approval of the application. These items are listed below. If you need additional time to address these issues, you must request an extension of the decision date in writing prior to April 26, 2017.

Rule 6.3.1. Exhibit A – Legal Description and Location Map

- 1) Please revise Exhibit A to also include the location of the main entrance to the mine site reported as latitude and longitude, or the Universal Transverse Mercator (UTM) Grid coordinates as determined from a USGS topographic map per Rule 6.3.1(1). Please specify coordinates of latitude and longitude in degrees, minutes and seconds or in decimal degrees to an accuracy of at least five decimal places (e.g., latitude 37.12345 N, longitude 104.45678 W). For UTM coordinates please specify the North American Datum (NAD) 1927, NAD 1983, or WGS 84, and the applicable zone, measured in meters.
- 2) Please revise Exhibit A to indicate the map required by this Exhibit has been made part of the series of maps submitted for Exhibit E.
- 3) Please verify who the surface owner of record is for the property to the south of the permit boundary. The Exhibit E maps do not show the name of the party.

Rule 6.3.2, Exhibit B – Site Description

- 4) The soils map submitted is difficult to read and the Division could not verify if the soil series discussed in Exhibit B exists at the site. Based on the location of the site and the information provided by the Web Soil Survey (<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>), it appears the soils within the proposed permit area are made up of two complexes, the Alda



Loam (unit 3) and the Westplain-Alda complex (Unit 128). Based on the series description for these soil units, the A horizon material could be up to 14 to 17 inches in depth. Please revise the soils information provided in Exhibit B to accurately characterize the soil within the proposed permit area.

Rule 6.3.3. Exhibit C – Mining Plan

- 5) The mine plan indicates the life of the pit is indefinite. Given this, will this operation be an intermittent operation as defined by C.R.S. 34-32.5-103(11)(b), meaning that the affected lands are to be used for less than 180 days per year? If so, please revised Exhibit C, subpart A to indicate this.
- 6) The applicant proposes to salvage 5 inches of topsoil. Given the information found regarding the soils at the site, it appears up to 14 to 17 inches of topsoil is available to salvage at the site. Please revise the topsoil salvaging plan based on the revised soils information discussed above for Exhibit B.
- 7) Subsection d) of Exhibit C indicates that the pit will likely fill with ground water and that all slopes will be no greater than 2H:1V. Per Rule 3.1.5(7), if an excavation will fill with water creating a pond, all slopes must be no steeper than 3H:1V from five feet above to 10 feet below the expected water line. Please revise subpart d) of this exhibit to commit to grading the pit slopes to a 3H:1V at a minimum five feet above and ten feet below the expected water line.
- 8) As mining progresses, will the operator excavate the material and create a vertical highwall or will the operator mine at a particular slope angle? If you commit to mining at the final proposed pit slopes angle, this will limit the amount of financial warranty that must be held to backfill and grade the site. If not, please specify the angle at which the material will be excavated and the maximum length of an un-reclaimed slope to be created.
- 9) If a highwall or a lessor slope than the proposed final regarded slopes will be excavated, the Division recommends maintaining a setback from the permit boundary to leave enough room to grade the final pit slopes. If the operator chooses to mine at a lessor slope than the final regraded slope angle, please specify the setback that will be required to grade the pit slopes or specify how the operator will backfill the pit slopes to the proposed regrade angle.
- 10) Has “Jack’s Lane” been constructed? If so, please provide a description of this road and a picture of this road and indicate if the road will be improved to support the mining operation. Based on the definition of “Affected Land” in Rule 1.1(3), roads must be included as affected land unless the road existed prior to the date on which a permit application was made to the Office and which was constructed for purposes unrelated to the proposed mining operation and which will not be substantially upgraded to support the mining operation. Also, per Rule 6.3.3(g), new or improved roads must be included as part of the permitted acreage. If the road does not exist, it must be

included in permit acreage, and given that the proposed permit area is already 9.9 acres including this road would require the applicant to withdraw this 110 Limited Impact Operation application and submit a 112 application or reduce the proposed permit area below the 10 acre Limited Impact Operation threshold.

Exhibit 6.3.4, Exhibit D – Reclamation Plan

- 11) Per Rule 6.3.4(1)(a), please specify at what point in the mining plan the overburden and topsoil will be replaced in relation to ongoing extraction.
- 12) Similar to item No. 6 above, please revise the topsoil replacement depth based on the revised soils information discussed in item No. 4 above.
- 13) Please revise the reclamation plan to indicate that the pit slopes will be graded to a 3:1 horizontal to vertical ratio at least five feet above to ten feet below the water line if water will fill the pit excavation and that all other slopes will be no greater than a 2:1 slope per Rule 3.1.5(7) and Rule 6.3.4(1)(d).
- 14) Please indicate at what point in the mining plan when the site will be seeded per Rule 6.3.4(1)(c)(ii).
- 15) The Division has reviewed the reclamation cost estimate submitted. The backfilling and grading cost and topsoil replacement cost will depend on how you address the adequacy review items above. Also, please address the following issues:
 - a. The backfilling and grading cost is based on grading .42 feet of material over the perimeter of the excavation and 1 foot of material over a 2.4 acre area. These assumptions may be appropriate if the pit slopes are mined at the angle of the final reclamation slopes for finish grading activities. However if the operator will create a highwall or slopes during the excavation period that are at a lesser angle than the proposed reclaimed slopes, the volume necessary for backfilling will likely be greater than those estimated. The volume of material to be backfilled will be based on the angle of the slope the pit will be excavated at. Please confirm at what angle the pit will be mined and re-evaluate the volume to be backfilled if necessary.
 - b. The reclamation plan and mining plan narrative indicate that it is not clear if groundwater will be exposed and fill the pit area. Based on the Division's knowledge of the area and of a nearby mine site, it is very likely the operator will encounter ground water at shallow depths likely near the 7 foot depth. The cost estimate submitted is based on the assumption that a ground water pond will be created. In order to address the financial liability associated with the exposure of groundwater, the operator must first obtain a permanent augmentation plan from the Office of the State Engineer (SEO) prior to exposing ground water or the permittee may post a bond to either:
 - i. Option A: backfill the pit to at least two feet above the static ground water level.

- ii. Option B: install an impervious clay liner or slurry wall to isolate the pit from the ground water table.

Either supply evidence a permanent plan for augmentation has been obtained for the exposure of groundwater or provide an estimated cost for either bonding for option A or B discussed above. Or, you may commit to not exposing groundwater until a permanent plan for augmentation has been obtained for the entire projected area of exposed groundwater. If the latter option is chosen please revise the mining plan with this commitment.

- c. The reclamation plan indicates the entire pit area will have overburden and topsoil replaced. The cost estimate only estimates that cost to replace topsoil over 2.4 acres. Please revise the estimate for topsoil replacement to cover the entire 9.9 acre affected area with topsoil.
- d. Please estimate the volume of overburden that will need to be replaced over the affected area and provide a cost for this activity.
- e. Please revise the estimate for revegetation for the entire 9.9 acre affected area.

Rule 6.3.5, Exhibit E-Map

- 16) Each map submitted with this exhibit; with the exception of the Mining Plan Map, Reclamation Plan Map and the Final Contour Map, have two scales depicted on the maps. There are several discrepancies between the two scales shown on each map. Please revise these maps to only show one scale and please insure the scale is correct and adequate.
- 17) Please revise the Mining Plan and Reclamation Plan map to clarify the post mine slopes to comply with Rule 3.1.5(7) and Rule 6.3.4(1)(d).
- 18) Please revise the reclamation plan to state the average thickness of topsoil and overburden to be replaced throughout the affected area.

Rule 6.3.8, Exhibit H – Municipalities Within a Two-mile Radius

- 19) Please revise Exhibit H to list the mailing address and telephone number of the governing body for the City of Sterling.

Rule 1.6.2 – Public Notice Procedures

- 20) Please submit proof the required publication was made in accordance with Rule 1.6.2(1)(d). Also, if necessary please provide evidence the notice required by Rule 1.6.2(1)(d) was mailed or

personally served to all Owners of Record of the surface and mineral rights of the affected land and to the Owners of Record of all land surface within 200 feet of the boundary of the affected land.

This concludes the Division's review of the PVRE Pit #1 application. Additional adequacy review issues may arise after the end of the public comment period. As indicated above, the Division is required to issue its decision for the application on April 26, 2017. The Division has identified several adequacy review issues that will need to be addressed prior to the Division's approval of the application. If you need additional time to address these issues, you must request an extension of the decision date in writing prior to the April 26, 2017 decision date. If the decision date arrives and there are outstanding adequacy review issues and an extension has not been granted the Division may deny the application.

Please do not hesitate to contact me with questions, my phone number is (303) 866-3567 ext. 8120, my e-mail address is jared.ebert@state.co.us.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jared Ebert", with a stylized flourish at the end.

Jared Ebert
Environmental Protection Specialist III

CC: Dan E. Long, Platte Valley Real Estate, LLC.