

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

October 1, 2003

TO: Internal File

THRU: Peter Hess, Senior Reclamation Specialist, Team Lead

FROM: Gregg Galecki, Sr. Reclamation Specialist, Hydrologist

RE: As-built of Sediment Pond, Canyon Fuel Company, LLC, Dugout Mine  
C/007/0039- #1708

## **SUMMARY:**

The following is a review of information submitted to the Division on September 22, 2003. The current application addresses revisions to Chapter 7 and Plate 7-4 to reflect changes associated with the sediment clean-out process of the Dugout Canyon Mine sediment pond. Modifications to the Primary Spillway design were associated with required remedial action pursuant to Notice of Violation (NOV) N03-46-3-1, which included encasing the bottom portion of the Primary Spillway in concrete. The review is from a hydrologic perspective and addresses only regulations germane to hydrology. The information provided adequately addresses the minimum requirements of the regulations and incorporation into the currently approved Mine Reclamation Plan is recommended.

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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:**

#### **Siltation Structures: Sedimentation Ponds**

Text in Chapter 7 of the MRP (Pg. 7-75) has been modified to reflect as-built information for the Sediment Pond due to surveying conducted in July 2003. The text was also modified to indicate that stage-curve information for the Sediment Pond is available on Plate 7-4 instead of Appendix 7-8.

**Findings:**

The information provided adequately addresses the minimum requirements of the Operation Plan – Hydrologic Information section of the regulations.

### **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**

Plate 7-4 was modified to include as-built information based on survey information collected in July 2003. The plate now also includes the Sediment Pond Stage Storage Curve graph. The plate also illustrates the location of the Sediment Clean-out marker that is located on the primary spillway riser.

During routine cleaning of the Sediment Pond in July 2003, the vertical pipe functioning as the Primary Spillway was breached sending coal fines into Dugout Creek. As a remedial action to avoid a similar occurrence in the future, the bottom 4-feet of the vertical pile and

approximately 14-feet of the horizontal pipe draining the vertical pipe have been encased in concrete. This encasement will serve as 'armoring' for the pipe to reduce the likelihood of the pipes being breached by a backhoe during routine cleaning of the pond. This cement encasement is illustrated in Plate 7-4.

### **Certification Requirements**

Plate 7-4 has been updated with as-built information. The plate has been stamped, dated, and certified as being correct by Professional Engineer David G. Spillman (State of Utah – No. 151610).

### **Findings:**

The information provided adequately addresses the minimum requirements of the Operation Plan – Maps, Plans, and Cross Sections of Mining Operations section of the regulations.

### **RECOMMENDATIONS:**

Incorporation of the proposed amendment into the currently approved Mine Reclamation Plan is recommended.