

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 30, 2004

OK

TO: Internal File

THRU: Peter H. Hess, Environmental Scientist III/Engineering, Team Lead *PHH by an*

FROM: *PB* Priscilla W. Burton, Environmental Scientist III/Soils

RE: Sealing South Portals, Canyon Fuel Company, LLC., SUFCO, C/041/002, Task ID #1965

SUMMARY:

On June 24, 2004, the Division received notification that the south portals would be sealed according to plan provided in Section 5.4.2.7 and in Section 5.5.1 of the MRP, and reclaimed according to methods described in Section 3.4.1. The amendment accompanying this notification does not add any further information on the reclamation of the south portals, but does remove from the plan all reference to the Muddy Creek breakout.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

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Analysis:

Soils are located at 7500' on slopes of 1:1 (Plate 5-2C) in Sec 12, T 22 S, R 4 E (Plate 5-6), about a mile distant from the main mine entries at the same elevation. Soil survey maps Plates 2-1 and 2-2 does not include the south portal area. However, the disturbed area soil map generally classifies soils at this elevation on the east facing slope as Soil Type T = loamy skeletal, mixed, frigid, calcixerollic xerochrept's.

Soil sample 24 (Vol 4, Appendix 2-2) provides some information on the soil type. Soil Type T is composed 50% of a sandy clay loam soil that is vegetated by pinyon and juniper on 60% slopes, having a litter layer 2-4 inches thick over a surface layer 10 – 12 inches thick with 35 – 60% rock fragments by volume. There is 50 – 65% rock fragments in the subsoils. Bedrock is found at 55 – 60 inches in depth. Thirty percent of the soil type is rock outcrop.

Findings

The information provided indicates that deep rocky soils are the norm for east facing slopes in the vicinity of the breakout.

OPERATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Topsoil Removal and Storage

There was no topsoil salvaged from the south portals probably due to the steep slope above a drainage. R645-301-232.700 allows for an exception to topsoil salvage under adverse conditions.

Findings:

The information provided meets the requirements of R645-301-232.700.

RECLAMATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

Plate 5-2C shows the location of the south portals. A detail of the site is also provided on Plate 5-2C. The narrative in Section 2.4.2.1 describes the redistribution of soil using hand labor for the Muddy Canyon Breakout. It is assumed that the same procedures will be used for the south portals.

Findings:

The information provided meets the requirements of the Regulations.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Narrative in Section 2.4.2.1 indicates that the surface soils will be roughened and deep gouged using hand rakes and shovels. The site will be seeded as described in Section 3.4.1, page 3-48 and 3-49 using 2,000 lbs mulch/acre, 100 lbs nitrogen/acre, and 100 lbs phosphorus/acre and the standard seed mix described in Section 3.4.1.2 will be broadcast over the area.

Findings:

The information provided meets the requirements of the Regulations.

RECOMMENDATIONS:

Approval is recommended. The gouging, fertilizer and mulch information should be confirmed during inspections.