



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

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Michael O. Leavitt
Governor
Lowell P. Braxton
Division Director

August 18, 1998

TO: File

THRU: Joseph Helfrich, Permit Supervisor 

FROM: David Darby, Reclamation Specialist 

RE: Culvert in Right Fork of Bryner Canyon, Gordon Creek #2, #7, & #8 Mines, Mountain Coal Company, ACT/007/016-98A, Carbon County, Utah

5.2

File #2

SUMMARY

Mountain Coal Company resubmitted a proposal to retain a 48 inch culvert in the Right Fork of Bryner Canyon for a post-mining land use.

Analysis:

The analysis of this amendment considered the advantages and disadvantages of leaving the culvert in place. Removal of the culvert could expose the subsided area to streamflow and initiate renewed subsidence. Whereas, leaving the culvert in place poses a maintenance issue.

Regulations under R645-301-100, Permanent Diversions and R645-301-742.300, Diversions give the Division latitude in approving permanent structures for post mining land use. The criteria for the designation of this culvert was whether it had a necessary purpose.

The purpose of the culvert is to protect the stream channel from continued subsidence. The channel collapsed in 1979 after four entries were driven under the channel, with less than 30 feet of cover.

The applicant has provided a list justifying the reasons for leaving the culvert in place. Basically, removing the culvert would create new disturbance to an already stable environment. The proposal is also supported by a request from the landowner to retain the culvert for the purpose of protecting the channel. The landowner has endorsed a letter assuming responsibility for keeping and maintaining the culvert after bond release.

Calculations were provided showing the culvert was well oversized to transport the flow of a 100 year-6 hour, the design size for permanent structures. An engineering analysis was also presented which concludes that the culvert has a minimum life of 36 years and

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potentially more than 50 years.

Findings:

The culvert has a definite purpose of protecting the stream. The culvert will be maintained by Mountain Coal Company throughout the reclamation and bond period, and then by the landowner.

It is recommended that the culvert remain in the channel to provide protection to the stream channel.

cc. Daron Haddock
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