0010

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

January 24, 1986

Mr. Richard Holbrook
Office of Surface Mining
Brooks Towers
1020 15th Street
Denver, Colorado 80202

R.L.K.

Dear Mr. Holbrook:

RE: DOGM Changes, Final Decision Document, U. S. Fuel Company, Hiawatha Complex, ACT/007/011, Folder No. 2 and 4, Carbon County, Utah

As per our meeting of January 9, 1986, the Division has modified the Final Decision Document written by OSM for the Hiawatha Complex to include Permit Conditions the Division deemed necessary.

Accordingly enclosed are replacement pages 46, 47, 81 and 82 for the Final Decision Document original page 82 should be retained as page 82A, as noted.

Please contact me or Susan Linner if you have questions.

Sincerely,

L. P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

SCL:jvb
cc: R. Naten
D. Darby
S. Linner
R. Summers
0028R-58

Several other small springs also occur within the zone that may be affected by subsidence (see Exhibit VII-1D response, updated January 9, 1984). These springs do not have water rights associated with them, although the water sources are used for stock and wildlife watering. The total number of springs within the subsidence zone is 11, which includes the 3 springs having water rights. The cumulative flow of the springs is approximately 24 gpm (DOA response, January 1984, p. 80).

The applicant will be required to replace water demonstrated to have been lost according to Condition 817.126(2).

Please refer to Part UMC 817.54 in Chapter XI of this TA for the discussion of alternate sources of water available to replace the USFS water right they may be affected. Alternate sources of water have beeen identified and the applicant has committed to replace all affected water supplies.

The PAP also discusses the potential impacts of mine subsidence in relation to overlying streams. Subsidence in the North Horn Formation is predicted to be very gradual, with no abrupt changes in slope. For this reason, erosional instability in the North Horn Formation is not expected to change noticeably. For the Price River and Castlegate Sandstone Formations, subsidence effects are predicted to be abrupt with changes in elevation of approximately 3 feet. The slopes and stream channels representative of these potential subsidence areas are, however, quite rocky with abundant competent rock ledges. Therefore, conditions of erosional instability are not expected in relation to mine subsidence in the Price River or Castlegate Sandstone Formations.

Subsidence will affect stream flow quantity in areas where surface cracks develop. In areas experiencing trough subsidence, no stream flow impacts have been documented. Areas on the ridge of Gentry Mountain and within Gentry Hollow subjected to subsidence should not experience any changes in stream flow attributable to mining. Well defined stream flow does not exist along Gentry Mountain. Stream channels that cross the upper, west-facing slopes of Gentry Hollow are ephemeral. Ephemeral stream flow originates and flows across the North Horn Formation which is subject only to trough subsidence and not cracking, hence, no impacts are expected to occur to stream flow crossing the ridges of Gentry Mountain and the upper slopes of Gentry Hollow.

Potential impacts to perennial stream flow resulting from subsidence should be limited to the Miller Creek watershed where streams cross formations stratigraphically below the North Horn Formation. The results of the spring inventory conducted in the permit and adjacent areas in October 1983 indicate that base flow within the zone of potential subsidence in the Miller Creek watershed is about 7 gpm in the north branch of the North Fork of Miller Creek, 12 gpm in the south branch of the North Fork of Miller Creek, 16 gpm in the Middle Fork of Miller Creek, and 6 gpm in the South Fork of Miller Creek. This base flow originates as springs issuing from the North Horn Formation and the Castlegate Sandstone. Only minor seepage issues from the Price River Formation within the potential subsidence zone of the Miller Creek watershed.

Losses of stream flow may result by interception of the stream channel by subsidence cracks which occur downstream from source springs issuing either from the North Horn Formation or the Castlegate Sandstone. Potential losses to base flow from subsidence could occur in the North Fork of Miller Creek. Available data indicates that natural seepage into the stream channels depletes the spring flow above the monitoring stations in the other forks of Miller Creek. The applicant shall provide protection to the stream channel in accordance with Condition UMC 817.126(4) to ensure no adverse impacts from subsidence occur.

The control of mine discharges is discussed under part UMC 817.50 in this chapter. The PAP is in compliance with regard to UMC 784.14.

3. The applicant shall, within 30 days of permit approval, commit to compensate, at a fair market value, owners of livestock which are injured or killed as a direct result of surface hazards caused by subsidence.

4. The permittee shall replace any water demonstrated to have been lost or adversely affected by mining operations with water from an alternate source in sufficient quantity and quality to maintain the current and postmining land uses. The permittee will advise the regulatory authority of the loss or adverse occurrence within two working days of becoming aware that it has occurred, and within 14 days of notification shall submit to the regulatory authority for approval a plan to replace the affected water. Upon acceptance of the plan by the regulatory authority, the plan shall be implemented in the time-frame dictated by the regulatory authority's approval notification.

5. Existing raptor nests adversely affected by mine related subsidence shall be replaced or otherwise mitigated by the permittee in consultation with the U. S. Fish and Wildlife Service and the Utah Division of Wildlife Resources according to the requirements of UMC 784.21 and UMC 817.97. Notification of the loss to the above named agencies and the regulatory authority shall take place within two working days of the permittee becoming aware that the loss has occurred.

6. At least 60 days prior to beginning second seam mining inside a perennial stream buffer zone as defined by a 20 degree angle of draw from vertical, measured from the limit of mining in the lowest seam to the center of the stream channel, the permittee shall present a detailed evaluation of the anticipated effects of multiple seam mining on perennial streams to the regulatory authority for review and approval as required by UMC 817.126(a). This evaluation must be based upon subsidence monitoring information collected on multiple seam mining in areas with similar overburden depth and surface topography.

XXVII - SPECIAL CATEGORIES OF MINING OTHER THAN ALLUVIAL VALLEY FLOORS AND PRIME FARMLAND - UMC 827 and UMC 828

All support facilities associated with the Hiawatha Mines Complex are located within the permit area. Therefore, UMC 827 is not applicable.

No in situ processing of coal is proposed at the Hiawatha Mines Complex. For this reason, UMC 828 is not applicable.

XXVIII - MISCELLANEOUS COMPLIANCE

UMC 817.49 SLIDES AND OTHER DAMAGE

The applicant has committed to notifying UDOGM and the U. S. Forest Service should a slide occur which may have a potential adverse effect on life or public property (DOA response, VOLUME I, pg. 133 July 20, 1984).

XXV - SEALING OF DRILLED HOLES AND UNDERGROUD OPENINGS - UMC 817.14 and 784.13(b)(8)

The applicant has described and furnished details of the methods proposed for sealing mine portal openings and other openings as part of the reclamation plan (original submittal, Volume I, Chapter III). The applicant is in compliance with UMC 817.14 and 784.13(b)(8).

XXVI - SUBSIDENCE - UMC 817.124, 817.126 and 784.20

The applicant has indicated that no subsidence has occurred on the mine plan area since mining began (Vol. I, Chapter III p. 33). Subsidence monitoring will take place in cooperation with the U. S. Forest Service and the applicant as described in detail in Appendix XII-1, refer to Coopertive Agreement Attachment No. 1, signed by Reed Christensen, Forest Supervisor, Manti-Lasal National Forest.

Due to the amount of cover above the mineable coal seams fractures may not become visible. However in comparing overlays of seams to be mined in the next five year permit term multiple seam mining will take place which compounds the chance of subsidence affects. The North Fork of Miller Creek could sustain fracturing from subsidence, see p. 47 of this TA.

To ensure protection to owners and users of surface features from subsidence the applicant must commit to the conditions outlined below.

<u>Condition 817.124 - (1-6) - DD</u>

1. The applicant shall, within 30 days of permit approval, commit to restoring areas impacted by subsidence-caused surface cracks or other subsidence features such as escarpments (not to include naturally occuring escapments which are not a result of mining) which are of a size or nature that could, in the Division's determination, either injure or kill grazing livestock or wildlife. Restoration shall include recontouring of the affected land surface including measures to prevent rilling, and revegetation in accordance with the approved permanent revegetation plan in the MRP. Restoration shall be undertaken after annual subsidence survey data indicate that the surface has stabilized, but in all cases restoration and revegetation shall be completed prior to bond release.

2. The applicant shall, within 30 days of permit approval, commit to compensate surface owners (except for land owned by the applicant) for lands which cannot be safely grazed due to hazards caused by surface effects of subsidence, with land (in close proximity) of comparable size and grazing capacity to be used for grazing until restoration of the damaged land is achieved.

UMC 817.100 CONTEMPORANEOUS RECLAMATION

The applicant has conducted interim revegetaion on areas of disturbance including topsoil stockpiles, fill slopes, cut slopes, and sediment pond outslopes. The documents and page numbers where information is presented are the DOA response (Volume I, page 133; Volume II, Exhibits III-12B and III-4B; Volume III, Exhibits IX-4A and IX-4B) and the ACR response (Chapter III, page III-31D and 31E). The applicant is in compliance with this regulation.

UMC 817.106 REGRADING OR STABILIZING RILLS AND GULLIES

The applicant has committed to fill, grade, reseed, and stabilize all rills and gullies deeper than 9 inches (ACR response, Chapter III, p. III-53); therefore, the PAP is in compliance with UMC 817.106.

UMC 817.11 SIGNS AND MARKERS

Personal communication with David Lof (UDOGM inspector for the Hiawatha Mines Complex) on March 21, 1984, indicated that the applicant is in compliance with UMC 817.11.

UMC 784.13(b)(9) COMPLIANCE WITH CLEAN AIR AND CLEAN WATER ACTS

The applicant has a current NPDES permit (UT 0023094) from the Environmental Protection Agency (EPA). The applicant had no outstanding violations on that permit as of March 13, 1984, and, therefore, is regarded as being in compliance with the Clean Water Act by the EPA, UDOGM, and Utah Department of Health.