



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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July 25, 1989

TO: Susan C. Linner, Permit Supervisor

FROM: James Leatherwood, Reclamation Soils Specialist *JL*

Re: Mid-Term Review, Southern Utah Fuel Company, Convulsion Canyon Mine, ACT/041/002, Folder #2, Sevier County, Utah

## SUMMARY

The Southern Utah Fuel Company, Convulsion Canyon Mine, Mining and Reclamation Plan (MRP) has been evaluated for the Five Year Mid-Term Review. In general the MRP requires reorganization. The MRP contains original plans in addition to several review responses generated during past MRP reviews. The MRP should be organized in a cohesive format where only approved plans, and P.E. certified maps are included. The following Analysis outlines specific areas of concern and/or conflict.

## ANALYSIS

### UMC 783.14 Geology Description - JSL

The MRP must include a plan to monitor the roof, floor and mid-seam according to table 6 of the Utah Division of Oil, Gas & Mining's "Guidelines for the Management of Topsoil and Overburden for Surface and Underground Coal Mines" for possible acid- or toxic-forming materials. Monitoring shall be conducted on an annual basis or more if the general location of the mining operations change and this change results in a change in the quality of the roof, floor or mid-seam.

### UMC 783.21 Soil Resources Information - JSL

Concerns relative to the soil survey are editorial in nature and pertain to Volume 2. Page 38 should reference the appropriate soil survey maps and should reflect current soil survey descriptions in Volume Five.

UMC 783.24 Maps: General Requirements - JSL

UMC 783.25 Cross-Sections, Maps, and Plans - JSL

The septic tank and leach field shown on plate H-II, Geologic description map, is considered an operation incident to underground mining activities and must therefore be placed within the permit area and delineated as such on all appropriate maps.

Each appropriate map incident to the MRP must be certified by a qualified registered professional engineer.

Other editorial concerns are:

- 1) Volume 1, Cross-section D-D', Volume 2, exhibit 11 & 12, among others, are outdated.
- 2) Plate H-II, Geologic description, does not delineate flood irrigated areas as referenced to under Volume 4, page 70.
- 3) Maps 83-3 and 83-4 in addition to Design Plan 1 of Exhibit 1 were not found.
- 4) Final reclamation contour map must be updated to include contour intervals at an extent that clearly delineates post-mining topography.

UMC 784.13 Reclamation Plan: General Requirements - JSL

The statement that fill areas are enhancing the area (Volume 2, page 41, section 5) must be removed from the MRP unless otherwise supported by complete and accurate justification.

Volume 3, completeness response, page 201 and 203 discuss reclamation and monitoring of the gob slide area adjacent to the access road. Monitoring analysis and summary of success must be included within the text of the MRP.

Dr. Al Southard's Reclamation Plan proposes the use irrigation as one of the reclamation techniques for the disturbed area. The plan does not however, either commit or not commit, with appropriate explanation why, to irrigation. This discrepancy must be resolved within the text of the MRP.

The MRP must identify the volume and location of the soil material to be used for the filling of the buried tank at the time of final reclamation.

UMC 817.21 Topsoil: General Requirements - JSL

Earlier submittals do not reflect the approved substitute topsoil changes reflected in the later submittals. Volume 8, 1983 stipulation response defines the approved substitute topsoil plans. The following list areas that must be updated: Volume 1, page 19 and Volume 2, page 19 & 28; Volume 5, 1981 submittal; and, Volume 8, 1983 Completeness Review, page 30.

Volume 8, 1983, stipulation response, reflects the accepted 6" redistribution depth. Volume 2, pages 41 and 53 must be updated to reflect the accepted redistribution depth of 6". The plan should also contain a soil redistribution map indicating those areas proposed not to receive substitute topsoil.

UMC 817.89 Disposal of Noncoal Waste - JSL

The MRP must be updated to reflect the required two foot soil depth minimum over the noncoal waste. Specifically, Volume 1, page 14; Volume 1, Addendum No. 3, first page; Volume 2, page 52; Volume 8, 1983, completeness response; and, Volume 8, 1984 stipulation response.

The plan discusses the possibility of incineration of all combustible noncoal waste. The plan for incineration should be elaborated upon or deleted from the text.

UMC 817.95 Air Resource Protection - JSL

Volume 2, page 51 of the MRP discusses efforts pertaining to coal particulate monitoring. The results of said monitoring along with a summary of the results of the particulate monitoring to date must be submitted within the MRP.

RECOMMENDATION

The above stated concerns must be addressed by the operator before the plan can be considered complete and adequate.