

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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February 5, 2007

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TO: Internal File

THRU: Priscilla Burton, Team Lead *PLB by an*  
Pamela Grubaugh-Littig, Supervisor

FROM: *SC* Steve Christensen, Environmental Scientist II

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

## SUMMARY:

On November 22, 2006, the Division of Oil, Gas and Mining (the Division) received an application from Canyon Fuel Company, LLC (the Permittee) to revise the approved Mining and Reclamation Plan (MRP) for the Dugout Mine by expanding the disturbed area by 0.5 acres. The purpose of the expansion is to prevent impacts to topsoil currently located within the permitted disturbed area and to allow for the potential expansion of the coal storage piles.

The hydrologic information provided does not meet the requirements of the State of Utah R645-Coal Mining Rules. The proposed amendment should not be approved until the following deficiencies are addressed.

**R645-301-731**, The Permittee should provide a commitment that, upon approval of the amendment, all maps that depict the disturbed area boundary within the MRP will be updated to reflect the expansion. Upon inspection of the disturbed area boundary depicted on Plate 7-5, Disturbed Area Diversions, it appears that it does not match the disturbed area boundary on either the currently approved Plate 5-2 or the recently submitted Plate 5-2. The disturbed area boundary should be consistently depicted throughout the MRP.

**R645-301-732**, The Permittee should provide clarification as to the sediment control measures to be employed during the initial clearing and topsoil removal phase of the project as well as to the sediment control measures to be utilized following the removal of the topsoil pile. The Permittee should provide a narrative describing what sediment control measures would be implemented to prevent, to the extent possible, additional contributions of sediment to the undisturbed drainages (UC-5 and UC-6) as a result of this project.

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**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

**Analysis:**

**General**

The application meets the Operational Plan regulations for General Hydrologic Requirements as provided in R645-301-731. Plate 5-2 (Surface Facilities) depicts the location of the proposed disturbed area expansion. Plates 5-3(7), 5-3(8) and 5-3(9) (Surface Facility Cross Sections) depict the cross sections of the Dugout surface facility within the proposed disturbed area as well as outside the proposed expansion zone.

The proposed expansion of the disturbed area is contained within the approved Permit area. As such, the existing drainage system will convey and treat the storm water runoff generated from the newly disturbed area. Due to the small area of newly proposed disturbance, revisions and/or changes to the drainage system are unnecessary at this time.

The excavated topsoil (estimated at approximately 1,200 cubic yards) will be transported to the Soldier Canyon storage area.

**Sediment Control Measures**

The application does not meet the Operational Plan regulations for Sediment Control Requirements as provided in R645-301-732. The proposed disturbed area expansion is located directly adjacent to the inlets for undisturbed drainage culverts UC-5 and UC-6. The Permittee should provide clarification as to the sediment control measures to be employed during the initial clearing and topsoil removal phase of the project as well as to the sediment control measures to be utilized following the removal of the topsoil pile. The Permittee should provide a narrative describing what sediment control measures would be implemented to prevent, to the extent possible, additional contributions of sediment to the undisturbed drainages located adjacent to the proposed disturbed area expansion.

**Findings:**

The information provided does not meet the hydrology requirements for Hydrologic Information as provided in the R645-State of Utah Coal Mining Rules. The following deficiencies should be addressed:

**R645-301-732**, The Permittee should provide clarification as to the sediment control measures to be employed during the initial clearing and topsoil removal phase of the project as well as to the sediment control measures to be utilized following the removal of the topsoil pile. The Permittee should provide a narrative describing what sediment control measures would be implemented to prevent, to the extent possible, additional contributions of sediment to undisturbed drainages (UC-5 and UC-6) as a result of this project.

**MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

**Analysis:**

**Mining Facilities Maps**

The application does not meet the Operational Plan requirements for Mining Facilities Maps as provided in R645-301-731. Upon comparing the submitted Plate 5-2 (Surface Facilities) with the approved MRP Plate 5-2, the location and relative size of the proposed disturbed area expansion is apparent. However, there are numerous maps depicting the disturbed area within the MRP. Upon inspection of the disturbed area boundary depicted on Plate 7-5, Disturbed Area Diversions, it appears that it does not match the disturbed area boundary on both the currently approved Plate 5-2 and the recently submitted Plate 5-2. The Permittee should provide clarification as to which Disturbed Area is the official representation and alter all maps within the MRP so that the disturbed area boundary is consistently represented throughout the MRP.

**Findings:**

The information provided does not meet the hydrology requirements for Mining Facilities Maps as provided in the R645-State of Utah Coal Mining Rules. The following deficiencies should be addressed:

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**R645-301-731**, The Permittee should provide a commitment that, upon approval of the amendment, all maps that depict the disturbed area boundary within the MRP will be updated to reflect the expansion. Upon inspection of the disturbed area boundary depicted on Plate 7-5, Disturbed Area Diversions, it appears that it does not match the disturbed area boundary on both the currently approved Plate 5-2 and the recently submitted Plate 5-2. The disturbed area boundary should be consistently depicted throughout the MRP.

**RECOMMENDATIONS:**

The hydrologic information provided in the application does not meet the requirements of the State of Utah R645-Coal Mining Rules. The proposed amendment should not be approved at this time.