



February 9, 2021

J. C. York
J&T Consulting, Inc.
305 Denver Ave, Suite D
Fort Lupton, CO 80621

**RE: West Farm Pit (Permit No. M-2008-078)
Amendment No. 2 (AM-02)
Adequacy Review #1**

Dear Mr. York:

On December 8, 2020, the Division of Reclamation, Mining and Safety received your amendment application package for the West Farm Pit, File No. M-2008-078. The following questions address adequacy issues and missing information that is needed to complete the application. This information needs to be addressed and/or received before the Division can approve the application.

Rule 6.2.1(2) Maps and Exhibits - Adequate as submitted.

Rule 6.4 - Specific Exhibit Requirements - 112 Reclamation Operation

6.4.1 EXHIBIT A - Legal Description - Adequate as submitted.

1. Are the permitted acres be the same as affected acres?

6.4.2 EXHIBIT B - Index Map - Adequate as submitted.

6.4.3 EXHIBIT C - Pre-mining & Mining Plan Map(s) of Affected Lands

2. The topo lines on the maps make it difficult to read. Please remove the topo lines from the second set of maps (4, 5 and 6 of 6) and resubmit the maps.
3. There are several structures located between Phase 7 and Phase 5 mining areas. Please identify the owners of these structures and label them on the Exhibit C map.
4. The ownership of the three large triangle shaped bodies of water located in Phase 3, 4 and 5 were not identified. Please identify the ownership of these structures on the Exhibit C map.
5. The ownership of the ditch between Phase 4 and 7 was not identified. Please identify the ownership of this ditch on the Exhibit C map.
6. The ownership of the ditch between Phase 2 and 4 was not identified. Please identify the ownership of this ditch on the Exhibit C map.
7. The ownership of the ditch running east, south of Phases 5, 6 & 7 was not identified. Please identify the ownership of this ditch on the Exhibit C map.
8. The ownership of the ditch west of Phase 3 was not identified. Please identify the ownership of this



ditch on the Exhibit C map.

9. No offset was identified for the north bank of the Phases 7 and 9 ponds. Please clarify the setbacks.
10. The north bank of the Phase 4 pond is adjacent to the Lamar sewer lagoons. It is unclear from the maps provided the distances between the structures and property lines. Please clarify the following:
 - a. Distance from the permit boundary to City of Lamar property line
 - b. Distance from mining limit to the lagoon berm
 - c. Distance from mining limit to the permit boundary
11. An area on Exhibit C: Map 4 of 6 is labeled as Highway Realignment Parcel. Please clarify:
 - a. Does a second party have jurisdiction over this parcel?
 - b. If another party has jurisdiction over this parcel, has a Right of Entry been obtained?
 - c. What are the future plans and timeline for the highway realignment project?
 - d. What are the anticipated effects to the mining plan/operation when the highway project begins?
 - e. How will the mining plans change to accommodate the highway project?

6.4.4 EXHIBIT D - Mining Plan

12. Please provide specific details on the construction of the slurry walls. For slurry walls already constructed, please provide the final construction drawings. For proposed slurry walls, please provide the design specifications, and commit to providing the final construction drawings after installation is complete.
13. Mining and reclamation are anticipated to progress through the 9 phases as shown on the map. Phase 5 will then be mined and reclaimed before the Phase 6 area is mined. The Phase 5 mined area extends from the northern permit boundary to the southern boundary. How will machinery and material be transported through the Phase 5 area when it is in reclamation and the Phase 6 area is being actively mined?
14. There is a narrow section of the permit area between Phase 5 and Phase 6 that is approximately 50 feet wide. Is this section wide enough to accommodate large machinery (haul trucks, construction equipment, conveyors, etc.) without causing off-site impacts to the surrounding areas?
15. The mining plan map Exhibit C, 4 of 6 shows many structures (ponds, ditches, etc.) within the different phases. All phase areas will be mined and become a water resource pond at the end of mining. It is unclear from the map the timing each structure will be in place, the purpose of each structure and when it will be moved. Please describe the timeline for each Phased area to address the following issues:
 - a. Phases 7 & 8 area proposed to be mined but are also listed as a plant site and product stockpiles
 - b. The 4 sediment ponds in Phase 9 overlap the slurry wall,
 - c. The overland conveyor and scale house are within the Phase 9 slurry wall,
 - d. The radial stacker crosses the Highway Realignment Parcel,
 - e. There are several sediment/collection ponds in the Phase 2 area and it is not clear which ones are built, being used, or their purpose of each pond,
 - f. Where will the overburden and topsoil stockpiles go when the area they are currently in is being mined?
16. The wash plant is listed as being in two different locations on Map 4 of 6. What is the timeline for the different locations of the wash plant? Please also describe the locations and timeline for the sediment control structures associated with the wash plant because the locations listed for all the sediment ponds will eventually be mined.
17. The fines recovered from cleaning the sediment ponds is stockpiled either adjacent to the ponds or in Phase 9 area. What is the long term plans or disposal plan for the fines after they have been

stockpiled and dried?

18. Will explosives be used in conjunction with the mining or reclamation process (Rule 6.4.4(i))?

6.4.5 EXHIBIT E - Reclamation Plan

19. A commitment to install a perimeter drain if needed was made. Should a perimeter drain be needed, it will be installed between the slurry wall and the permit boundary. What is the proposed typical distance between the slurry wall and permit boundary? Will there be enough room to allow for the installation of a perimeter drains if it should be needed?
20. A commitment was made to install a perimeter drain if one is needed to convey ground water around the lined reservoir. What event or measurement will be the determining factor for installation of the perimeter drain?

6.4.6 EXHIBIT F - Reclamation Plan Map - Adequate as submitted.

6.4.7 EXHIBIT G - Water Information -

21. Groundwater that is encountered during the mining operations will be discharged in accordance with the NPDES permit. The approved NPDES discharge point is located in the Phase 2 area which is about 2 miles from the proposed furthest point of mining (Phase 6). Will the ground water be pumped back to the current discharge point or will a new discharge point be approved?
22. On Figure-Exhibit G-1, a well is identified east of West Farm but is not listed on Table G-1. Please add this well and its pertinent information to Table Exhibit G-1.
23. Several slurry walls are proposed to be installed in a linear fashion. The total combined length of all the slurry walls is 3.75 miles, with a couple of breaks in the wall. These structures will potentially have a significant effect on the ground water in the area. A ground water model is needed to predict the effects the slurry walls will have on the ground water. The Division recommends that 5 quarters of monthly ground water level data is needed to create an adequate model. The model analysis needs to address:
 - a. The impacts of static water levels,
 - b. The impacts on all wells within 600 feet of the permit,
 - c. The anticipated mounding and shadowing effects
 - d. Breakdown the effect that each slurry wall (Phases) will have on the water level as each slurry wall is built
 - e. What will be the potential impact of mounded water on the several ditches running adjacent and through the permit area?
 - f. Create ground water contour maps: before and after AM-02 slurry wall construction.
24. Six ground water monitoring wells were identified on the monitoring well location map. All the wells are clustered in the vicinity of the current mining area. The current program is inadequate to address the new permit area proposed in AM-02. A new ground water monitoring program needs to be submitted for review. The design needs to be able to monitor water levels at each phase of mining, a commitment to collect data on each well monthly and to submit the data in the Annual Report.
25. On page 1 of Exhibit G it states dry mining will be conducted and that a slurry wall will be installed around the perimeter of each phase. Please clarify when the slurry wall will be installed, before or after mining each phase?
26. On page 1 of Exhibit G it states that the gravel pit will be lined concurrent with mining. Please clarify if this means a lining will be applied to the bottom of the pit or if the lining means the slurry wall.

6.4.8 EXHIBIT H - Wildlife Information - Adequate as submitted.

6.4.9 EXHIBIT I - Soils Information - Adequate as submitted.

6.4.10 EXHIBIT J - Vegetation Information -

27. A formal jurisdictional determination has been sent to the ACOE. Please commit to not disturbing any areas that may potentially be jurisdictional before the ACOE has made its determination.

6.4.11 EXHIBIT K - Climate- Adequate as submitted.

6.4.12 EXHIBIT L - Reclamation Costs –

28. The topsoil storage piles are proposed to be placed in the Phase 9 area. No topsoil piles locations were identified in the eastern phases of mining. When topsoil is salvaged in the eastern phases (4, 5 & 6), will it be hauled for storage in the phase 9 area and then hauled back to the eastern phase areas for reclamation? This information is needed to determine haul distance costs for replacement of topsoil.
29. The acres recorded on the Reclamation Cost Summary chart, the Summary of Unit Costs worksheets on the Maps in Exhibit C are not consistent. Please update the acreages for consistency.
30. In phases 7, 8 & 9, acres were credited to these tasks, lowering the cost of the task. The source of the credit is labeled as 'credit from above' but it is unclear where above is. The number of acres credited is greater than the number of acres in the phase being restored. Please clarify the source of the credits and explain why the number of acres credited is greater than the acres in the phase.
31. Please provide supporting documentation verifying slurry wall construction costs. This can consist of a 3rd party bid.

6.4.13 EXHIBIT M - Other Permits and Licenses (Statement Req'd) - Adequate as submitted.

6.4.14 EXHIBIT N - Source of Legal Right to Enter –

32. A narrow section of permitted land lies between Phases 5 & 6. This strip of land is part of the conservation easement. According to the easement agreement no new roads can be constructed in this area without permission from The Greenlands Reserve. Has permission been granted to cross this strip of land?

6.4.15 EXHIBIT O - Owner(s) of Record of Affected Land and Substance to be Mined - Adequate as submitted.

6.4.16 EXHIBIT P - Municipalities Within Two Miles - Adequate as submitted.

6.4.17 EXHIBIT Q - Proof of Mailing of Notices to Board of County - Adequate as submitted.

6.4.18 EXHIBIT R - Proof of Filing with County Clerk and Recorder - Adequate as submitted.

6.4.19 EXHIBIT S - Permanent Man-made Structures -

33. The following structure agreements were not included in the AM-02 application and were not found in the previous amendment application:
 - a. Lamar Light and Power
 - b. Lamar Canal
 - c. Inman fence
 - d. Atmos Energy
 - e. AT&SF Railroad
34. The structure agreement with Prowers County Road Dept. is from 2018 and covers the sections of CR HH.5 and HH8/10 that are in the current permit area. CR HH 8/10 and CR 11 are within the proposed AM-02 permit area. A structure agreement needs to be submitted that addresses these sections of road.
35. There are several structures located between Phase 7 and Phase 5 mining areas. Please identify the owners of these structures and submit a structure agreement for them.
36. The existing structure agreement with the City of Lamar is for the sewer lagoons to the north of the permit area. At the time this agreement was made in 2018, the permit boundary only bordered the western most lagoon. The proposed AM-02 permit boundary will border all 3 sewer lagoons. A new structure agreement with the City needs to be submitted that address all 3 sewer lagoons.
37. The mining plan proposes to relocate an underground power line owned by the SE Colorado Power Association. A structure agreement is needed that explicitly states that Prowers Aggregate has permission to relocate the power line.

Exhibit A- Slope Stability Report

38. Please provide a copy of the Cesare, Inc. report Figure 1 with the borehole locations labeled on the map.
39. Please label the 150' offset for Section 7-1 on the Mine Plan Map 5 of 6.
40. The operator is committing to the slope stability monitoring recommendations outlined on page 9 of the J&T Consulting, Inc. report. These commitments will be added to the terms and conditions of the permit upon final approval of the permit.

Please note that the decision date for this application is March 22, 2021. If you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. Also, the comment period for this application is still open and any comments or objections received may initiate new adequacy questions.

All corrected pages must also be provided to Prowers County Clerk & Recorder.

If you have any questions, please contact me at (720) 774-0040 or brock.bowles@state.co.us.

Sincerely,



Brock Bowles
Environmental Protection Specialist

CC: Michael Cunningham, DRMS
Amy Eschberger, DRMS