



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

December 18, 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 #5

Dear Mr. Strack:

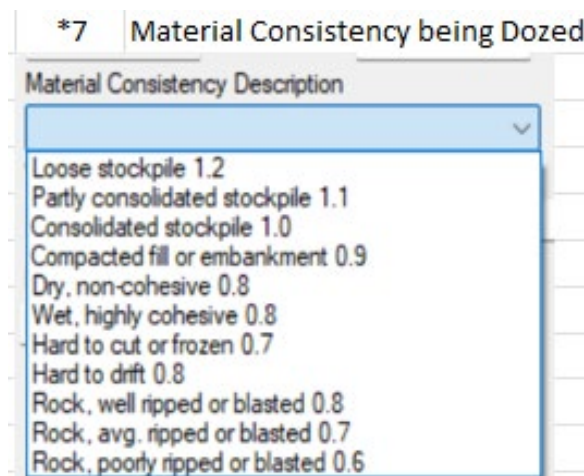
On June 24, 2024, the Division of Reclamation, Mining and Safety (Division) filed your Technical Revision request TR-12 for the Eagle-Gypsum Mine, Permit No. **M-1984-041**. The Division has reviewed the response to Adequacy Review #4. Generally speaking the Division is in agreement with the figures presented and only minor modifications to Exhibit L need to be made. The following items need to be addressed:

Exhibit L - Reclamation Costs

1. The price provided for topsoil was \$70 CY. This price did not include delivery, and it was later clarified that delivery was an additional \$50 CY. Please revise all costs to include both purchase and delivery of topsoil for a total cost of \$120 CY. Update the Exhibit accordingly.
2. Given the scope and nature of this project full time road maintenance is required. Please incorporate a grader and water truck for a minimum of the first year.

Bonding Spreadsheet

3. Incorrect correction factors were provided. Narrative descriptions do not match the factor utilized. See the pictures below.



*8 Spoil Pile-how its being dozed		
Spoil Pile		source
Operator Skill		
Dozing Method		
Visibility		
Blade Type		
		Dozing over a cliff 1.0 Stockpile slot dozing - favorable conditions 0.9 Stockpile slot dozing - adverse conditions 0.8 Finish dressing - rough finish 0.8 Finish dressing - medium finish 0.7 Finish dressing - smooth finish 0.6
*9 Doze Method		
Dozing Method		
Visibility		
Blade Type		
Job Efficiency	0.830	(1 shift/day)
		General dozing - shallow fills, uphill push 1.0 Slot dozing 100% - deep fills, downhill push 1.2 Slot dozing 50% - intermediate fills 1.1 Side by side - 2 dozers, downhill push 1.2

Attached is a table summarizing inputs used in the Division's calculations. It specifically highlights differences between the Operators calculation and the Divisions. Note that inappropriate correction factors were used. Please address the three adequacy items above and provide a revised Exhibit L and Financial Warranty Estimate Spreadsheet. In the meantime, the Division will coordinate concurrence with the BLM.

Please submit your response(s) to the above listed issue(s) by December 19, 2024, in order to allow the Division sufficient time for technical review. If you cannot address the above issues by December 20, 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 **December 20, 2024**. If any adequacy issues remain by the decision due date the Division may deny your request.

If you require additional information, or have questions or concerns, please feel free to contact me.

Sincerely,



Amy Yeldell
Environmental Protection Specialist

Ec:
Travis Marshall, Senior EPS, DRMS
Amy Eschberger, Senior EPS, DRMS
Leigh Simmons, DRMS
Brittany Cocina, BLM



General Assumptions:

- Table below summarizes input values used for calculations. Values in red differ from the provided spreadsheet values of AR4 of TR-12
 - Incorrect correction factors were provided – I.e. narrative description does not match factors
 - Fleet sizes adjusted to optimize productivity
- All affected areas will be revegetated via hydroseeding
- No buildings or mining related features are to remain.
- Imported topsoil is \$70 CY, delivery 22 miles is \$50 CY.
 - AR-4 Spreadsheet only accounted for purchase. Missing \$50 CY x 45,593 CY = \$2,279,650
- Worst-case scenario is for the most expeditiously closure methods and may vary from how intended reclamation is proposed in the Reclamation Plan
 - The majority of highwalls will be cut/fill and may result in a slight increase in affected acreage rather than disturbing additional areas to generate the necessary overburden for transport to backfill pits to achieve grade
 - A minimum of 6" of topsoil will be applied. A blending of overburden and topsoil to create a seedbed is approved making the minimum required for topsoil 3". Until the East Pit is stripped an insufficient quantity is available on site and thus it will be imported
 - Culverts will be cemented on both ends and buried in place rather than removal
 - Slopes will be graded to a 3H: 1V or less. In areas that already meet this slope they will be left in place and revegetated. The Reclamation Plan would have slopes naturally blend in addition to establishing the required grade.

Task	Form Used	Description
A1000	Truck	Removed task, grade existing material in place, no trucking
A1001	Dozer	Regrade staging area pad to 3H: 1V or less Pad is compacted fill or embankment 0.9
A1002	Ripper	Decompact Pad 4.93 ac
A1003	Truck	Haul 3" topsoil for 4.93 ac = 1,998 CY from stockpiles on site Proposed haul is 625LF, closest stockpile is 3,000 LF @-6%
A1004	Dozer	Grade transported topsoil and mix 50/50



		Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A1005	Compact	Removed task, compaction completed with spreading topsoil
B1000	Reveg	Updated application and seeding rates
A2000	Truck	Removed task, grade existing material in place, no trucking Unsure why 21,299 CY and \$20,170 to move dirt?
A2001	Dozer	Regrade lower pit to 3H: 1V or less Highwalls are compacted fill or embankment 0.9 , slopes are 0% cut/fill
A2002	Ripper	Decompact Pad 52.81 ac
A2003	User Provided	Remove Trucking Task and replaced with user provided Purchase topsoil \$70 CY and Deliver to site \$50 CY for 21,299 CY = \$2,555,880
A2004	Dozer	Grade transported topsoil and mix 50/50 Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A2005	Compact	Removed task, compaction completed with spreading topsoil
B2000	Reveg	Updated application and seeding rates
C2000	Demo	Demo Tasks Parts Storage foundation is 6" not 6', corrected volume Total Job Hours 67.8
A3000	Truck	Removed task, grade existing material in place, no trucking Unsure why 11,513 CY and \$10,903 to move dirt?
A3001	Dozer	Regrade lower pit to 3H: 1V or less Highwalls are compacted fill or embankment 0.9 , slopes are 0% cut/fill
A3002	Ripper	Decompact Pad 28.5 ac
A3003	User Provided	Remove Trucking Task and replaced with user provided Purchase topsoil \$70 CY and Deliver to site \$50 CY for 11,513 CY = \$1,381,560

A3004	Dozer	Grade transported topsoil and mix 50/50 Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A3005	Compact	Removed task, compaction completed with spreading topsoil
B3000	Reveg	Updated application and seeding rates
C4000	Demo	Demo Tasks
C4001	User Provided	Used Operators cost under separate task for Culvert Cementing
A4000	Truck	Removed task, grade existing material in place, no trucking Unsure why 7,248 CY and \$6,864 to move dirt?
A4001	Dozer	Removed task, no grading required
A4002	Ripper	Decompact Pad 17.97 ac
A4003	Truck	Haul 3" topsoil for 17.97 ac = 7,248 CY from stockpiles on site
A4004	Dozer	Grade transported topsoil and mix 50/50 Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A4005	Compact	Removed task, compaction completed with spreading topsoil
B4000	Reveg	Updated application and seeding rates
A5000	Truck	Removed task, grade existing material in place, no trucking Unsure why 6,222 CY and \$5,892 to move dirt?
A5001	Dozer	Removed task, no grading required
A5002	Ripper	Decompact Pad 15.43 ac
A5003	Truck	Haul 3,765 CY from stockpiles on site, remaining imported task C5006 Spreadsheet claim 6,222CY on site to haul however response states only 3,764 CY available
A5004	Dozer	Grade transported topsoil and mix 50/50

		Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A5005	Compact	Removed task, compaction completed with spreading topsoil
A5006	User Provided	Remove Trucking Task and replaced with user provided Purchase topsoil \$70 CY and Deliver to site \$50 CY for 2458 CY = \$294,960 If only 3764 available and 6222 is need, must import
B5000	Reveg	Updated application and seeding rates
A6000	Truck	Removed task, grade existing material in place, no trucking Unsure why 508 CY and \$481 to move dirt?
A6001	Dozer	Removed task, no grading required
A6002	Dozer	Regrade pond to 3H: 1V or less Pond compacted fill or embankment 0.9 , slopes are 0% cut/fill, rough finish dressing 0.8
A6003	Ripper	Decompact 1.26 ac
A6004	User Provided	Remove Trucking Task and replaced with user provided Purchase topsoil \$70 CY and Deliver to site \$50 CY for 508 CY = \$60,960
A6005	Dozer	Grade transported topsoil and mix 50/50 Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A6006	Compact	Removed task, compaction completed with spreading topsoil
B6000	Reveg	Updated application and seeding rates
A7000	Truck	Removed task, grade existing material in place, no trucking Unsure why 2542 CY and \$2,407 to move dirt?
A7001	Dozer	Removed task, no grading required
A7002	Dozer	Regrade ponds to 3H: 1V or less Pond compacted fill or embankment 0.9 , slopes are 0% cut/fill, rough finish dressing 0.8

A7003	Ripper	Decompact 6.3 ac
A7004	User Provided	Remove Trucking Task and replaced with user provided Purchase topsoil \$70 CY and Deliver to site \$50 CY for 2,542 CY = \$305,040
A7005	Dozer	Grade transported topsoil and mix 50/50 Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A7006	Compact	Removed task, compaction completed with spreading topsoil
B7000	Reveg	Updated application and seeding rates
A8000	Truck	Removed task, grade existing material in place, no trucking Unsure why 3,509 CY and \$3,323 to move dirt?
A8001	Dozer	Regrade ponds to 3H: 1V or less Pond compacted fill or embankment 0.9 , slopes are 0% cut/fill, rough finish dressing 0.8
A8002	Ripper	Decompact 8.7 ac
A8003	User Provided	Remove Trucking Task and replaced with user provided Purchase topsoil \$70 CY and Deliver to site \$50 CY for 3,509 CY = \$421,080
A8004	Dozer	Grade transported topsoil and mix 50/50 Consider material partially consolidated since ripping to mix hauled topsoil with overburden is required 1.1 correction factor Spoil pile Finish dressing medium finish 0.7 to include time for tracking slopes
A8005	Compact	Removed task, compaction completed with spreading topsoil
B8000	Reveg	Updated application and seeding rates
D1001	User Provided	Slope Monitoring for 5 yrs @ 40 hrs. and \$10,000 yr
D1002	User Provided	Reclamation Monitoring for 3 yrs @ 20 hrs. and \$4,100 yr
D1003	User Provided	Stormwater Monitoring for 5 yrs @ 40 hrs. and \$8,100 yr

E1001	Borehole	Plug up to 30 holes 200 MD
E1002	User Provided	Purchase Riprap \$66,625
E1003	User Provided	Rock Vortex Weirs – Ad Hoc Remediation Solution \$125,000
F1001	Mob	Initial Mobilization Added: 16M Grader, 315 Hydro Excavator, 963 Track Loader, 450 Backhoe, Cement Pump Truck, Power Mulcher, Foreman and Crew Trucks, Flatbed – Reveg Supplies Adjusted fleet size based on utilization
F1002	Mob	Secondary Mobilization – Reveg Failure Only Reveg equipment and minor touch up grading Removed: D10, 966H Loader, 323 Hydro Excavator, Generic 12-18cy 6x4 Added: 315 Hydro Excavator, Power Mulcher, Foreman and Crew Trucks, Flatbed – Reveg Supplies
F103	Mob	Site Maintenance Mobilizations Added 13 Crew trucks for each site visit and 1 foreman truck
F1004	Site Maintenance	Added full time Grader and Water Truck team for road maintenance 1 st year of reclamation
Indirect		Use standard indirect percentages/rates Divisions Job Superintendent is \$79.27 hr

Please feel free to contact me with any further questions. Amy Yeldell at the Division of Reclamation, Mining and Safety, Rm 215, 1001 E 62nd 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:
Travis Marshall, Senior EPS, Grand Junction DRMS