

# 4005

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# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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March 5, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor *SKC*

FROM: James Owen, Lead/Engineer *JO*

RE: Update Drainage Plan, Utah American Energy, Horse Canyon Mine, C/007/0013,  
Task ID #4005

## **SUMMARY:**

On February 6, 2012, the Division of Oil, Gas & Mining received an application from Utah American Energy to amend the Horse Canyon Mine's Mining & Reclamation Plan (MRP). The applicant requests approval to update its drainage plan.

This memo addresses the application's compliance with the engineering (R645-301-500) and hydrology (R645-301-700) sections of the Utah Coal Mining Rules.

TECHNICAL MEMO

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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, -300-147, -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:**

The application states that all temporary drainage reports to either an Alternate Sediment Control Area (ASCA) or to a sediment control pond. On pages 59-64 of Appendix 7-4, the applicant included modifications to designate and define areas that are considered ASCA's. On page 63, a new section was included titled "Non-ASCA Areas". The items that the applicant seeks to define as Non-ASCA's include the north and south ventilation breakout areas. Details are provided in terms of pad sizes and expected precipitation amounts.

The application states that runoff from the pads (which are mainly bedrock) will flow to the portals and will be treated with mine water through mine water sumps. It is expected that the majority of this runoff water will evaporate prior to reaching the mine sumps due to ventilation air flow.

**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 were identified:

**R645-301.742.240** The ventilation breakout areas cannot be considered "Non-ASCA Areas" as described in the application. The runoff encountered on the breakout pads is being treated through underground sumps in accordance with R645-301.742.126. The amendment must be modified to include ventilation breakouts area's as ASCA's or as Small Area Exemptions (SAE's). According to the Division's definitions, an ASCA can be considered for SAE when the minimal surface disturbance is covered with non-erodible cover, the area produces no runoff, or if effluent limits will be met. In this case the Division expects that effluent limitations will be met via the mine discharge outfall. Please modify pages 59-63 to include the ventilation breakouts as Small Area Exemptions.

**R645-301.731.511.3** The applicant states that water quality standards and effluent limitations would be met. For completeness and clarity please include definitive commitments that these standards and limits will be met for the breakout pads via the mine discharge outfall.

## **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:**

The application included certified maps detailing the Proposed Sediment Control (Plate 7-5), and Surface Area Official Disturbed Boundary (Plate 5-2).

### **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 deficiency was identified:

**R645-301.512.130 & 140** Maps 5-2 and 7-5 must be updated to include the ventilation breakout areas as SAE's (Small Area Exemptions). These cannot be considered Non-ASCA's. They are ASCA's but also qualify as SAE's. Please include this designation on both maps.

### **RECOMMENDATIONS:**

The application is not recommended for approval at this time.