PETE LIEN & SONS, INC.

MAILING ADDRESS: P.O. BOX 440 RAPID CITY, SD 57709-0440 PH. 605-342-7224
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July 10, 2024

Colorado Division of Reclamation, Mining and Safety
Room 215
1001 E 62nd Avenue
Denver, Colorado 80216

Re: Pete Lien & Sons, Inc.; Mining Permit No. M-2004-013; St. Barbara Sand and Gravel Mine; Technical Revision Request to increase acreage disturbed.

Permittee submits the following items for further clarification based on the 31 May 2024 letter from Jocelyn Carter, Environmental Protection Specialist.

Item 1. The Operator's proposed changes to the wording in Exhibit L – Reclamation Costs cannot be approved by the Division. Revise application accordingly.

- Proposed changes to Exhibit L – Reclamation Costs, have been made increasing the maximum disturbed acreage at any one time from 80 to 96 acres.
- A portion of Rule 1.1(3) DEFINITIONS, that describes lands that can be excluded as affected lands has also been added.

Item 2. Re-submit any comments regarding the bond estimate in your response to this letter, ensuring they reflect the increased disturbance amount. Additionally, please submit any maps necessary to identify portions of the disturbed area that have been backfilled, graded, topsoiled, and/or seeded. Maps need to meet the requirements outlined in Rule 6.2.1(2).

- A map that identifies portions of the disturbed area that have been backfilled, graded, top-soiled and/or seeded. Our review of aerial identifies a total disturbance area of 90.3 acres compared to the Division's estimate of 94.5 acres.
- Comments regarding the most recent bond estimate:
    a. Areas that currently have topsoil and have been seeded total 13.0 acres.
    b. Task 003. Replace topsoil 7 inches on the remaining 77.3 acres (90.3 – 13.0 = 77.3)
    c. Task 004. Revegetate 77.3 acres versus 82 acres
    d. Task 004. Hay delivered. $429.79/ton still seems high.
    e. Task 004. Crimping and Mulching. Are both required?

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Item 3. To fully address the required corrective actions, this application must update Exhibit D – Mining Plan to increase the maximum disturbed area at any time in addition to the submitted Exhibit L – Reclamation Costs. Submit and updated Exhibit D.

- Exhibit D – Mining Plan has been revised to include a paragraph to increase the maximum disturbed area in addition to Exhibit L – Reclamation Costs.

Item 4. Exhibit L – Reclamation Costs supplied with the application does not provide a breakdown of the major phases of reclamation with their associated costs as required by Rul 6.4.12(1). Resubmit Exhibit L – Reclamation Costs to include this information.

- Exhibit L – Reclamation Costs has been revised to include cost estimates by major phase of reclamation.

Item 5. Exhibit L – Reclamation Costs. Updated policy on bonding slurry walls. This new policy should be considered whenever the Operator submits the Technical Revision to install the slurry wall.

- No response is required for this item.

If there are any questions regarding this submittal or if additional information is required, please contact me at (605) 939-2719 or by email at mgolliher@petelien.com.

Respectfully,

Brian Tideman
Chief Operating Officer
Pete Lien & Sons, Inc.

Michael Golliher
Technical Director of Mine Planning
Pete Lien & Sons, Inc.

Attachments included: St. Barbara Exhibits D, L, Site Map

Exhibit L - Reclamation Costs

Reclamation costs for this mining permit were based on the maximum ~~disturbed~~ affected acreage ~~(80 acres)~~ of 96 acres at any given time: including plant and stockpile areas. All lands shall be excluded that would be otherwise included as land affected but which have been reclaimed in accordance with an approved plan. The DRMS approved the current reclamation bond of ~~$410,693 on June 4, 2004~~ $549,479 on November 30, 2020.

Cost Estimate by Major Phase of Reclamation (2024 Cost Estimate):

1. Filling Settling Pond. 0.51 acres, 7.5 ft. deep, Average push 250 ft. ($6,255)
2. Fill Process Ponds and Mining Area. 8.75 acres, 7.5-15 ft. deep, 750 ft. haul. ($258,675)
3. Replace Topsoil. 82 acres, 7 inches deep, Average haul 1,000 ft. ($132,067)
4. Revegetate. 82 acres, Fertilize, Tilling, Seeding. Alkali Sacaton(1.5 lb./ac), Switchgrass (4.0 lb./ac.), Galletta 11.0 lb./ac.), Western Wheatgrass, (16.0 lb./ac.). ($205,683)
5. Equipment Mobilization. Nearest town: Pueblo. ($26,309)
6. Indirect Costs. Overhead, Profit, Legal, Engineering, Project Management. $156,333

As discussed in Exhibit E - Reclamation Plan, a slurry wall of approximately 13,094 feet in length is required for Mine Area 1. A planning number for the cost of slurry wall construction is $3.00 per square foot. Thus, 13,094 feet long x 35 feet deep equals 458,290 square feet. Constructing this slurry wall would therefore cost approximately $1,375,000. Mine Area 2 impounds approximately 353 acre-feet of water. This requires a slurry wall approximately 6,565 feet long. Thus, 6,565 feet x 35 feet deep equals 229,775 square feet. Constructing the slurry wall would therefore cost approximately $689,000.

The Pierre Shale directly underlies the sand and gravel deposit on the property. This geologic unit is well known for its relative impermeability and is a very suitable bedrock for impounding water.

It is recognized that the DRMS has a policy whereby a financial warranty for a slurry wall can be submitted at 20% of the value of the slurry wall provided that detailed engineering design plans are submitted. The applicant currently does not have such plans and won't until an end-user of the reservoir is known.

At that time, the plans will be developed. It is proposed that the financial warranty be increased by $412,800 (which is 20% of the cost of constructing the slurry wall) and that a Technical Revision be submitted when an end user is known and they have designed the slurry wall.

The applicant commits to a slurry wall design that meets or exceeds the specifications of the DRMS and the State Engineer's Office.

Exhibit D - MiningPlan

Overview

The St. Barbara Sand and Gravel Mine permit area is approximately 364 acres, of which eventually 304 acres will be mined.

The size of the area(s) to be affected at any one time will be a maximum of 96 acres. All lands shall be excluded that would be otherwise included as land affected but which have been reclaimed in accordance with an approved plan.

A plant and product stockpile area of approximately 30 acres and a fresh water/settling pond area of approximately 18 acres will be placed in the northwest area of the permit property. Both of these areas will be mined. The plant area will contain product stockpiles, crushers, screens, conveyors , a wash plant, scale house, office and associated outdoor storage and vehicle and equipment parking.

Sand and gravel products will be mined, processed and shipped at an undetermined rate. Due to the economy the mine was shut down in 2008. There is currently no production taking place. The originally planned rate of production would require mining about 5 to -7 acres annually. There are currently no definite plans to re-open the mine and a temporary cessation notice is included with this amendment application. This may be a dry mine, and dewatering will take place continuously over the life of the mine. It is possible that the operator may go to wet mining using either a dragline or suction dredge. Topsoil, overburden, and sand and gravel will be excavated by front-end loaders. dozers or scrapers, and will be transported to the plant site by truck, conveyor, or front-end baders.

The post-mining land use of this property will be lined water storage comprising 210 acres of water surface and 94 acres of reseeded dry land.

Schedule and Sequence

Mining commenced in summer of 2004 and will continue for at least 25 years, depending on market demand and economic conditions.

The initial stage of operations will include construction of the plant and associated facilities in the plant area and construction of the freshwater/settling pond area. The process water ponds will remain in the same area until mining and processing of the remainder of the property ceases.

Mining will then begin east of the plant area and proceed east to the eastern permit boundary setback. Once excavation reaches this setback, mining will move to the west

portion of the property and proceed east again, repeating this process until mining area 1 is exhausted (see Exhibit C-3 for mining sequence).

Mining area 2 (east of the Public Service Company power line) will be mined in the same way, except it will proceed from east to west. The plant area will be mined last and the processing equipment will be relocated to previously backfilled areas. The process water ponds will be relocated and that area will be mined also.

Topsoil

Topsoil quantities sufficient to implement the reclamation plan (approximately 257,000 cubic yards) will be salvaged and stockpiled. Approximately one foot of topsoil will be recovered until there is enough available for reclamation and then after that topsoil material will be handled and used as overburden (or perhaps sold off-site in relatively small quantities).

Topsoil will be stockpiled along Nyberg Road for mining area 1 and along the eastern portion of mining area 2 (see Exhibit C-3). Topsoil stockpiles will be seeded with the seed mix contained in the reclamation plan (Exhibit E) to stabilize them and protect them from erosion until the topsoil is used for reclamation.

Overburden

Overburden (clay and silt) averages approximately 6 feet thick across the property. Overburden material for the entire mine area will amount to approximately 3.4 million cubic yards. This material will be used as reclamation backfill.

Overburden removed at the start of mining will be stockpiled at the eastern end of the plant area and in the southern portion of mining area 1. These stockpiles will remain in place and will be used for reservoir construction. An adequate volume of overburden will be stockpiled to backfill the areas shown on Exhibit F: Reclamation Plan Map at the end of mining operations. See Exhibit C-3 for approximate overburden stockpile locations.

Sand and Gravel

Nominal thickness of sand and gravel on the site is 25 feet. This will amount to a total reserve of approximately 12 million cubic yards (18,000,000 tons). About 10% of the

sand and gravel deposit will be process waste (approximately 1.2 million cubic yards). This material will also be used for reclamation backfill in the northern part of the property.

Operation Components

The access to a public road (i.e. Nyberg Road), mine boundaries, office/scale house, and processing plant are shown on Exhibit C-3.

Roads

All roads inside the mining limits will be temporary and will be reclaimed after mining is completed. The access to Nyberg Road and one perimeter road around the property will remain after mining and reclamation are completed.

Drainage, Runoff. and Dewatering Conveyance Structures

Storm drainage will be either 1) routed into the pit floor and used for processing water or discharged through the dewatering system, or 2) routed to the settling pond in the southeast part of mining area 1. Diversion ditches and berms will be used, if necessary, to ensure that runoff from disturbed areas will be controlled in this manner.

Dewatering water will be conveyed from a dewatering trench to a settling pond. From the settling pond the water will be discharged through an outfall structure into the Arkansas River pursuant to an approved COPS permit. A U.S. Army Corps of Engineers permit has been obtained for the outfall structure.

Sizing of Settling Ponds and Outfall Structures

Settling ponds and outfall structures have been designed to meet the discharge requirements.

Water Demand and Source

Exhibit G, Water Information, contains a discussion of water demand and source. Also contained in Exhibit G are discussions of protecting the hydrologic balance (groundwater and surface water) and compliance with Colorado water law.

Acid and Toxic Producing Materials/Explosives

No acids or toxic producing materials (or refuse) will be exposed as a result of mining operations. No explosives will be used.

Processing

Pit run sand and gravel will be transported from the dewatered pit area by loader, truck, and/or conveyor to the plant/material stockpile area. Pit run is then fed either into a crusher (if necessary), or directly into a wet screen. At the screen, the pit run will be separated into various material stockpiles.

The oversize rock may be crushed, depending on market conditions, and returned back into the screening circuit.

The rock products will be washed via water spray bars. The sand will be washed via sand screws. The rock products will be stacked via conveyor, then loaded and stockpiled via front-end loader. The washed concrete sand will be conveyed, then stockpiled via stacking conveyor. Material will be transported offsite via truck.

Commodities Produced and Used

Specification aggregates will be produced including concrete sand, road base, coarse, aggregates, and other construction material products. The primary use will be for concrete aggregates at Pete Lien & Sons' concrete plant in Colorado Springs. No incidental products are planned to be produced.

St Barbara Pit

Permit M-2004-013

Locations: Portions of Section1 T21S R63W & Portsions of Section 6 T 21S R62W
Pueblo County, CO

Background: World Imagery/ PLS Aerial

*Not official PLS map. See GIS Coordinator.

36

31

01

06

Nyberg

43rd

Legend

Sub Site

- Mine Permit

Name

- SW and NE Topsoil - 5.13 ac
- STB - DRMS Disturbance Boundary - 90.27 ac
- N and W Topsoil Stockpile - 13 ac
- St Barbara Backfilled - 8.66 ac
- St Barbara Discharge Corridor - 4.46 ac
- St Barbara Plant Site - Process Ponds (35.6 ac)
- St Barbara Quarry-Pond (23.4 ac)
- Roads
- PLS
- Section Lines-CO

N
W E
S

0 250 500 Feet

PETE LIEN & Sons, Inc.

Last Revised: 7/10/2024
Drawn by: THutchens
Verified by:
Surveyed: