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 DIVISION OF OIL, GAS AND MINING

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October 22, 2001

TO: Internal File

FROM: Stephen J. Demczak, Sr. Reclamation Specialist/Engineering, Team Lead *EJD RYBM*

RE: Sewer and Water System, Canyon Fuel Company, LLC., SUFCO Mine, C/041/002-01C-1

**SUMMARY:**

The SUFCO Mine has submitted an amendment to expand the capacity of existing culinary water system and sanitary drain field. These two upgrades to the water and sewer system will not require any increase in the US Forest Service Special Use Permit area, nor will the disturbed area change.

With an increase of production, the SUFCO Mine has hired twenty-five additional people and has worked extra days during the week. The present culinary water system at the mine site has a capacity of 20,000 gallons. The permittee wishes to expand the system to 40,000-gallon capacity by adding two 10,000-gallon tanks. The additional water capacity is needed to facilitate showers, disposal of sewage, dust suppression, and fire fighting capability.

The sewer system expansion is required due to the increase of shower water and sewage usage.

**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**TOPSOIL AND SUBSOIL**

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

**TECHNICAL MEMO**

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**Analysis:**

**Removal and Storage**

The permittee conducted a soil investigation of the leach field and water tank area in October 2001. The permittee concluded that no topsoil was present at either site. The permittee stated that the areas have been disturbed in the past. However, the permittee will salvage approximately 1–3 inches of material. The material to be removed appears to be remnants of a C-horizon. This material is grayish brown loose, sandy and silty loam with some fine to coarse gravel. Below the C-horizon are remnants of the C2-horizon that consisted of brown very gravelly sand. The gravel was fine to coarse and large sandstone cobbles were present. The soils were dry.

The permittee will remove approximately 26 cubic yards of C-horizon and be placed on the temporarily on the existing leach field. The C2-horizon being removed mostly from the excavation of the laterals or trenches will be stored separately. The C2-horizon will be used to backfill the trenches and the C-horizon will be topsoil for the leach field.

**Findings:**

The information provided is considered adequate and meets the requirements of this section.

**VEGETATION**

Regulatory Reference: R645-301-330, -301-331, -301-332.

**Analysis:**

The permittee will reseed the leach field area with the approved seed mix that is in the Mining and Reclamation Plan.

**Findings:**

The permittee has met the requirements for this section of the R645 Coal Rules.

**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

**Analysis:**

**Exemptions for siltation structures**

The leach field in Convulsion Canyon will be classified as an alternate sediment Control area. The permittee will use silt fences, and berms to treat the water runoff from this area.

**Findings:**

The information provided is considered adequate and meets the requirements of this section.

**SUPPORT FACILITIES AND UTILITY INSTALLATIONS**

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

**Analysis:**

The permittee has requested to expand the culinary and sewage systems capacities. The amendment proposes two additional 10,000-gallon water tanks and an additional 0.40 acres of leach field expansion. These additions are on the Extended East Spring Canyon Surface Facilities Map, Plate 5-2B.

**Findings:**

The proposed amendment has met the requirements of this section in the R645 Coal Rules.

**MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

**Analysis:**

**Mining facilities maps**

The permittee has submitted an updated surface facilities map, Plate 5-2B showing the construction of two 10,000-gallon water tanks and 0.40 acres expansion of the leach field. This map is P.E. certified by Wesley K. Sorensen badge number #159457.

**Findings:**

**TECHNICAL MEMO**

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This section of the proposed amendment meets the requirements of the R645 Coal Rules.

**BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

**Analysis:**

**General**

The bonding amount to remove the pump house is \$9,000, which is an increase of 0.2% of the current bond. The cost of removal is a small amount and no immediate change in the bond will be needed. The bond can be adjusted during permit renewal.

**Findings:**

The information submitted meets the minimum requirements of this section in the R645 Coal Rules.

**RECOMMENDATIONS:**

The information provided is considered adequate and meets the requirements of the regulations. It is recommended that this amendment be approved.