



State of Utah
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DIVISION OF OIL, GAS AND MINING

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February 23, 2001

TO: In [REDACTED]

THRU: Susan M. White, Team Lead, 

FROM: David W. Darby, Reclamation Specialist III 

RE: Revised Permit Area, Mountain Coal Company, Gordon Creek #2, #7, & #8 Mine, C/007016-AM99C-3

SUMMARY:

DOGM received a response to deficiencies for the Revised Permit Area amendment on January 16, 2001. The original proposal was received on December 16, 1999.

Hydrologic information was requested under the Operational section.

R645-301-750, an analysis must be provided assessing hydrology data relative to the impact projections contained within the PHC and CHIA. The analysis must show that onsite impacts have been minimized and that offsite impacts have been prevented.

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:

The application mentions subsidence on page 3-28b and states that subsidence has not caused impacts to water resources. The hydrologic resources monitored by the operator have been examined. All water monitoring sites were surveyed and data has been collected. The applicant states that water monitoring shows fluctuation in flow and provides high, average and low flow values. No diminished flows have been determined at monitoring sites (in the approved monitoring plan).

TECHNICAL MEMO

The operator describes the land practices of the area to be deleted from the permit and points out that the operator has no control over operations such as logging and cattle grazing that can have impacts on the springs and streams monitored by the mine company.

The notable subsidence features, the flows and quality of springs and streams meet the in the post-mining land use of grazing and wildlife habitat.

The hydrology of the area has been examined and monitored over the life of the project. The applicant submitted a hydrologic impact analysis containing monitoring information in Appendix 7-8. All of the monitoring sites were evaluated with respect to monitoring results. The operator suggests that no adverse effects to the hydrologic regime have taken place as a result of mining.

The applicant concludes that no off site impacts to the hydrologic regime have occurred from either subsidence or disturbance over the past 6 1/2 years of monitoring. All disturbed area runoff is directed to the sedimentation pond (a three celled pond), which has only discharged one time, and that was a result of piping on the lower cell, when a marmot dug into the embankment. Water quality samples were taken of the discharge and revealed no excessive levels of water quality. The pond has captured and contained the runoff of large storms without discharging.

The information and numeric data presented by the operator is relevant, but there are no analytic conclusions to show trends or changes, and no discussions on of irregularities of the data. I will suggest that the operator submit graphs of the flows, specific conductance (or TDS), temperatures and dissolved oxygen (on streams) at the monitoring sites and use those graphs to describe trends, changes in patterns (or from upstream to downstream) and relationship of subsided areas (show map) to monitoring sites. The applicant should mention noted flows in relation to precipitation.

In the last submittal of the data in Appendix 7-8, are the values averages or one time monitoring values?

Findings:

Performance Standards

R645-301-73. (1) Prior to the release of the mined area from the permit, the applicant needs to show the analytical conclusions that identify the no impact theory, rather than presenting statements. Any irregularities in the data pattern should be described and discussed. The applicant should identify if the water monitoring program and finding were consistent with the Probable Hydrologic Consequences (PHC). (2) The applicant has not summarized the total record of water quality and quantity that compares pre-mining conditions to post-mining conditions. The Utah Coal Mining

Water Quality database shows water monitoring data collected since 1979. The information should be used to identify water quantity and quality trends over the mining period.

RECOMMENDATIONS:

It is recommended that this submittal not be approved until the above referenced information is adequately addressed.

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