

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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OK

February 8, 2007

TO: Internal File

FROM: Priscilla Burton, CPSSc, Environmental Scientist III *PWB.ryan*

RE: Disturbed Area Expansion, Canyon Fuel Company, Dugout Canyon Mine, C/007/0039, Task ID #2705

## SUMMARY:

On November 22, 2006, the Division received an application to expand the Dugout Mine by 0.5 acres at the confluence of the right and left forks of Dugout Creek. The expansion and subsequent topsoil stripping is proposed as a way "to prevent impacts to topsoil currently within the disturbed area and to allow potential for expansion of the coal storage piles." No information on coal storage pile expansion was included in the amendment.

With this amendment, the Dugout mine disturbed area includes:

23.50 acres for the mine facilities

24.85 acres for the degas wells

26 acres for the refuse site

74 acres approximate total

The following deficiencies were identified with this amendment.

**R645-301-232.100**, Due to the proximity to undisturbed drainages, please provide the following on a map: hatch marks showing the new extent of the disturbed area and shading to indicate the location of topsoil removal.

**R645-301-234.220**, The Permittee should consider an alternative location for storage of the 1,200 yd<sup>3</sup> of topsoil, since the topsoil storage location is known to have a cheat grass weed control problem.

**R645-301-231.400**, Please describe within the narrative of the amendment, the cheat grass control efforts taken, along with dates of implementation.

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**R645-301-420**, Appendix 4-1 of the MRP contains the 1999 air quality Approval Order DAQE-001-1999. App. 4-1 must be updated to contain the most recent air quality order and any recently filed Notice of Intent to revise the Air Quality Order must be included with the application. • Please state in Section 526.100 Mine Facilities and Structures of the MRP the dimensions of the stacking tubes and calculate the area required for the 7,500 Ton surge piles. [PWB]

**R645-301-526.222**, If there are no plans for coal stockpile expansion (none were included with the application), then topsoil removal may not be an appropriate response to solve the problem of coal fine deposition outside the existing disturbed area. The Permittee should evaluate the best available technology for coal fine containment, such as wind fences, tackifiers and water spray.

**TECHNICAL ANALYSIS:**

## **OPERATION PLAN**

### **AIR QUALITY**

**Regulatory Reference:** 30 CFR 784.26, 817.95; R645-301-244.

**Analysis:**

The facility is designed for two 7,500 Tons surge coal stockpiles (Figure 5-2). The annual throughput is 4.4 million tons of coal per year (Section 523). There is no information in the plan on the dimension of the stockpiles or the height of the stacking tubes. Therefore, the Division could not calculate the area required for each 7,500 Ton surge pile.

Appendix 4-1 contains the 1999 air quality Approval Order DAQE-001-1999 authorizing five million tons/yr throughput.

**Findings:**

The information provided does not meet the minimum requirements for Air Pollution Control Plan. The Permittee must submit the following, prior to approval, in accordance with:

**R645-301-420**, Appendix 4-1 of the MRP contains the 1999 air quality Approval Order DAQE-001-1999. App. 4-1 must be updated to contain the most recent air quality order and any recently filed Notice of Intent to revise the Air Quality Order must be included with the application. • Please state in Section 526.100 Mine Facilities

and Structures of the MRP the dimensions of the stacking tubes and calculate the area required for the 7,500 Ton surge piles. [PWB]

## TOPSOIL AND SUBSOIL

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

### Analysis:

#### Topsoil Removal and Storage

##### Dugout/Soldier Canyon Storage Area [12/02/05]

The amendment indicates that the affected soil type is in mapping units 96 and 21, similar to Test Pit 5, shown on Plate 2-1. Plate 5-2 outlines the additional disturbed area, but it is not clear the extent to which topsoil will be stripped from within the additional disturbed area, since it extends around to the slopes above the east and west forks of Dugout Creek. Due to the proximity to undisturbed drainages, please provide the following on Plate 5-2: hatch marks showing the new extent of the disturbed area and shading to indicate the location of topsoil removal.

Eighteen (18) inches of topsoil will be removed and sampled for analysis. Topsoil (estimated 1,200 yd<sup>3</sup>) will be stored at the topsoil storage site next to the Gilson Well riparian soils. Volume of stored topsoil would increase to 28,650 yd<sup>3</sup> (Table 2-2).

Some stockpiles at the topsoil storage site are covered with cheatgrass. For this reason, placement of additional topsoil at the Soldier Canyon topsoil storage site may not be the best location. The Permittee could consider an alternative location at the main facilities site. The Division requests an update on cheatgrass control with this amendment.

### Findings:

The information provided does not meet the requirements of topsoil storage operation plan. Prior to approval, please provide the following in accordance with:

**R645-301-232.100**, Due to the proximity to undisturbed drainages, please provide the following on Plate 5-2: hatch marks showing the new extent of the disturbed area and shading to indicate the location of topsoil removal.

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**RECOMMENDATIONS:**

The deficiencies should be addressed prior to approval.