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September 13, 1985

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DIVISION OF OIL
GAS & MINING

Mr. Lowell Braxton
Administrator, Mineral Resource Development
and Reclamation Program
State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Re: Deer Creek Mine Permit Application

Dear Mr. Braxton:

During the preparation of the permit application for the Deer Creek Coal Mine submitted in March 1981, special conditions prevailed which affected the design of the Final Reclamation Plan. This mine is a pre-law complex situated on fee land in a steep, narrow canyon and was constructed utilizing on-site borrowed fill material to build a fill structure or pad to accommodate necessary equipment for portal construction prior to mining.

As state regulations prohibits the placement of drainage channels across fill structures, it became necessary to evaluate alternative designs.

First, re-establishment of the drainage channel resulted in having to remove the entire fill structure, estimated to contain 300,000 cubic yards of material. The concept of complete removal serves only to double the problem. Finding a suitable disposal area would, in essence, create a new and equal mining area resulting in reclamation of not one, but two sites.

Therefore, we chose to present a final reclamation plan that would leave the structure in place, constructing a channel using the most advanced available technology to assure its long term competency and stability.

Post mining monitoring will gauge its degree of success.

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The final reclamation plan and proposed channel design as included in the PAP meets the requirement of experimental practices and the following discussion addresses each particular requirement under UMC 785.13(e).

Deer Creek Mine final reclamation plans are described in the PAP, Volume 2, Section 4, with appropriate maps, plans and cross sections found in Volume 7, map packet 4-1 and 4-3.

Current underground mining has yielded 50,000 cubic yards of waste rock which is also being used as fill to extend the mine pad for growth purposes. It is anticipated that by the end of mine life approximately 300,000 cubic yards of fill material and waste rock will occupy the mine pad. Underground drainage systems have been placed within the fill to convey all undisturbed drainage from the upper canyons down past the mine pad.

Final reclamation activities include removing the underground drainage system and leaving this large fill area in place and then constructing a riprapped trapizoidal channel across the top of the fill as described in the PAP.

This experimental practice does not change the reclamation plans or post-mining land uses. A simple hand and glove approach will be implemented in reclaiming this fill area versus removing the fill and possibly creating more adverse environmental conditions. To remove the fill would be cost prohibitive as well as pose problems with relocation, erosion, revegetation and stabilization.

Post-mining land uses are the same as those stated in the PAP; grazing, wildlife habitat, and potential recreational use. Experimental practice will be limited to the mine pad fill area.

Construction designs of the channel across the fill incorporate the use of clay and gravel liners with riprap sufficient to withstand impacts associated with a 100 year storm event. Stability of the fill structure has been certified to meet the 1.5 safety factor and will maintain that same safety factor during and after final reclamation, thus affording protection and safety above those requirements of Subchapter K. The fill structure having no coal seams or mining activities beneath it is not affected by subsidence.

Final reclamation plans within the PAP includes post-mining monitoring for 10 years prior to bond release. Planned monitoring methods include weather data collection (from weather station), storm runoff flow measurements, soil stabilization - rills, gullies, and channel restoration, seeding, planting, and sediment control all which will identify any potential risk to the environment.

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If it appears, through monitoring, that this experimental practice may fail due to excessive storms and erosion, it will then require re-routing the diversion channel through bedrock material on the lower terrace of the eastern canyon wall.

These design plans of routing this channel across the fill were included in the PAP at the time of the weekly newspaper publications set forth in the Emery County Progress starting on February 29, 1984 and running for four consecutive weeks, ending on March 21, 1984.

Please consider the above as support to UP&L's reclamation plans currently under review for permit approval.

If you have any questions concerning these matters, please call.

Yours truly,



C. E. Shingleton
Director of Permitting,
Compliance & Services
Mining and Exploration

CES:SC:bb:5034

cc: Allen Klein (OSM-Denver)
Rick Holbrook (OSM-Denver)
Larry Guymon (EMC)
Ralph Jerman (UP&L)