



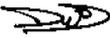
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## State of Utah

DEPARTMENT OF NATURAL RESOURCES  
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December 8, 1988

TO: File

FROM: David Darby, Geologist RE: Amendment Review, Slurry Injection Wells, Castle Gate Coal Company, Price River Complex, ACT/007/004-88-H, Carbon County, Utah, Folder #2.Synopsis

Castle Gate Coal Company (CGCC) submitted a response on November 17, 1988 (received November 21, 1988) to the Divisions review comments of November 16, 1988.

Summary of Review

Exhibit 1-1 has been modified to expand the underground permit boundary in Sections 35 and 36 of Township 12 South, Range 9 East. The attitude of the formations in the vicinity of the Slurry Injection Site was calculated and shows an east-west strike and a dip of about 3 degrees to the north.

The impact of most concern from this operation is the potential for ground and surface water diminution. The operator has accounted for this situation by submitting analyses of the receiving mine water and of the separated slurry precipitate and fluid. Other than the Chemical Oxygen Demand (COD) all the constituents listed in the fluid analysis meet the drinking water standards established by the Environmental Protection Agency (EPA) and adopted by the Utah Bureau of Water Pollution Control (UBWPC). The UBWPC has indicated that as long as the operation maintains the quality of injection fluids below safe drinking water limits, there should not be any adverse impacts to surrounding ground or surface water sources. The Division concurs with this concept.

A monitoring schedule was established by UBWPC which requires the operator to sample the injection fluid. Unannounced random sampling of the injection fluid will also be conducted on a coordinated basis by the Division and the UBWPC.

A potential exists that the water stored in the mine could have future influences on adjacent mined areas if intercepted. Since the depository is already flooded there would be no new hydraulic pressures generated from injection fluids. However, mining of future reserves adjacent to the depository may require dewatering of the vacated D seam. Subsidence fractures from longwall mining beneath and adjacent to the depository may result in interception of this reservoir. Although there are no immediate plans to conduct mining operations adjacent to the depository, this concept should be realized.

Page 2  
October 4, 1988  
ACT/007/004-88-H

Summary

This application is recommended for approval providing the following conditions are accepted by the operator.

In the event there is a change in water quality of the injected fluid the operator will be required to expand the permit boundary to incorporate all interconnected working of the D seam depository.

In the event that the injection fluids exceed the limits of the safe drinking water standards, or if there are other indications of ground or surface water diminution, the operator will be required to abate injection, establish a monitoring network to identify the extent of contamination and conduct remedial action to re-establish pre-operation conditions.

The operator will be required to submit all water quality sample taken for this operation to the Division within 30 days of the sample date.

dwd/DWD

cc. Sue Linner  
Loren Morton  
B Team  
1565R