

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
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John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta Piñeda
Director

February 15, 2013

Mr. Jason Burkey
United Companies of Mesa County
P.O. Box 3609
Grand Junction, CO 81505

Re: Otter Creek Pit, Permit No. M-2012-050, 112c Construction Materials Reclamation Permit Application Package, Preliminary Adequacy Review.

Dear Mr. Burkey:

The Division of Reclamation, Mining and Safety has begun the review process for the above referenced construction materials reclamation permit application. The application appears to be a straight forward but the initial review of the application has revealed a few clarifications and issues that need to be addressed.

- 1) The application form states that the post mine land use is wildlife habitat. Throughout the application it states that the proposed post mine land use is wildlife habitat, recreation and rangeland with the possibility of residential properties being built. Please commit to proposing only one post mine land use and clarify what it is.
- 2) Addressing Rule 6.4.4(f)(ii), please state the nature of the stratum immediately beneath the material to be mined.
- 3) Addressing Rule 3.1.9(3), on page D-2 under pit 1 it states that the topsoil will be sloped at 2H:1V on the inside of the visual berm. According to the Rule topsoil stockpiles shall be stored in places and configurations to minimize erosion. Typically the Division requires topsoil stockpiles to be no steeper than 3H:1V. Please commit to stockpile the topsoil no steeper than 3H:1V.
- 4) On Page D-10 Section 4 that discusses topsoil and overburden handling it is stated that "Topsoil from Pit 2 will be used to finish the D ½ Road berm and to extend the berm to the western edge of the pit along 33 ½ Road. Please clarify or correct this statement.
- 5) On Page D-11 the 2nd paragraph refers to Table D-6 for a description of a balance of the topsoil and overburden stripped and stockpiled. No table labeled D-6 was found in the mine plan section. Please provide table D-6 or clarify what table the applicant is referring to.
- 6) On Page E-7 Section 8 which discusses revegetation success criteria, it states that "It is

suggested that the dry land vegetation be approximately 10% perennial cover, which is similar to natural undisturbed vegetation of the area. Where was this basis for the percentage of vegetative cover from? According to the NRCS a 50% failure rate is expected for the Grand Junction area.

- 7) Addressing the final configuration of the lakes presented on Map F the proposed strip of land between the north and south lake is only 30 feet wide according to the reclamation map. The Division believes that wave caused erosion may have a significant impact especially toward the northeastern shore of the southern lake due to the prevailing wind pattern. The Division recommends either incorporating shore armoring into the final configuration and/or increasing the width of the strip of land to assure the proposed final configuration will hold up for many years of wave induced erosion.

This is a preliminary review. Other issues may arise from other agency comments, and as more information is supplied. This application cannot be approved until all issues brought forth by Division staff are adequately addressed. Please submit a response to the following issues as soon as possible, but no later than March 4, 2013 so the decision due date set March 18, 2013 can be met. If your response or a written extension request are not received by March 4, 2013 this application may be denied.

If you need additional information, please contact me at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, 101 S. 3rd St., Suite 301, Grand Junction, Colorado 81501, telephone no. (970) 241-2042.

Sincerely,



Travis Marshall
Environmental Protection Specialist

Enclosure(s): Geotechnical Stability Comments from Dustin Czapl

ec: Russ Means, DRMS

cc: Greg Lewicki
Greg Lewicki and Associates
11541 Warrington Court
Parker, CO 80138

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MEMORANDUM

To: Travis Marshall
From: Dustin Czapla
Date: January 8, 2013

RE: *Otter Creek Pit, File No. M-2012-050, Geotechnical Stability Comments*

I have reviewed the Geotechnical Stability Exhibit submitted with the above noted application and determined that the applicant has adequately shown that the operation, if conducted as proposed, should not adversely affect structures located off-site. However, the applicant has shown that some failure of the vertical slope along the north and west sides of the pit is likely. The applicant has proposed to place a visual berm, constructed of topsoil material, along the rim of the pit above the vertical slope. Pursuant to Rule 3.1.9, salvaged topsoil shall be stored in places and configurations that minimize erosion, and shall be located in areas where disturbance by the ongoing mining operation will be minimized.

The applicant has estimated that the angle of repose for the mined material is 38 degrees. The cross-section below shows that a failure along the angle of repose could affect the slope across a horizontal distance of 57.6 feet. Therefore, in order to adequately protect the topsoil stockpile, it will be necessary to maintain a buffer of approximately 60 feet (horizontal) between the toe of the highwall and the toe of the topsoil stockpile. I recommend that the north and west sides of the pit be mined at a slope of 1H:1V, and that a 15 feet buffer be maintained between the rim of the pit and the toe of the topsoil stockpile, as shown below.

