

0016



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

August 20, 2001

TO: [REDACTED]

THRU: Susan M. White, Team Lead, *SMW*

FROM: David W. Darby, Reclamation Specialist III *[Signature]*

RE: Revised Permit Area, Mountain Coal Company, Gordon Creek #2, #7, & #8 Mine, [REDACTED] AM99C-4

SUMMARY:

DOGM received a 4th response to deficiencies for the Revised Permit Area amendment on May 18, 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 states that a subsidence monitoring network has been in place during and after mining to identify any changes to surface water resources caused by subsidence. No ponds, streams or springs exist above the areas where subsidence has been identified. Beaver Creek Coal Company conducted mining operations under Beaver Creek, however surveys conclude no adverse impacts from subsidence have taken place. Mining ended in November 1990, all subsidence should have occurred within a few years after mining stopped. There is no indication

TECHNICAL MEMO

of stream alteration or other mining related effects to the stream. Subsidence has been monitored from 1986 to 1998.

The applicant concludes that no off site impacts to the hydrologic regime have occurred from either subsidence or disturbance over the past 61/2 years of monitoring. The notable subsidence features has not changed the flows or quality of springs or streams, they still meet the post-mining land use of grazing and wildlife habitat.

Hydrologic resource monitoring has also been conducted by the operator. Appendix 7-8 and Attachment A to Appendix 7-8 provide an assessment of hydrologic data. 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. Water monitoring sites were surveyed from 1980 to 2001 to assess impacts. The applicant states that water monitoring analysis indicate no diminished flows at monitoring sites as a result of mining.

The operator describes other industrial operations conducting operations in the area. Their operations and land practices are not regulated. Grazing and logging actives are known to have caused impacts to the hydrologic system, however their impacts are hard to quantify. It has been noted and recorded in DOGM files that grazing and logging have had adverse impacts on Beaver Creek. The operator has no control over such operations.

Graphs in Attachment C indicate the TSS and Specific Conductivity have been increasing since 1995. This could be the result of a combination of factors, including removal of beaver dams, increased grazing, siltation of streams by logging. Mine water has never been discharged from the Gordon Creek #2, #7 and #8 Mines. The operator states that no adverse effects to the hydrologic regime have taken place as a result of mining.

The applicant has submitted information to show that mining has not caused adverse impacts on or off the mine plan area. Other activities such as grazing and logging have impacted areas above the mine which confuse the baseline and trends of the outcome of the mines water monitoring plan. Subsidence, water quality and water quality data submitted by the operator. Identify no mining impacts on or off the area proposed for permit release.

Findings:

The applicant has addressed the requirements of this section.

RECOMMENDATIONS:

It is recommended that this submittal be approved.