

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

March 14, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: David Darby, Reclamation Specialist, Hydrologist

RE: Discharge Permit, Hiawatha Mine Complex, Hiawatha Coal Company, C007/0011, Task #2133

SUMMARY:

The Division received an amendment submitted on January 19, 2005 from Hiawatha Coal Company (HCC) requesting to update and add UPDES discharge sites to their mine permit. A new UPDES permit will be incorporated into the Mining and Reclamation Plan (MRP). The UPDES sites were part of the mining permit in the past, but were removed in August 1998 after the U.S. EPA notified HCC they would no longer like to receive copies of the Discharge Monitoring Reports required under the NPDES permit for minor facilities.

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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:

Exhibit 7-1 shows the locations of mine water discharge points monitored by Hiawatha Coal Company. These points have been assigned EPA identification numbers D001 D002, D010, D012 and D013. Monitoring requirements for these points are given in Tables 7-13 and 7-17.

Gravity Discharges From Underground Mines

HCC identified Site D001, Mohrland Portal as a gravity discharge site. Point D001 is located at the Mohrland Portal (King No. 2 Mine) in Cedar Creek Canyon. This discharge is monitored twice a month from April through September and once a month during the rest of the year. D002 is overflow from the Hiawatha Town water tanks. This water originates from the Mohrland portal via the Mohrland Pipeline. Sampling is done once a month. Once mining resumes the sources for the water discharge at the Mohrland will be tested for age according the method used in the Mayo report (Appendix 7-21). Point D012 is at a valve on the Mohrland Pipeline. Water is monitored at this point whenever the pipeline must be drained for major repairs.

Point D010 is a discharge from the King 4 mine ventilation portal in North Fork Canyon and is currently inactive, but may become active when the mine reopens. Point D013 is from an overflow pipe from the King 6 water tank in South Fork Canyon. The King 6 mine is currently inactive and the water tank is not being used.

Water-Quality Standards And Effluent Limitations

HCC submitted an updated copy of the UPDES Permit No. 0023094 in Appendix 7-5. The permit was approved and issued on October 28, 2004. All discharges of water from disturbed areas will be in compliance with all Utah and federal water quality laws and regulations and with effluent limitations for coal mining contained in 40 CFR Part 434.

Sediment Control Measures

All disturbed areas associated with mining and reclamation operations are protected by sediment control structures. Most of the larger areas are served by sediment ponds or slurry ponds. Other disturbed areas, classified as Alternate Sediment Control Areas (ASCA's), utilize alternative methods of sediment control such as catch basins, silt fences and interim revegetation.

To minimize disturbance to the hydrologic cycle, sediment ponds and slurry ponds have been placed such that disturbed area drainage will flow into and be contained in them. The sediment ponds are designed to contain total flow from a with spillways and oil skimmers in order to treat and control the water in the event of discharge from the ponds. Each pond has been assigned an EP identification number and will be included in Hiawatha's UPDES Permit when it is renewed. To date none of the ponds have discharged any water. Table 7-18 lists each pond and its location.

Table 7-18. Sediment Pond Locations

Pond No.	Location
D003	Upper Coal Storage Yard
D004	North of Slurry Pond No. 1
D005	East of Slurry Pond No. 4
D006	North East of Slurry Pond No. 5
D007	South East of Slurry Pond No. 5
D008	Middle Fork Mine Yard
D009	South Fork Mine Yard
D011	South Fork Truck Loading Facility

Siltation Structures: Exemptions

ASCA's are disturbed area, which cannot drain to the catch basin. Runoff from these areas are appropriately treated using silt fences and straw bales. They often consist of ditches, outcast slopes and ripped outlets for the culverts. The fan portal area has an outcast area below the road that does not drain to the catch basin. Runoff from this area should be contained by silt fences or straw bales. Map PC5-2 should identify ASCA areas and the type of siltation structure to contain sediment.

Findings:

Information provided in by the Permittee meets the minimum requirements of the regulations for Hydrologic Section.

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RECOMMENDATIONS:

This amendment is recommended for approval.

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