



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

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September 17, 1998

TO: File

THRU: Joe Helfrich, Permit Supervisor *Jeh*

FROM: James D. Smith, Reclamation Specialist *JDS*

RE: Waste Rock Disposal, Canyon Fuel Company, LLC, Banning Loadout, ACT/007/034-98A, File #2, Carbon County, Utah.

**SUMMARY**

UDOGM received a proposed amendment to the Banning Loadout MRP on August 25, 1998. The amendment package consists of "Appendix 5-3 - Temporary waste rock storage area - Dugout Canyon Mine waste rock", a new table of contents, and a new Exhibit 5-2. The proposed waste-rock storage will be only until a permanent waste-rock disposal area for the Dugout Canyon Mine can be permitted and built, at which time the waste rock will be moved to the permanent disposal area.

**TECHNICAL ANALYSIS**

**ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR Sec. 783., et. al.

**GEOLOGIC RESOURCE INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.22; R645-301-623, -301-724.

**Analysis:**

No new or additional geologic information is included in this proposed amendment. Reference is made to current Banning Loadout MRP for geologic information.

**Findings:**

Information in the geologic resource section is considered adequate to meet the requirements of this section.

## **HYDROLOGIC RESOURCE INFORMATION**

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

**Analysis:**

**Baseline cumulative impact area information.**

The proposed amendment to the Banning Loadout MRP will not require a new CHIA or revision of the existing CHIA.

A technical analysis was not done for the following Hydrologic Resource Information sections because they are not involved in or affected by the proposed amendment.

- **Sampling and analysis.**
- **Baseline information.**
- **Modeling.**
- **Alternative water source information.**
- **Probable hydrologic consequences determination.**
- **Ground-water monitoring plan.**
- **Surface-water monitoring plan.**

**Findings:**

Information in the hydrologic resource section is considered adequate to meet the requirements of this section.

## **MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION**

Regulatory Reference: 30 CFR Sec. 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

### **Analysis:**

#### **Existing Structures and Facilities Maps.**

#### **Surface and Subsurface Manmade Features Maps.**

Exhibit 5-2 shows existing structures, facilities, and manmade features. There are currently no areas of spoil, waste, coal development waste, or noncoal waste disposal; no dams or embankments; and no water treatment or air pollution control facilities within the permit area. There are no major electric transmission lines, pipelines, and agricultural drainage tile fields.

#### **Existing Surface Configuration Maps.**

#### **Contour Maps.**

Exhibit 5-2 adequately represents the existing land surface configuration of the area, except that where the waste-rock storage pile is planned the radial-stacker coal pile has blocked westward drainage and created a low spot where rainwater and snowmelt ponds.

#### **Certification.**

Exhibit 5-2 is certified by a registered professional engineer.

A technical analysis was not done for the following maps, plans, and cross sections of resource information because they are not involved in or affected by the proposed amendment.

- **Affected Area Boundary Maps.**
- **Archeological Site Maps.**
- **Coal Resource and Geologic Information Maps.**
- **Existing Structures and Facilities Maps.**
- **Existing Surface Configuration Maps.**
- **Cultural Resource Maps.**
- **Mine Workings Maps.**
- **Monitoring Sampling Location Maps.**
- **Permit Area Boundary Maps.**
- **Subsurface Water Resource Maps.**
- **Surface and Subsurface Ownership Maps.**
- **Surface Water Resource Maps.**
- **Vegetation Reference Area Maps.**

- **Well Maps.**

### **Findings:**

Maps, plans, and cross sections of resource information are not considered adequate to meet the requirements of this section. Prior to approval the permittee must provide the following information:

**R645-301-722.500** - Exhibit 5-2 adequately represents the existing land surface configuration of the area except where the coal pile from radial-stacker has blocked westward drainage and created a low spot where rainwater and snowmelt ponds.

## **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, -300-147, -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:**

#### **Acid and toxic-forming materials.**

Waste rock brought to the Banning Loadout will be sampled at a rate of 1 sample for every 2000 tons. If acid- or toxic-forming material is found, it will be buried within the storage pile under 4 feet of non-acid- and toxic-forming material.

#### **Impoundments.**

Exhibit 5-2 indicates that the waste-rock storage pile is to be located where rainwater and snowmelt ponds because the radial-stacker coal pile blocks natural westward drainage. Saturation of the waste by this water could result in spontaneous combustion if the coal content in the waste were high enough.

The permit application needs to include a description of measures to be employed to ensure that materials constituting a fire hazard are disposed of in accordance with the Coal

Mining Rules, and a description of the contingency plans which have been developed to preclude sustained combustion of such materials. Placing the waste in another area with better drainage, such as west of the radial stacker, would reduce the possibility of spontaneous combustion.

A technical analysis was not done for the following Hydrologic Operation Plan Information sections because they are not involved in or affected by the proposed amendment.

- **Ground-water monitoring.**
- **Surface-water monitoring.**
- **Transfer of wells.**
- **Discharges into an underground mine.**
- **Gravity discharges.**
- **Water quality standards and effluent limitations.**
- **Diversions.**
- **Stream buffer zones.**
- **Sediment control measures.**
- **Siltation structures.**
- **Sedimentation ponds.**
- **Other treatment facilities.**
- **Exemptions for siltation structures.**
- **Discharge structures.**
- **Casing and sealing of wells.**

#### **Findings:**

Hydrologic operations information in the operation plan is not considered adequate to meet the requirements of this section. Prior to approval the permittee must provide the following information:

**R645-301-528.350, -536.230** - The permit application needs to include a description of measures to be employed to ensure that materials constituting a fire hazard are disposed of in accordance with the Coal Mining Rules, a description of the contingency plans which have been developed to preclude sustained combustion of such materials, and that the waste will be placed in a controlled manner to prevent combustion.

## **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.**

Exhibit 5-2 adequately represents the existing land surface configuration of the area, except that where the waste-rock storage pile is planned the radial-stacker coal pile has blocked westward drainage and created a low spot where rainwater and snowmelt ponds. Saturation of the waste by this water could result in the waste pile's burning if the coal content in the waste were high enough.

#### **Certification Requirements.**

Exhibit 5-2 is certified by a registered professional engineer.

A technical analysis was not done for the following maps, plans, and cross sections of mining operations because they are not involved in or affected by the proposed amendment.

- **Affected area maps.**
- **Mine workings maps.**
- **Monitoring and sample location maps.**

### **Findings:**

Maps, plans, and cross sections of mining operations are considered adequate to meet the requirements of this section.

## **RECLAMATION PLAN**

### **HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

#### **Analysis:**

The waste rock is to be removed from the site before the site is reclaimed.

#### **Findings:**

Hydrologic information in the reclamation plan is considered adequate to meet the requirements of this section.

### **CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT**

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

The Division has prepared a CHIA that includes the Banning Loadout. The proposed modification to the top-soil storage will not require a new CHIA or revision of the existing CHIA.