

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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August 29, 2012

TO: Internal File

THRU: Priscilla Burton, Team Lead *PWB by 8/25*

FROM: Amanda Daniels, Environmental Scientist AD

RE: North Lease Permit Modification, Canyon Fuel Company, Skyline Mine, C/007/0005, Task #4092

### SUMMARY:

On May 2, 2012, the Utah Division of Oil Gas & Mining received an application for an amendment to the Mining & Reclamation Plan (MRP) of the Skyline mine. The application seeks approval to extend the Skyline Mine North Lease area approximately 770.52 acres. Approximately 690 acres are being undermined in the Fish Creek drainage. The amendment is considered a significant revision.

This memo addresses the application's compliance with the hydrology (R645-301-700) section of the Utah Coal Mining Rules.

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiencies were identified:

**R645.301.731.211 & R645.301.724** Required water monitoring parameters include total iron and total manganese. Please include these in your water monitoring plan.

**R645.301.724 & R645.301.731.200** Please consult with the Water Rights Division to ensure all water rights in the immediate area around the lease expansion are included.

**R645.301.724.100** Baseline water information requires an explanation of seasonal quality and quantity of the existing groundwater. Please demonstrate this with appropriate monitoring in the proposed lease expansion.

**R645.301.724.100** Establishing the baseline hydrologic information for the proposed expansion area requires the approximate rates of discharge or usage and depth to the water in the

coal seam, and each water-bearing stratum above and potentially impacted stratum below the coal seam. Please revise the MRP accordingly.

**R645.301.724.310** The PHC is inadequate with regard to the proposed lease expansion area, until baseline information on seasonal water quality and quantity has been established and the PHC has been updated with this information.

**TECHNICAL ANALYSIS:**

**ENVIRONMENTAL RESOURCE INFORMATION**

**HYDROLOGIC RESOURCE INFORMATION**

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

**Analysis:**

**Baseline Information**

Section 2.3 was updated and indicates that a survey of water rights in the area of the proposed lease expansion was conducted in 2012 and list existing water rights as 91-3916, 91-3917, 91-3920, 91-3921, and 91-3940 through 91-3944 (excluding 91-3942). They state that these are used for stockwatering and are claimed by the USFS or the Euray Allred family. The Utah Division of Water Rights was not consulted regarding existing water rights.

Baseline data was not submitted for spring S25-32. Baseline information demonstrating approximate rates of discharge or usage and depth to water in the coal seams for the proposed expansion was not established. Information regarding water-bearing stratum above the coal seam and potentially impacted stratum below the coal seams were not identified.

**Probable Hydrologic Consequences Determination**

Section 2.3 was updated and states that the proposed mine plans indicate that 900-1300 feet of overburden separate the mine workings from the surface and that impacts to the water resources are not anticipated. The PHC was not updated.

**Groundwater Monitoring Plan**

Table 2.3.7-1 has been updated to include that spring S25-32 will be monitored quarterly, beginning in 2012 for flow, pH, specific conductance and water temperature.

**Findings:**

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiencies must be addressed prior to the Division approval of the application:

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**R645.301.724.100** Baseline water information requires an explanation of seasonal quality and quantity of the existing groundwater. Please demonstrate this with appropriate monitoring in the proposed lease expansion.

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## 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:

##### Groundwater Monitoring

Table 2.3.7-1 has been updated to include that spring S25-32 will be monitored quarterly, beginning in 2012 for flow, pH, specific conductance and water temperature.

#### Findings:

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiencies must be addressed prior to the Division approval of the application:

**R645.301.731.211 & R645.301.724** Required water monitoring parameters include total iron and total manganese. Please include these in your water monitoring plan.

**RECOMMENDATIONS:**

The application should not be approved at this time.