

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

December 5, 2005

TO: Internal File

THRU: Peter H. Hess, Environmental Scientist III/Engineering, Team Lead

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

RE: Mid-Term Review, Canyon Fuel Company, LLC., Dugout Canyon Mine, C/007/039, Task ID #2348

SUMMARY:

The Division initiated a mid-term review of the Dugout Canyon Mine MRP on October 13, 2005 (see Outgoing file document 0072.pdf). After review of the soils section of the MRP, it is clear that the Permittee must provide as-built volumes for all stockpiles at the Soldier Canyon / Dugout Topsoil Storage Area. Commitments in the MRP direct the Permittee to provide an As-Built and indicate the storage area designated for Area #5 steep slope soils.

TECHNICAL ANALYSIS:

OPERATION PLAN

TOPSOIL AND SUBSOIL

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

Analysis:

Topsoil Removal and Storage

Refuse Site [05/05/05]

An amendment for the refuse site development is currently under review. In the amendment, Table 2-2 of RA Attachment 2-2 provides the estimated topsoil and subsoil volumes

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as 22,809 yd³. These volumes are considerably less than the anticipated salvage volume [44,317 cubic yards]. Salvaged topsoil material is further identified in Section 242.100 as follows:

- 1) 7,298 yd³ (topsoil stockpiled with berms included);
- 2) 15,511 yd³ (subsoil stockpile with berms included).

Pace Canyon [05/25/2005]

Two stockpiles are under construction in Pace Canyon for reclamation of the fan portal (Appendix 2-9 and Plate PC5-2). Both are located on ground from which the native soil was not recovered. Marker strips were placed on the surface of the area where the native soils were not recovered before the additional stockpile material was placed. These stockpiles are estimated to hold 566 and 3,027 cubic yards. They have been constructed with 2h:1v side slopes (Appendix 2-9). Figure 1 in Appendix 2-9 indicates the maximum depth of the south stockpile is 15 – 17 feet. The maximum depth of the north stockpile is 10 feet.

The north stockpile is surrounded with a subsoil berm (Section 234.200). This berm is three feet tall at its lowest point (designs for this berm are on page 37 of Attachment 1 in Appendix 7-12). The south stockpile has berms on either side directing flow to a silt fence. At the lower portion of the pile, this berm is two feet tall (designs in Appendix 7-12 Attachment 1, pp. 36-38).

Topsoil at Pace Canyon is also temporarily stockpiled above the portal and along the channel diversion area for immediate replacement after construction of the portal and channel diversion (Plate PC5-2 and MRP section 242.100). The temporary stockpile is protected with a silt fence.

The entire disturbed area is being fenced to protect the topsoil stockpiles from grazing and to keep livestock from entering the Mine workings (Pace Canyon Grazing Allotment No. 24085).

Final as-built volumes for the north and south stockpiles will be provided to the Division after construction is complete.

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

There exist four stockpiles at the Dugout portion of the Soldier Canyon / Dugout Storage Area (Plate 2-3). The first pile was created during Phase I construction. The second stockpile was created during Phase II construction of the mine site (permit issued on 10/16/98). A third pile contains riparian soils from the Gilson water well development. The fourth pile was created during the construction of the secondary electrical substation and is part of the soil/rock storage area specified on Plate 2-3. All piles are signed.

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The plan includes information on pile construction in Sections 224, 231.100, 231.400, and Plate 2-2 and Appendix 2-5. The current volume of all stockpiles is estimated at 27,400 cubic yards of soil (Table 2-2 and Sec. 233.200). Since construction, there has not been a survey of the actual volumes contained within the stockpiles.

The Division requests clarification of the location of the storage of the Area #5 soils described in Section 231.100 of the MRP. This clarification must include a designation of the soil types on Plate 2-3.

It is not clear whether an as-built map was ever provided after construction of the culvert showing locations of steep slope soil removal (as per the commitment at the bottom of page 2-29 of the MRP).

Findings:

The information provided does not meet the regulatory requirements of this section. Prior to approval, the Permittee must provide the following information, in accordance with:

R645-301-231.400, •The MRP must include surveyed volumes of all stockpiles at the Dugout Soldier Canyon Topsoil Storage Area. • The Division requests clarification of the storage location of the Area #5 soils described in Section 231.100 of the MRP.

R645-300-143, Please clarify whether an as-built map was ever provided after construction of the culvert showing locations of steep slope soil removal (as per the commitment at the bottom of page 2-29 of the MRP).

RECOMMENDATIONS:

The Permittee must provide as-built volumes for all stockpiles at the Soldier Canyon Topsoil Storage Area. Commitments in the MRP direct the Permittee to provide an As-Built and indicate the storage area designated for Area #5 steep slope soils.