

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

October 7, 2005

TO: Internal File

THRU: Wayne Western, Team Lead

FROM: Priscilla Burton, Reclamation Soil Scientist

RE: Phase I Bond Release Adit No. 1, Castle Gate Holding Co., Castle Gate Mine, C/007/0004, Task #2244

SUMMARY:

Adit No. 1 reclamation plan is described in Appendix 3-2 of the MRP. The pre-SMCRA disturbed area measured 3.0 acres, of which 1.5 acres were reclaimed in the fall of 2002. The remainder of the site was well vegetated or undisturbed by post-SMCRA operations. Substitute topsoil came from within the pad areas and was assessed for suitability prior to backfilling and grading (App. 3G of Appendix 3-2).

Foundation Coal Company applied for Phase I bond release for the Adit No. 1 area of the Castle Gate Mine on May 5, 2005. They completed reclamation of the area in the fall of 2002.

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TECHNICAL ANALYSIS:

RECLAMATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Redistribution

The site met the minimum topsoil and subsoil requirements for Phase I Bond release. The Permittee met those requirements by showing the post mining topography on Exhibit 3.5-3. Associated cross-sections are illustrated on Plate 3.5-3B. Table 3.5-7 provides a mass balance summary. There were 4,878 cu yds of material moved during regrading. The Division staff visited the site on September 8, 2004. Coal waste, asphalt, concrete and steel remain buried beneath four feet of clean fill (page 3.5-10).

This pre-SMCRA site was reclaimed using the best available material from within the disturbed area. The characteristics of the surface soils are provided in Appendix 3G.

The ephemeral channel was covered with three inches of soil and seeded and mulched as described on page 3.5-15 and Section 3.5 Appendix 3.5C page 8.

Findings:

The information provided meets the minimum Topsoil and Subsoil requirements for Phase I bond release.

STABILIZATION OF SURFACE AREAS

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

Analysis:

The Permittee met the minimum stabilization of surface areas requirements for Phase I Bond release. The site was furrowed on the contour. Two T /ac. of hay was scattered on the regraded surface (page 3.5-13). The hay was incorporated with gouging (page 3.5-13 and 3.5-18). Seed was broadcast over the site (Table No. 1, Chap. 9). Following the seeding, the site received an additional 1 to 1.5 tons per acre of straw much applied with mechanical blowers (page 3.5-14) and then was sprayed with a hydromulch and tackifier at a rate of 500 lbs per acre. An erosion control mat was placed in the channel bottom (page 3.5-15 and Section 3.5 Appendix 3.5C page 8). The channel was seeded and mulched as well.

After seeding and mulching, App. 3.5-D demonstrates that the amount of sediment estimated to leave the site is reduced to 0.2 Tons/acre/year. The field visit on September 4, 2005 confirmed that the Permittee has applied best management practices to control erosion and prevent sediments from leaving the site.

Findings:

The information provided in the application meet the minimum Stabilization of Surface Areas requirements for Phase I bond release.

RECOMMENDATIONS:

The 1.5 acre site is recommended for Phase I bond release.