

#4198

OK

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

---

November 5, 2012

TO: Internal File

THRU: Daron Haddock, Program Manager, Team Lead 

FROM: James Owen, Engineer 

RE: Drainage Control Adjustments, Alton Coal Development, Coal Hollow Mine, C/025/005, Task ID #4198

## SUMMARY:

On October 9 2012, The Utah Division of Oil Gas & Mining (Division) received and application for an amendment to the Mining and Reclamation Plan (MRP) of the Coal Hollow Mine. The primary purpose of the address deficiencies identified in a previous application (task # 4101) for the inclusion of a plan for the management of alluvial groundwater that has been encountered during surface coal mining activities.

This memo addresses the application's compliance with the engineering (R645-301-500) and bonding (R645-301-800) sections of the Utah Coal Mining Rules.

TECHNICAL MEMO

---

**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 following deficiencies were identified during the most recent (task #4101) review process:

- ***R645-301.533.712; .526.155*** Figure 1 includes anticipated design details for the perforated pipe and culvert. The drawing should include the anticipated maximum depth and maximum width of the trench as well as the anticipated thickness of the layer of gravel. Once the anticipated design is complete, the applicant must commit to informing the Division of any variations from the design prior to installation so that the Division may verify compliance during installation.

In the current application, the operator commits to provide the Division a map showing the area where interceptor drains are proposed for construction at such a time as these become necessary. The applicant will provide an updated copy of this map within 15 days of the construction of any alluvial groundwater interceptor drains. The map will include a legend with details on construction specifications in relation to the standard design. Text has been added to page 11 of Appendix 7-9 (Alluvial Groundwater Management Plan) to reflect this commitment.

Standard design specifications for alluvial groundwater interceptor drains are described in Appendix 7-9 of the application. The drains will be constructed within previously permitted disturbed areas that are hydraulically up-gradient of mine pit areas where such drains are necessary. If alluvial groundwater intercept drains are required in other area, these will be constructed upon approval from the Division.

**Findings:**

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

## **BONDING AND INSURANCE REQUIREMENTS**

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

### **Analysis:**

The following deficiencies were identified during the most recent (task #4101) review process:

- *R645-301-800 The applicant must provide information on the maximum amount of interceptor drains that may be constructed in disturbed areas that are not intended to be mined. The Division must consider these as support facilities and will need to verify that the permittee is adequately bonded for demolition of the structures.*

In the current application, the operator states that a maximum of two interceptor drains will be built and operational at any time. A line item has been added to Chapter 8 Appendix 8-1 to include the demolition and disposal requirements of the dewatering system. The unit cost estimates for the system are \$3,775 per trench. Because a maximum of two trenches can be installed an operational at any given time, the total reclamation cost is listed at \$7,550. Unit cost estimates are derived from RSMeans Heavy Construction Reference Manual.

### **Findings:**

Contents and information provided are sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules.

### **RECOMMENDATIONS:**

Approval is recommended at this time.