



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

August 9, 2024

Tim Strack  
American Gypsum Company LLC  
740 HWY 6  
Gypsum, CO 81637

**RE: Eagle-Gypsum Mine, File No. M-1984-041 , Technical Revision (TR-12) Adequacy Review #3**

Dear Mr. Strack:

On June 24, 2024, the Division of Reclamation, Mining and Safety (Division) filed your Technical Revision request TR-12 for the Eagle-Gypsum Mine, Permit No. **M-1984-041**. The Division has reviewed the response to Adequacy Review #2. Follow up questions/clarifications are listed in red below the original questions from AR-2. New items are towards the end. All items need to be sufficiently addressed:

1. A spreadsheet "Tabulated Mine Quantities.xlsx." was included with the TR-12 materials. Three material types were broken out; storage (final placement), Waste (cut material to be relocated into storage) and gypsum (taken off site). The Division is interpreting that for bonding purposes Storage and Waste will be utilized as backfill material. However, no volumes for growth medium (topsoil) were provided.
  - a. Please revise the spreadsheet to include topsoil volumes by location.

*(RESPONSE) Table updated to include existing stockpile quantities.*

With regards to the worst-case scenario (5 yr period) all affected lands need to be reclaimed. Growth medium is listed under the "Lower Pit Extent" however it is only 16,000 CY. An additional 16,000 CY is referenced under "Lower Pit and Upper Pit Reclaimed". The Reclamation Plan (section 7.6) mentions that the current volume stockpiled is 244,000 CY and that is insufficient.

- i. Explicitly state the number of CY of growth medium that is stockpiled on site,
  - ii. its storage locations
  - iii. and the volume to be used at each designated area.
5. For the backfill and topsoil (or "growth medium") material specify the volume, storage location, the average haul distance and haul grade for transporting the material, by area and material type.



(RESPONSE)

	Lower Pit		Upper Pit	
	Backfill	Topsoil	Backfill	Topsoil
Volume (CY)	3,584,000	46,200	2,295,000	47,400
Storage Location	Southern Extent of Upper Pit	Growth Medium Stockpile at Upper Pit	Northeast Extent of Lower Pit	Growth Medium Stockpile at Upper Pit
Average Haul Distance	6,550'	5,700'	7,750'	2,900'
Average Haul Grade	5-10*	5-10*	5-10*	5-10*

- a. What do the \* annotate under Avg Haul Grade?
- b. While helpful, volumes provided in this table do not correlate to figures provided on Attachment 3 – Tabulated Mine Plan Quantities. Significantly larger grading quantities are references on Attachment 3.
  - i. In addition to the long-term forecasting please provide a table which shows only the current reclamation liabilities and those anticipated to be affected over the next 5 years.

6. Section 3.6 of the Reclamation Plan acknowledges that the site is topsoil deficient and that overburden will be blended to ‘stretch’ the volume. Has any soil testing of this blended material occurred to date? If so, what were the results?

*(RESPONSE) Documentation is added that covers to-date efforts on site of soil testing of the blended material. The applicable section 3.6 is section 7.6 within the revised Plan of Operations document.*

Revised language of Section 7.6 conflicts with the information provided in the previous paragraph. The Operator originally committed to applying 6-12 inches of topsoil. Then in the revised paragraph states that the goal is 2 inches however even that scant amount may be blended. If insufficient growth medium is available on site the operator may be required to import topsoil or additional organic material to create a proper seed bed.

8. Volumetrics were not provided for all currently disturbed areas. Please clearly provide information for the all-road segments, shop and office facilities, sediment control and access roads, stockpiles, and loadout areas in addition to the open pits.

*(RESPONSE)*

Areas in addition to Lower/Upper/East Pit	Area	Reclamation Topsoil Volume
All-Road Segments	74.85 Acres	60,400 CY
Shop and Office Facilities	Included within Lower Pit disturbed area quantities	
Loadout Areas	Included within All-Road Segments	

Several roads have significant cut/fill associated with their removal. Please provide the grading volumes associated with each of the major road segments as well as sediment ponds and their access roads.

11. Will any mulch be applied to reclaimed areas?

*(RESPONSE) The soil blending response to Request #6 includes details of potentially incorporating mulch into the soil blending for reclaimed areas.*

Section 7.6 does not explicitly state if mulch will or will not be applied during reclamation as required per Rule 6.4.5(1)(c).

16. Please provide the construction details of the mine access gate which shall be removed upon final reclamation.

*(RESPONSE) Mine access gate information provided in section 7.9*

A photo was provided (Figure 7.5 and 7.6) however no information regarding building materials and dimensions was provided. This information should be added to Table 7.3 as it is a feature that will need to be removed upon final reclamation. is needed to accurately calculate the demolition and disposal costs of the feature.

### **NEW A-3**

General: A regurgitation of the 2019 Plan of Operations Modification regarding the East expansion was submitted. If permitting in 5 yr block, information should be focused on the current disturbances which are primarily within the Lower and Upper Pit. Several areas which are now permitted are refer to as proposed. Similarly, the AR-2 response is the BLM Plan of Operations Modification, not an updated version of DRMS Mining and Reclamation Plans approved under AM-4. Details provided to the various agencies must remain consistent.

17. For the purposes of reclamation cost estimating the Division has broken the site up into several areas so that features may be added or removed as the site progresses through time. Please ensure that figures correlate to the follow areas. Additional sub areas may be added if deemed necessary by the Operator.

- a. Stockpile Staging Area
- b. Lower Pit
- c. Upper Pit
- d. Main Haul Road (Gate to Fork)
- e. Lower Pit Road (Fork to Lower Pit)
- f. Sediment Pond M201 and Road
- g. Sediment Pond M601 and Road

- h. Upper Pit Road (Fork to Upper Pit Current Road)
- i. Upper Pit Road 6900 (Modified Upper Pit Road)
- j. East Pit Road (Access from Upper Pit to East Pit)
- k. East Pit

18. Table 6.2 does not account for continued mining in the Lower Pit , nor reclamation of such. Please revise this table to include all required information under Rule 6.4.4(e).

19. The worst-case scenario presented is not consistent throughout the provided materials.

- a. Based on Attachment 3 – Tabulated Mine Plan Quantities 2024 appears to be the highest liability over the next 5 years. While revised text of section 6.2 states 2028 is the worst-case scenario.
- b. Additionally, the Tabulated Quantities do not match the areas identified as being disturbed in 2028, it only shows the Upper Pit. Based on the narrative in section 6.2 all three pits will be opened up.
- c. Worst-case scenario backfill volumes in the AR-2 cover letter do not correlate to the Tabulated Quantities.

20. Based on Table 6.1 the East Pit is expected to be affected within the next 5 years. Please provide backfill/grading information for the East Pit. Specifically revise the table provided in response to #5 and incorporate this information into the reclamation plan.

21. Pursuant to Rule 6.4.12 provide a reclamation cost estimate. The Division is amenable to a 5-year liability period for the worst-case scenario. Provide information on the following tasks:

- a. Break reclamation tasks up based on area as referenced in #17.
- b. Provide all grading volumes, material type, push distances, Push slopes, hauling volumes, hauling slopes. For backfill grading and growth medium material.
- c. Identify areas which require decompaction, state acreages and ripping depths anticipated
- d. Areas to be revegetated (acres)
- e. Demolition and off-site disposal of man-made features
- f. Include post reclamation site maintenance (slope monitoring, reclamation monitoring and stormwater monitoring)
- g. Abandonment of 20 exploratory drill holes
- h. Ad Hock Remediation Solutions “Rock Vortex Weirs”
- i. Purchase and delivery of Riprap
- j. Mobilization

22. Section 6.2 states " The expected maximum disturbance area of mining operations in the next 5 years is approximately 7,100,00 ft<sup>2</sup>, or 163 acres." According to the most recent annual report 198 ac is affected with approx. 4 acres seeded to date. Clarify by mining area the total affected lands (current and 5 yr. anticipated).

Please submit your response(s) to the above listed issue(s) by Monday, August 12, 2024 in order to allow the Division sufficient time for technical review. If you cannot address the above issues by August 12, 2024, please request an extension to the decision due date to ensure adequate time for the Division to review materials. The current decision due date is **August 15, 2024**. If any adequacy issues remain by the decision due date the Division may deny your request.

The Division will continue to review your Technical Revision and will contact you if additional information is needed.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, Room 215, 1001 E 62<sup>nd</sup> Ave Denver, CO 80216. Direct contact can be made by phone at 970-210-1272 or via email at amy.yeldell@state.co.us

Sincerely,



**Amy Yeldell**  
Environmental Protection Specialist

Ec:

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