



August 1, 2022

Submitted Via Email

Mr. Timothy Cazier, P.E.  
Division of Reclamation Mining and Safety  
1313 Sherman St., Rm. 215  
Denver, CO 80203

**RE: GCC Rio Grande, Inc., Salt Canyon Project, Reclamation Permit No. M-1997-064, Technical Revision 03; Response to DRMS Preliminary Adequacy Review**

Dear Mr. Cazier:

GCC Rio Grande, Inc., Salt Canyon Project (GCC) received the Division of Reclamation, Mining and Safety's (DRMS) preliminary adequacy review comments dated June 22, 2022, for Technical Revision 03 (TR-03) to Reclamation Permit M-1997-064. The purpose of TR-03 is to update the mining plan including current and future mining phases, increase the maximum allowed disturbance area and update blasting related procedures. This submittal responds to the comments and questions included in the preliminary adequacy review. For convenience, the below response follows the numbering established in the adequacy review letter and includes the original DRMS comments in italicized text. The decision date for TR-03 was administratively extended to August 12, 2022 with a GCC submittal target date of August 5, 2022 to provide the DRMS with adequate time to review.

GCC Responses to the DRMS Preliminary Adequacy Review

1) Rule Reference

*DRMS Comment: The last sentence of the first paragraph of your cover letter references "Section 1.9 of the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations". The primary commodity mined at the Salt Canyon Project is gypsum, a construction material. As such, this permit is regulated under the "Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials". Rule 1.9 is the same in both sets of the regulations, but that is not the case for all Rules. No response is necessary.*

GCC Response: Thank you for the clarification.

2) General Mining Information

*DRMS Comment: The cover letter states the maximum allowed disturbed area at one time will be increased to 40 acres. The third paragraph on p.1 of Exhibit D states "Processing and Storage Area will be limited to approximately ten (10) acres or less." Please clarify whether the 10-acre processing and storage area is included in the 40-acre maximum allowed disturbance.*

GCC Response: The ten (10) acre limit for the Processing and Storage Area is included in the 40-acre maximum allowed disturbance. The Mining Plan, Exhibit D to the Salt Canyon Project Permit M-1997-064 application (the "Mining Plan"), has been updated to better clarify this inclusion and is included as an attachment to this submittal.

3) Active Mine Highwall

*DRMS Comment: The first paragraph on p. 2 of Exhibit D indicates a 225 foot wide limit to the active face will be maintained, and discusses dozers pushing blasted material down to the pit floor "if needed". The sloping of highwalls to 3H:1V is an important consideration in estimating the reclamation bond, in both the length of the highwall and the initial mining/excavated slope. Please provide clarification on the typical highwall configuration:*

*a. 225 feet would seem to be a short highwall length. A quick look at the October 6, 2019 Google Earth image indicates the active highwall was approximately 650 feet long. Please clarify if the mine plan has changed since 2019 to maintain a shorter highwall width, or if the indicated 225-foot width needs to be increased.*

*b. Is the highwall planned to be near vertical, or blasted at 3H:1V?*

GCC Response: The 225-foot highwall limit was a remnant from earlier Mining Plans that was overlooked during the recent update and is indeed inadequate for both current and future mining plans. GCC estimates a highwall face length limit of 2,500 feet will be adequate for future mining. The highwall face is planned to be nearly vertical. As mining progresses in a southeasterly direction, the lagging northwesterly highwall will be reclaimed utilizing the rotational removal and placement of the surface material and overburden, as discussed in the Mining Plan. The Mining Plan has been updated to reflect this increased highwall length and is included as an attachment to this submittal.

4) Highway 115 Visual Buffer

*DRMS Comment: The third paragraph on p. 2 of Exhibit D discusses the "most southeasterly portion of the southern deposit will not be mined to maintain visual buffering for Highway 115 patrons. When mining approaches this area, a 3:1 slope will be maintained...". It is unclear from this narrative whether the reclamation plan for this area has changed from what is shown on the Exhibit F map (dated 9/3/2009) and approved with the 2009 conversion application; or if this is the proposed Phase 7, 8 or elsewhere. Please clarify where this area exists and where the visual buffering is planned on Exhibit C maps C-2 and C-3. Also, if this grading differs from the approved Exhibit F map, please submit a revised Exhibit F.*

GCC Response: GCC's approach for maintaining a visual buffer for Highway 115 patrons is to utilize the natural ridges and topography on the southeasterly side of the permitted boundary extending east towards Highway 115. Within the permitted boundary, a 3:1 slope is anticipated adjacent to these ridges along with additional contouring and/or berming to blend in with the natural ridges and topography to yield an effective visual buffer. GCC anticipates completing this work as part of both concurrent and final reclamation to ensure the buffer is maintained throughout the life of the project. However, the final design and contouring details have not been finalized. GCC plans to work with a third-party reclamation firm to finalize these design details and requests six (6) months to complete and submit this work in a separate Technical Revision to the DRMS for approval, including an updated Reclamation Plan Map (Exhibit F) and Exhibit C maps C-2 and C-3,

as needed. In the interim, GCC commits to ensuring that no mining or additional disturbance within the Phase 8 boundary will occur until DRMS has reviewed and approved an updated contouring plan for this area. Please note that, in accordance with the Mining Plan, disturbance within the Phase 8 boundary is not estimated to begin until approximately 2028.

5) Surface Water Management Reclamation

*DRMS Comment: The last paragraph of Exhibit D discusses the "installation of temporary diversion ditches, berms, and settling basins". Please address the disposition of these features during final reclamation, when they will be removed and provide estimated or typical dimensions of each feature to be included in the reclamation cost estimate.*

GCC Response: The primary stormwater feature at the Salt Canyon project is a diversion berm running along the southern portion of the quarry directing sheet flow from the west end and south-central portion of the property to Outfalls 001 and 002, respectively. See attached to this submittal the Salt Canyon Mine Stormwater Management Plan, Appendix A – Figure 2 Site Specific SWMP Map. The dimension of the existing mounded berm is approximately 3-feet wide by 2-feet tall by 3,000-feet long. Future expansion of the berm in an easterly direction is estimated to be less than 2,000-feet. The berm will be removed, and is anticipated to be used, as fill material in the quarry during final closure. Other stormwater features that may be needed are expected to be contained within the quarry pit, the disposition of which will be addressed as part of the concurrent reclamation plan utilizing rotational removal and placement of the surface material and overburden. Except for the southern stormwater berm, there are no additional reclamation costs expected related to planned stormwater management features outside of the quarry pit. The Mining Plan has been updated to better clarify expected stormwater management including the southern stormwater berm and is included as an attachment to this submittal.

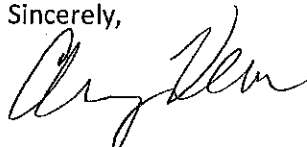
6) Blasting Plan:

*DRMS Comment: There are two elements of the blasting plan that could not be located: (a.) Limits on airblast (dB or psi), and (b.) Locations of blast monitoring. Please provide this information.*

GCC Response: Please see attached an updated Blasting Plan addressing these two (2) items.

If you have any questions regarding this submittal or need any additional information, please contact me at (719) 647-6861.

Sincerely,



Amy Veek  
Environmental Engineer  
GCC Rio Grande, Inc., Pueblo Plant

Mr. Timothy Cazier, P.E.  
August 1, 2022  
TR-03 – Response to Preliminary Adequacy Review

Enclosures:

1. Exhibit D - Mining Plan
2. Salt Canyon Mine Stormwater Management Plan, Appendix A – Figure 2 Site Specific SWMP Map
3. Blasting Plan

cc (via email)

A. Veek, GCC  
D. Frederico, GCC  
J. Rojo, GCC  
T. Cardwell, Aquionix, Inc.