

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

January 22, 2007

JK

TO: Internal File

THRU: Wayne Hedberg, Permit Supervisor, Task Manager *DWH*

FROM: Peter H. Hess, Environmental Scientist/Engineering, Team Lead *PHH by an*

RE: Revised Map 7-2, Mine Site Drainage Map, Utah American, Inc., West Ridge Mine, C/007/041, Task ID #2738

SUMMARY:

The Permittee submitted a revised Map 7-2, Mine Site Drainage Map to the Division on January 16, 2007. The only revision to the map is the addition of riprap to an outslope area adjacent to the crusher building / coal reclaim belt which transfers coal to the truck loading facility. Erosive action on this slope had been noted by the assigned DOGM reclamation specialist and the Division requested that the Permittee address the issue, and update the appropriate map in the Mining and Reclamation Plan.

Task ID #2738 is the submittal of the revised Map 7-2, Mine Site Drainage Map. There are no text changes to Chapter 7, Hydrology of the mining and reclamation plan.

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.

TECHNICAL MEMO

Analysis:

Sediment Control Measures

The Permittee submitted a revised Map 7-2, Mine Site Drainage Map on January 16, 2007 to show added rip-rap on the outslope adjacent to the crusher building / coal reclaim belt. Wash down water from the crusher building and concrete pad area located at the base of this building had been reporting over the pad outslope, thence to the diversion identified as DD-12. Erosion of the slope had occurred, with an area about six feet in width and fifteen feet in length being affected.

The Permittee first attempted to correct the situation by placing a half round culvert through the area, but the completed job was not effective, as the inlet end of the half-round would not effectively receive future flows from the pad.

During the course of a follow-up inspection with the Division, the Permittee's resident agent re-discussed this area with the DOGM inspector. It was agreed that the area would be provided better protection if the half-round was removed and riprap was placed to prevent further erosive action. The Permittee then agreed to update the surface drainage map accordingly (Map 7-2).

The volume of wash down water that reports to the riprapped area is small and has low velocity. The volume is also intermittent. The size of the installed riprap is adequate to protect the outslope and prevent further erosive action. The Permittee intends to grout the rock in place when temperatures improve. The flow will report to disturbed area ditch DD-12 (at the toe of the slope) when it leaves the protected area. DD-12 reports any runoff to disturbed area culvert DC-12, thence to Cell B (the lower cell of the dual cell sediment pond).

Findings:

The minimum requirements of R645-301-731.720 and R645-301-512.140 have been adequately addressed.

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 submittal of revised Map 7-2, Mine Site Drainage Map, is a minor revision to an already approved surface drainage control plan. The addition of riprap on the slope adjacent to the coal reclaim belt and crusher building will prevent further erosive action in that area and thus reduce additional contributions of sediment to the pond, as well as provide protection of sub-soils in the area.

Certification Requirements

Map 7-2, Mine Site Drainage Map, which has been submitted as Task ID #2738 has been P.E. certified by Mr. Dan Guy, Utah registered professional engineer.

Findings:

Map 7-2 meets the minimum regulatory requirements of this section.

RECOMMENDATION:

The application is a very minor revision to the Mine site surface drainage control plan, and it should be approved.