

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

August 10, 2006

TO: Internal File

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

FROM:  Dana Dean, P.E., Senior Reclamation Hydrologist

RE: Silt Fence Removal, Task No. 2574, Canyon Fuel Company, Skyline Mine, C0070005

SUMMARY:

Canyon Fuel Company (the Permittee) submitted a plan to the Division proposing the removal of several silt fences from the Skyline Mine disturbed area on February 8, 2006. The Division found the plan to be lacking some important information and asked for that information on March 21, 2006. On April 18, 2006 the Permittee responded to the Division with further information. The Division indicated that the information was still lacking in a letter dated June 13, 2006. The Permittee provided further information on July 12, 2006.

In all cases the Permittee feels that adequate sedimentation control is now provided by vegetation. The plan now includes calculations to demonstrate that the vegetation provides adequate sedimentation control, and that the areas can now be considered small area exemptions (SAEs) instead of alternative sediment control areas (ASCAs).

This technical memorandum discusses the hydrology related issues pertaining to the proposed amendment to the Skyline Mining and Reclamation Plan (MRP).

The application meets the minimum requirements of the relevant hydrology regulations. The Division may approve it and incorporate it into the MRP.

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, -300-148, -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:

Water-Quality Standards And Effluent Limitations

The Permittee met the requirements of R645-301-751 by ensuring that the new small area exemptions comply with all applicable State and Federal water quality laws and regulations and with the effluent limitations set forth in 40 CFR Part 434.

40 CFR Part 434 §434.82 states that the effluent limitation for reclamation areas at Western Alkaline Coal Mines will be met if the Permittee demonstrates, through watershed models, that implementation of the sediment control plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The Permittee has provided a vegetation and groundcover survey in Volume 5, Section 21, and sediment control calculations based on the Revised Universal Soil Loss Equation Version 2 (RUSLE2) in Section 21a. The calculations demonstrate that the sediment yield is equal to or less than the reference area for each of the newly designated SAEs, except for the James Canyon Topsoil Pile, and the James Canyon Road Lower. The Division has determined that the maximum additional sediment yield from these areas (0.2 and 4 lbs/acre/yr., respectively) is small enough to be negligible. The Division finds that the Permittee has met the effluent limitations, and can therefore convert these ASCAs to SAEs, and may therefore remove all silt fences at these areas.

Siltation Structures: Exemptions

The Permittee has met the requirements of R645-301-742.240 by *demonstrating* that the area within each ASCA to be converted to an SAE is small, and that siltation structures and alternative sediment control measures are unnecessary for drainage from these areas to meet applicable State and Federal water-quality standards and effluent limitations. The Division finds that the silt fences can be removed and these areas can be exempted from siltation structure requirements. The areas may be converted from ASCAs to SAEs.

Findings:

The Permittee has met the requirements of the Operation Plan: Hydrologic Information section of the Regulations.

RECOMMENDATIONS:

The application meets the minimum requirements of the relevant hydrology regulations. The Division may approve it and incorporate it into the MRP.