

February 13, 2025

Robert Zuber
Colorado Division of Reclamation, Mining, and Safety
1313 Sherman St, Rm 215
Denver, CO 80203

RE: Tri County Pit, M-1977-205
Technical Revision 06 – Updates to Mining and Reclamation Plans
Adequacy Response 3

Mr. Zuber

United Companies is providing the attached adequacy response to items listed in your February 13, 2025 letter. Only outstanding items are included. Also attached are revised portions of the permit, as applicable.

Regards,



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Adequacy Items

1. *The C-2 Mine Plan map must show the pond where pit water is pumped prior to discharge. This pond is described on page D-2 as “just north of the south end of Pit 1.”*
 - a. *The text in Exhibit D (first paragraph on page 2) should be improved to clarify the use of Pit 1 as a sediment pond. Currently, the text refers to a “small pond” and implies there is a different pond than the pit itself.*

Exhibit D has been revised to correct this reference.

2. *The C-2 Mine Plan map must show all existing and proposed processing facilities, including (but not limited to) crushing/screening facilities, a wash plant and associated ponds, and an asphalt plant. As appropriate, add a note (or notes) indicating that the locations are subject to change as these facilities are portable.*
 - a. *Additional revisions to C-2 Mine Plan are needed. The Quonset hut should be shown on the map. The note for the processing facilities should state that the location is subject to change because the facilities are portable, rather than “Example Shown.” Although it is not required, the Division recommends that rather than one map, a series of maps be used for the mining plan. The maps could portray the mining plan at various phases of the life of the mine.*

The processing equipment has been relabeled for clarity. The Quonset hut is already on Map C-2, but has been labelled specifically for clarity. See the revised Map C-2.

3. *The text in Exhibit D should describe the function of the sediment pond circled in the figure below (screenshot from the Mine Plan map).*
 - a. *The response from Lewicki and Associates indicates that the smaller pond west of the Pit 1 pond has been filled. However, a September 2024 aerial photo (below) suggests that there is a pond west of the Pit 1 pond. Please explain if this pond has been filled in recent months and if it is associated with mining activity at the site.*

The pond identified in the aerial photo from the Division is a small piece of the mined out Pit 1. The operator built a road grade along this area, dividing the overall pond on the south end of Pit 1 into two. This pond has been added to, and labeled, on Map C-2 for reference. The road slopes have been built to final reclamation grades and the road will remain in place. The total groundwater lake area created in mining and reclamation are unaffected by the presence of the road.

4. *The text in Exhibit E must describe the plan for reclamation of the ponds discussed in items 1 and 3, above. If one or both of the ponds are permanent, this should be explained in Exhibit E. As necessary, add items to Exhibit L for this reclamation.*
 - a. *Please address any necessary reclamation of the pond discussed in #3 in Exhibit E and in Exhibit L.*

As described in Item 3, the pond identified by the Division in the aerial photo will remain as part of the permanent lakes left in reclamation. It's reclamation is complete, and thus no bond is required for it.

11. *On page L-1, what facilities are included in the entry for removal in Table L-1? In this exhibit, provide a comprehensive list with dimensions and other pertinent information.*

- a. *Additional information is needed for the demolition of buildings and foundations. Describe the exact buildings to be demolished and the plan for disposal. Will the material from buildings and foundations be hauled to a landfill? If so, what is the estimated hauling distance?*

Demolition information has been added to Exhibit L, including the specific items being demolished and the distance to the nearest landfill. A revised Exhibit L is attached.

Attachments

Exhibit C - Map C-2 Mining Plan

Exhibit D – Mining Plan

Exhibit L – Reclamation Costs

EXHIBIT D

MINING PLAN

1. General Mining Plan

The property boundary has been surveyed on site and the permit area will be surveyed prior to any site disturbance. Map C-2 shows the mining plan.

The gravel zone is approximately 30 feet thick in an alluvial deposit and is overlain by soil and overburden ranging from 4 to 15 feet. In general, the area will be mined by first excavating soil/overburden with front end loaders which will be used to backfill the slopes of mined out areas to a 3H:1V slope as shown on Map F-1. The raw gravel material will then be loaded into a crusher/screen plant where various sizes of product will be made and placed in separate stockpiles. Dozers may also be used to move topsoil/overburden or gravel. Mining activities are expected to occur approximately 3 to 5 months per year, while the processing operations including screening/crushing and washing can occur any time of the year. Three pits will be mined, as shown on Map C-2. The mining of the deposit will occur to the limits shown on Map C-2 and will be mined to a slope no steeper than 0.5H:1V to maximize gravel recovery. Backfilling with overburden will create shallower reclaimed slopes.

United Companies mines using a 0.5H:1V to near vertical slope on active mining faces. Highwall mining will progress to an offset line from the crest line, which marks the mid-slope of the 2H:1V mining slope. This offset serves two purposes. First, the volume of material left in the highwall will allow the crest to be pushed towards the toe with the final mining slope of 2H:1V, which will maximize gravel recovery and additionally will reduce the required backfill material to bring the slopes to a 3H:1V slope. Secondly, this offset provides additional slope safety. A failure would be governed by the internal angle of friction of the material. This would limit the failed slope to an angle of 38 degrees or ~1.3H:1V. This failure would not only stay within the permit area, but it would also stay within the final slope envelope. Such a failure is unlikely given that only the active slope is near vertical.

The maximum total tonnage sold from the site in any one calendar year is expected to be 380,000 tons, though the expected annual average is 90,000 tons. The raw material will be sold as various products: crushed rock, chips, road base, concrete, and asphalt. A breakdown of the product tonnages and mined tonnages can be seen in **Table D-1**. A breakdown of the estimated areas is included in **Table D-2**. Both topsoil and overburden may be sold onsite on an as needed basis, however the operator commits to keeping enough material onsite to be able to reclaim the site. The amounts of topsoil and overburden sold are secondary commodities and are not therefore included in the table below or the annual tonnage sold from the site. Reclaiming the site to a set of lakes ensures that there is more than enough overburden and topsoil to reclaim. The maximum disturbance at any time will be 29.7 acres.

Each pit serves as a sediment pond for the operations that take place in it. Pit dewatering will be conducted using a pump located at least two feet below the operating floor, in order to intercept water before it can pick up sediment from the pit. A gravel berm around the pump will also help ensure that the discharge from pit dewatering is clean. All dewatering is conveyed via pipe and ditch to the south end of Pit 1, which functions as a large sediment pond for the mining operation. This pond then discharges to the approved NPDES outfall and then to the Gunnison River. All water discharges from the operation will be via this discharge outfall

Pits 2 and 3 will dewater to Pit 1, to make use of the first pit's capacity for sediment storage, and the existing discharge point.

Clean water from dewatering will be used during mining to water trees and other vegetation around the pits that would otherwise be negatively affected by the lowered water table.

The wash plant which will be used onsite will consist of a system to handle sediment from the washing operation. This system will consist of two settling ponds. Water will be pumped from the ponds to the plant. As with the mining operations, the operator will ensure that the lowest depth of the settling ponds does not get any closer than 2' to the Mancos Shale. Removal of settled material will be conducted as necessary and will be dried and used for fill where necessary or placed on the bottom of the pit.

The topsoil and overburden from a new area will be used to reclaim the previous area. This will reduce material moving as well as reduce the maximum area to be reclaimed. Any fines from the crushing/screening operation and removed from the settling pond will also be salvaged and used in the reclamation. A table of expected mining lives for each Pit is included in **Table D-1**. The life of each pit is based on the anticipated annual average tonnage.

No explosives will be used in conjunction with the mining and reclamation operation.

2. Mining Timetable

The following timetable is a best estimate of the sequence of operations for the life of the mine after May 2005 and is based on mining and selling 90,000 tons of total product per year:

Table D-1 Mining Timetable

Pit	Area		Mining Time		Material Quantity	
1	39.2	acres	9.1	Years	823,000	Tons
2	29.3	acres	23.3	Years	2,100,000	Tons
3	10.8	acres	6.4	Years	577,000	Tons
Total	79.3	acres	38.8	Years	3,500,000	Tons

The mining schedule is planned to minimize disturbance by reclaiming areas as additional mining is undertaken. Note: If large contracts are awarded to the site, production could increase

to the permit maximum, thereby curtailing the life of the pit. On the other hand, if contracts are less than anticipated, the life of the pit could be extended. This table is based on a reasonable projection of average production rates.

3. Mine Facilities and Operation

The site will contain the following facilities, it is noted where applicable whether or not the facility is portable and whether it will have any fuel storage associated with it. A summary of equipment and related tanks is shown below.

- A portable asphalt plant with associated tanks
- A portable concrete plant with associated tanks
- Truck scales
- Mine office
- A portable crusher with associated tanks
- A portable wash plant with associated tanks

The following list is the best estimate as to the equipment which will be used onsite throughout the mine life:

- 2-3 Front end loaders
- 1 D-8 Bulldozer
- 1 40G Motor grader
- 1 4000 gallon water truck
- Volvo off road haul trucks (number will depend upon production needs)
- 15 and 24 ton on-road haul trucks (number will depend upon production needs)

All fuel tanks will have secondary containment. Some are double walled, others will be located within bermed or lined areas that have over 110% of the volume of the largest stored tank. All such tanks will be kept at the office area immediately southwest of Pit 1. See Map C-2.

No night mining activity is scheduled for the operation; however portable lighting may be used within the pit from time to time. The portable lights will only be used at the bottom of the pit for the purpose of after hour equipment maintenance and crushing activities within the permitted hours in the winter months while the days are shorter. Portable toilets will be used for employees. All mining structures on site are shown on Map C-2. The portable mining equipment such as loaders, dozers, trucks and excavators will be serviced on an as-needed basis onsite. Upon reclamation, all portable equipment will be removed from the site.

There will be no new fence around the operation, since it is inside private property. No problems are expected with vandalism. It is extremely unlikely that any toxic or acid-producing materials

will be encountered during the mining operation since the past mining shows that the material is alluvial in nature. However, in the event that such materials are encountered, they will be covered with subsoil and topsoil from the stockpiles to the same depths outlined in the reclamation plan and no more mining will occur in this area.

The operator commits to clearly marking the permit boundary with stakes surveyed on site.

The site will use all existing roads to haul the product to its final destination. It is planned that the material may be used to re-surface existing roads, make concrete aggregate or provide new road base for any new roads within an economic distance to the site.

Several hazardous materials will be stored and used onsite throughout the project. These materials include products which are associated with diesel motors, and products associated with asphalt and concrete production.

4. Topsoil and Overburden Handling

Topsoil ranges from 6 to 18 inches thick on site, 12 inches is the anticipated average. Up to 20 feet of overburden can be found on site, but most is expected to be around 8 feet thick. Both topsoil and overburden are used on site for reclamation of mined out areas. In the event that United needs to store topsoil or overburden in a berm, it will store this material either within the foot print of the current pit, or in the designated topsoil stockpile storage areas identified on Map C-2. Any topsoil or overburden stockpile that is to be in place longer than 180 days will be vegetated to prevent wind erosion. Anticipated topsoil and overburden quantities are shown in Table D-2. These are estimates based on site drilling and existing operations.

Table D-2 Estimated Topsoil and Overburden Quantities

Pit	Overburden Quantity	Topsoil Quantity
1	330,400 CY	41,300 CY
2	139,800 CY	17,400 CY
3	563,400 CY	70,400 CY
Total	1,033,600 CY	129,100 CY

5. Water Information, Rights and Augmentation

All water rights issues such as availability of water for this operation, consumption rates, dust control, etc. is presented in Exhibit G - Water Information.

6. Schedule of Operations

Mining operations will only occur as dictated by demand up to the maximum rates described earlier in the mine plan. Mining, screening and processing will be conducted with portable equipment at various times of the year. Product will be sold from this activity throughout the year, although little is expected to be sold in winter months. The operator will not have night gravel mining operations, although minor truck activity or repairs may occur after hours. Mining, processing and trucking will take place no more than 13 hours per day, between the hours of 6 am and 7 pm, 6 days per week.

7. Delta County Impacts and Environmental Impacts

The impacts to Delta County will be limited. No dust is expected from the operation due to the pit being wet and roads being watered as needed. Noise and traffic will remain the same as it has been in the past, as this amendment is merely an expansion of the resource available for mining. The operation has been in place for many years, so no new impacts to county services will occur.

EXHIBIT L

WORST CASE RECLAMATION SCENARIO

The worst case reclamation scenario for the Tri County Pit is at the end of mining of Pit 2, when the largest amount of dewatering would be necessary. At this stage, both the northern section of Pit 1 and Pit 2 will require dewatering. The steps of reclamation at this point are outline below:

- Pit 1 (north) and Pit 2 dewatering = 450 acre-ft
- Highwall backfilling = 2H:1V to 3H:1V slope for 3000-ft by 30-ft tall and vertical to 3H:1V slope for 1000-ft by 30-ft tall (Total = 105,000 CY).
- Backfill Pit 1 to Pit 2 connection = 57,900 CY
- Topsoiling of all disturbed areas outside of lakes to a depth of 12 inches = 29.7 acres.
- Discing of topsoil to a depth of 12-inches over all topsoiled areas.
- Drill seeding of wetland areas with wetland seed mix. Drill seeding with dryland seed mix in all other seed areas. Assuming a 25% seed failure rate, applied by increasing the seeding area to 125% of the topsoiled area.
- Facility removal (office, quonset hut, shed, truck scale, etc.)
 - Demolish office, quonset hut, and shed near the site entrance. Three steel buildings totaling 8700 square feet. 12-inch concrete foundation beneath the buildings: 8700 SF x 1-ft thick = 322 CY of concrete. All building demolition materials hauled to the nearest landfill roughly 35 miles away.
 - All other facilities are portable and will be hauled offsite following auction.
- Mulching and crimping of mulch over seeding dryland areas.
- Two-years of weed control management.

Table L-1 Reclamation Task and Cost Estimate

Description	Material Quantity	Unit	Unit Cost	Cost
Dewatering largest groundwater volume to complete backfilling, topsoiling, and seeding.	450	Acre-ft	\$105	\$47,250
Highwall backfilling from mining to final condition and backfilling Pit 1 to Pit 3 connection.	162,900	CY	\$1.50	\$244,350
Facilities removal.	1	Unit	\$15700	\$15,700
Topsoiling to 12 inches deep the maximum disturbance area of 29.7 acres.	47,851	CY	\$1.50	\$71,777
Discing of topsoil to a depth of 12 inches over 29.7 acres.	29.7	acres	\$105	\$3,119
Seeding of 7.8-acre dryland area. (25% reseed rate = 9.8 acres)	9.8	acres	\$400	\$3,920
Mulching and crimping of mulch over 7.8-acre dryland area.	7.8	acres	\$850	\$6,630
Seeding of 1.5-acre wetland area. (25% reseed rate = 1.9 acres)	1.9	acres	\$650	\$1,235
Weed control management for two years on 29.7 acres	29.7	acres	\$220	\$6,534
Subtotal				\$400,515
DRMS cost (28%)				\$112,144
Total Bond Amount				\$512,659