

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

October 6, 2006

OK

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor *DWH*

FROM: *SMP* Steve Fluke, Reclamation Hydrogeologist/Team Lead

RE: Permit Modification to Abandon Groundwater Monitoring Wells 89-18-1 and 89-20-1, Task ID #2605, Canyon Fuel Company, LLC, SUFCO Mine, C/041/0002

SUMMARY:

This Technical Memo addresses the hydrologic aspects of the MRP modification submitted by Canyon Fuel Company, LLC, to remove two groundwater-monitoring wells (wells 89-19-1 and 89-20-1) from the SUFCO Mine operational water monitoring plan because the wells have been damaged. The modification is titled for the abandonment of the groundwater monitoring wells, but only presents the removal of the wells from the monitoring plan. The wells are to be permanently sealed at a later date along with other damaged wells.

Hydrologic information provided in the permit modification does not meet the requirements of the Coal Mining Rules. The proposed amendment should not be approved until the deficiencies outlined in this memo are addressed.

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:

Groundwater Monitoring

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Groundwater monitoring wells 89-18-1 and 89-20-2 have been damaged during the development of the gateroads for the Muddy Tract longwall panels. The wells can no longer be used and are being removed from the operational monitoring plan. New wells are currently being drilled within the Muddy Tract that will be able to provide additional groundwater data and replace the damaged wells. The permit modification updates Table 7-2, Water Monitoring Program, and text in Section 7.3.1.2, Water Monitoring, to indicate that the two damaged wells are no longer part of the operational monitoring plan. However, the text in Section 7.3.1.2 describes that these two wells along with three additional wells (US-81-3, 89-16-1, and 89-16-1W) have been "abandoned" from the monitoring plan. No mention is made of the other nine wells shown as historical monitoring wells on Plate 7-3, Hydrologic Monitoring Stations. For clarity, the text in Section 7.3.1.2 should indicate and list all historical wells that have been permanently sealed and those that are no longer used and are to be permanently sealed in accordance with R645-301-631.200 and R645-301-748.

Transfer of Wells

There are no plans for the transfer of groundwater monitoring wells in this permit modification. Prior to final bond release, all monitoring wells must be permanently sealed in accordance with R645-301-731.400.

Findings:

Hydrologic Information of the Operation Plan does not meet the minimum requirements of the Coal Mining Rules. Before the application can be approved, the following deficiencies should be addressed:

R645-301-631.200, -731.210, and -748, The Permittee should update the text in Section 7.3.1.2 to indicate and list all historical wells that have been permanently sealed and those that are no longer used and will be permanently sealed in accordance with R645-301-631.200 and R645-301-748.

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:

Monitoring and Sampling Location Maps

Plate 7-3, Hydrologic Monitoring Stations, needs to be updated to show that wells 89-18-1 and 89-20-1 are no longer operational monitoring stations.

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Findings:

Maps Plans and Cross Sections information of the Operation Plan does not meet the minimum requirements of the Coal Mining Rules. Before the application can be approved, the following deficiencies should be addressed:

R645-301-731.700, The Permittee should update Plate 7-3, Hydrologic Monitoring Stations, to show that wells 89-18-1 and 89-20-1 are historical monitoring stations.

RECOMMENDATIONS:

Hydrologic information provided in the permit modification does not meet the requirements of the Coal Mining Rules. The proposed amendment should not be approved at this time.