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October 15, 1998

TO: File 2

THRU: Daron Haddock, Permit Supervisor

FROM: Michael Suflita, Reclamation Specialist

RE: Technical Analysis of Permit Application, Canyon Fuel Company, LLC, Dugout Canyon Mine - Phase II, ACT/007/039-98-1, File #2, Carbon County, Utah

SUMMARY

The Permit Application Package (PAP) for the Dugout Canyon Mine was approved by UDOGM and the permit was issued March 16, 1998. Construction at the mine site began in May 1998. The initial permit area did not include a parcel of BLM land that is located at the downstream end of the disturbed area. A special use permit has been obtained from the BLM for this parcel, and Canyon Fuel Company desires to expand the permit area onto this parcel, mainly to better accommodate a sedimentation pond for the mine pad. Other changes are also being made to the mine plan, such as water storage tanks up the canyon from the main pad area, expanded coal storage, and relocation of the electric-power sub-station, to better facilitate mining operations.

A Technical Analysis was completed by the Division and sent to the Applicant on August 25, 1998. The Applicant responded with a new submittals, the latest on September 29, 1998.

This Technical Analysis is limited to comments related to the incremental difference between the approved permit and these significant revisions. It is also limited to the surface facilities aspects of the application as directed.

TECHNICAL ANALYSIS

HYDROLOGIC RESOURCE INFORMATION

Hydrologic Resource Protection

Regulatory Reference R645-301-731.100

Analysis:

Several places in the MRP reference a mine water discharge to Dugout Creek. These include pages 7-49, 7-52, 7-69, and the UPDES Permit Appendix. Commitment is made to provide erosion protection if the discharge is outside of a culvert. In order to meet the coal regulatory program monitoring requirements, the Operator will need to define for themselves where and how the samples will be taken. The Operator is cautioned that this needs to take into account the MSHA and related safety issues attendant to the sampling, for example, inside culverts if that's where it occurs.

There are a minimum of four silt fences to be placed across Dugout Creek before installation of the culvert is begun. As described on page 5-44, these are to remain in place until after all initial construction is completed. The same protection is provided at reclamation.

Several places in the MRP reference the use of straw bales as shown in Figure 5-4 for sediment control. The methods of bale orientation and securing the bales has been modified to conform to the more current and best technology currently available.

Plate 7-5 shows the appropriate riprap protection for the outlets of Culverts DC-8 and DC-9.

Appendix 7-9, page 20 shows most of the ditches in the disturbed area are concrete lined which is optimal for erosion protection. Some less-steep sections do not need concrete and are riprap lined.

Finding:

Information provided in the application is considered adequate to meet the requirements of this section of the regulations.

Regulatory Reference R645-301-121.200

Analysis:

- There were several typographic errors in the plan that needed correcting. These have been corrected and include:

- Plate 7-5 no longer has a note at the bottom right that is left over from the original application.

- Page 7-65 now correctly describes DD-10 discharging into the drop inlet connecting DC-1 and DC-2.

- Plate 7-4, Section B-B' now shows the primary spillway and emergency spillways at the correct elevations. In addition, the Primary Spillway Riser Detail shows the top of the spillway riser at the correct elevation.

- Plates 7-4, 7-5, 7-8, and others, show the primary road at the lower end of the disturbed area ending near the sediment pond emergency spillway with a revised disturbed area boundary.

Finding:

Information provided in the application is considered adequate to meet the requirements of this section of the regulations.

Regulatory Reference R645-301-742.220

Analysis:

Although the disturbed area has been made larger, the surface hydrology aspects of the area remain basically the same. That is, the sediment pond is at the lowest end of the site and the ditches and culverts are in the same locations. The disturbed drainage areas and undisturbed drainage areas changed somewhat, generally becoming larger. The runoff curve numbers remained the same as previously approved.

The pond was designed using the appropriate 10-year, 24-hour design event. The primary spillway was designed using the appropriate 25-year, 6-hour event. Water exit velocity is below that of the natural stream flow. There is a separate emergency spillway which discharges into Dugout Creek with appropriate riprap protection. The emergency

spillway was designed using the appropriate 25-year, 6-hour event. The pond has a decant with valve control and the pond has adequate sediment storage and storm event volume. The Operator has committed to pond construction before mining begins.

Findings:

Information provided in the application is considered adequate to meet the requirements of this section of the regulations.

Regulatory Reference R645-301-742.311

Analysis:

Plate 7-5, and some of the other plates, showed a culvert at the extreme lower end of the disturbed area. Originally this culvert was shown as within the disturbed area, however, the disturbed area boundary was redrawn to exclude the culvert. This is logical since this culvert has already been installed and is part of the county road constructed by Carbon County.

A site visit by the Division Hydrologist showed no significant impacts should result from the configuration of the energy dissipator installed as part of the disturbed area construction, the culvert under the county road, and the side canyon entering Dugout Creek between them. A field report, with photos, detailing this situation is filed in Folder two of the MRP.

Finding:

Information provided in the application is considered adequate to meet the requirements of this section of the regulations.

Regulatory Reference R645-301-742.240

Analysis:

ASCA areas are discussed on pages 7-69 to 7-71 and are shown on Plate 7-8. ASCA-1 is a small paved road surface below the sediment pond. ASCA's 2 and 3 are sections of the road above the main disturbed area which cannot drain to the sed pond. These are appropriately handled using silt fences and straw bales in the ditches and riprapped outlets for the culverts. ASCA-4 is a small area at the uppermost end of the road above the disturbed area and it is handled using gravel surfacing.

Finding:

Information provided in the application is considered adequate to meet the requirements of this section of the regulations.

RECOMMENDATION:

The proposed revision can now be approved.

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