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# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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February 13, 2007

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TO: Internal File

THRU: Wayne Hedberg, Permit Supervisor *WH*  
Jim Smith, Team Lead *JS*

FROM: Wayne H. Western, Environmental Scientist III, Bonding *WHW*

RE: Loadout Expansion, Task ID # 2739, CO-OP Mining Company, Bear Canyon Mines, C/015/0025

### SUMMARY:

The Permittee submitted an application to the Division on March 27, 2006 to expand the loadout area at the Bear Canyon operation. The purpose of this expansion is to build a truck loading area that will allow the Permittee to load two trucks simultaneously.

### TECHNICAL ANALYSIS:

## ENVIRONMENTAL RESOURCE INFORMATION

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

### PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

### Analysis:

The Permittee did not meet the requirements of this section of the regulations. The Permittee must update Table 1-4 to show the addition of 0.05 disturbed acres. In addition, the Permittee must also include a table that shows the permitted acres and the subtotal for federal, State and fee lands.

### Findings:

The information in the amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R6545-301-521.190**, The Permittee must update Table 1-4 to show the addition of 0.05 disturbed acres. In addition, the Permittee must also include a table that shows the permitted acres and the subtotal for federal, State and fee lands.

## **OPERATION PLAN**

### **MINING OPERATIONS AND FACILITIES**

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

#### **Analysis:**

The Permittee met the requirements of this section. The Permittee expanded the truck loadout so that they could accommodate more trucks. The expansion was in anticipation of longwall operations that increased production. The expansion involved an additional 0.05 acres of disturbance.

#### **Findings:**

The information in the amendment is considered adequate to meet the requirements of this section.

### **AIR POLLUTION CONTROL PLAN**

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

#### **Analysis:**

The Permittee meet the air pollution control requirements. They have permits from the Division of Air Quality as needed. The modifications to the loadout will not require any changes to the air quality permits.

#### **Findings:**

The information in the amendment is considered adequate to meet the requirements of this section.

### **ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

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TECHNICAL MEMO

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**Analysis:**

**Road Classification System**

The Permittee met the requirements of this section by continuing to classify the Bear Canyon Haul Road as a primary road.

**Plans and Drawings**

The Permittee did not meet the general requirements of the regulations outlined in this section. The requirements are:

- The Permittee did include maps and cross sections of the proposed roads. Map 5-2C shows the surface facilities including the loadout expansion. The cross section show:
  - The asphalt surface of the Bear Canyon Haul Road
  - The concrete loading pads on the Bear Canyon Haul Road.

The Permittee did not meet the specific requirements for a primary road. Those requirements are:

- The reclamation plan for the Bear Canyon Haul Road must include how much material will be placed over the concrete and coal mine waste. At a minimum four feet of material must be placed over all coal mine waste unless the Permittee can show and the Division agrees that a less amount is sufficient to meet the requirements. In addition the concrete must be broken up to allow root penetration and there must be sufficient soil above the concrete to allow for plant development.
- The cross sections must be certified by a registered professional engineer.
- The Permittee must show that all road embankments have a minimum static safety factor of 1.3 or greater.

**Primary Road Certification**

The Permittee did not meet the primary road certifications for the Bear Canyon Haul Road because the cross sections were not certified.

**Other Transportation Facilities**

The Permittee meet the requirements for other transportation facilities. The Permittee showed the conveyors on Map5-2C.

**Findings:**

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-534.130**, The Permittee must address how the Bear Canyon Haul Road will meet the minimum static safety factor of 1.3. The Division needs to make a finding that the road will meet the 1.3 safety factor. If the information is not in the amendment, then the Division cannot make the finding and the Division will deny the amendment.

**R645-301-534.140**, The Permittee must include a reclamation plan for the roads associated with the Bear Canyon Haul Road that includes a plan for placing a minimum of four feet of material over the coal mine waste and the fracturing of the concrete pads.

**645-301-512.250**, The Permittee must have all maps and cross section that show the designs for the roads associated with the truck loadout expansion certified by a registered professional engineer. For examples, cross sections TS-5 + 400 to TS-5 + 800 were not certified.

**SPOIL AND WASTE MATERIALS**

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

**Analysis:**

**Coal Mine Waste**

The Permittee did not meet the requirements for the use of coal mine waste in modification of the Bear Canyon Haul Road. The Division requires that all coal mine waste that is used for construction meet the minimum requirements for coal mine waste storage and disposal.

**Refuse Piles**

The Permittee did not meet the requirements for the construction of Bear Canyon Haul Road because they propose to use coal mine waste but did not address the refuse pile regulations. All coal mine waste must be placed in a refuse pile. The Division considers the Bear Canyon

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**TECHNICAL MEMO**

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Haul Road to contain a refuse pile since coal mine waste was used for road construction. The Permittee must show how all of the refuse pile requirements were met.

**Findings:**

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-528.320 and R645-301-528.332**, The Permittee must show that the coal loadout road and all associated structures that are constructed with coal mine waste meet the requirements for coal mine waste handling and storage and refuse piles. Note: cross sections TS-5 + 400 to TS-5 + 800 show that coal mine waste will be used in the construction of the coal loadout road.

**SUPPORT FACILITIES AND UTILITY INSTALLATIONS**

Regulatory Reference: 30 CFR Sec. 784.30, 817.180, 817.181; R645-301-526.

**Analysis:**

The Permittee did not meet the requirements of this section. The Permittee must update Appendix 5-A to show the structures and facilities that were added and removed because of the truck loadout expansion.

**Findings:**

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-526**, The Permittee must update Appendix 5-A to show when conveyors and other facilities were added and removed because of the coal loadout modification.

**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 Permittee met the minimum requirements of the regulations by providing maps and cross sections that show the modifications to the coal loadout facility including the road.

**Findings:**

The information provided in the proposed amendment is considered adequate to meet the requirements of this section.

## **RECLAMATION PLAN**

### **APPROXIMATE ORIGINAL CONTOUR RESTORATION**

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

**Analysis:**

The Permittee met the requirements of this section. The truck loadout modification will only require minor modifications to the existing reclamation plan and should not affect the Permittee's ability to achieve approximate original contour requirements.

**Findings:**

The information provided in the proposed amendment is considered adequate to meet the requirements of this section.

### **BACKFILLING AND GRADING**

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

**Analysis:**

**General**

The Permittee met the requirements of this section. The truck loadout modification will only require minor modifications to the existing reclamation plan and should not affect the Permittee's ability to meet the backfilling and grading requirements.

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**TECHNICAL MEMO**

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**Findings:**

The information provided in the proposed amendment is considered adequate to meet the requirements of this section.

**ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

**Analysis:**

**Reclamation**

The Permittee did not meet the requirements of this section. The Permittee must include detailed reclamation plans for the coal loadout road. The plan must explain how the coal mine waste will be handled at reclamation.

**Findings:**

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-534.140**, The Permittee must include a reclamation plan for the roads associated with the truck loadout that includes plans for placing a minimum of four feet of material over the coal mine waste and the fracturing of the concrete pads

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

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

**Analysis:**

**Bonded Area Map**

The Permittee met the requirements of this section of the regulations. Plate 5-2C shows the bonded (disturbed) area.

### **Reclamation Backfilling And Grading Maps**

The Permittee met the requirements of this section of the regulations. Plate 5-6c shows the reclaimed area.

### **Final Surface Configuration Maps**

The Permittee met the requirements of this section of the regulations. Plate 5-6c shows the reclaimed area.

### **Certification Requirements.**

The Permittee did not meet the primary road certifications because the cross sections were not certified.

### **Findings:**

The information provided in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following in accordance with:

**R645-301-526**, The Permittee must update Appendix 5-A to show when conveyors and other facilities were added and removed because of the coal loadout modification.

## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

### **Analysis:**

#### **Determination of Bond Amount**

The Division determined the amount needed for the Division to reclaim the Bear Canyon Mine in the event of bond forfeiture. That amount is \$2,187,000 in 2008 dollars.

The current bond is for \$1,825,000, therefore, the Permittee must post an additional \$362,000.

In addition, the Permittee must incorporate copies of the Division's reclamation cost estimate into the MRP.

**TECHNICAL MEMO**

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**Findings:**

The information provided by the Permittee in the proposed amendment is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the following information in accordance with:

**R645-301-830.100**, The Permittee must incorporate the Division's reclamation cost estimate into the MRP.

**R645-301-830.200**, The Permittee must increase the bond to a minimum of \$2,187,000.

**RECOMMENDATIONS:**

The Division should deny the amendment until the Permittee posts adequate bond and meets all of the other deficiencies.