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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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March 11, 1987

Mr. Allen Klein, Acting Chief
Federal Programs Division
Office of Surface Mining
Brooks Towers
1020 15th Street
Denver, Colorado 80202

FILE COPY

Dear Mr. Klein:

RE: U. S. Fuel Company, Hiawatha Complex, Lease U-51923,
ACT/007/011-86A, Carbon County, Utah

The Division has finished its review of U. S. Fuel Company's (USF) request of February 17, 1987 to mine federal lease U-51923. Under the Utah Program and regulation UMC 788.12 this request is considered to be an amendment to the pending permit application. The Division has found it to be approvable as such, with no conditions.

In order to help OSMRE pursue this lease approval as a Mining Plan Modification (Modification) the Division has prepared an abbreviated Technical Analysis (attached). This discusses only specific sections of the regulations which would apply to the proposed action. It is hoped that this will facilitate OSMRE's approval of the modification and allow USF to begin mining this lease in early April, on schedule.

Please contact myself or Susan Linner if we can provide further assistance.

Sincerely,

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

SCL:jvb

Attachment

cc: R. Holbrook S. Linner
 D. Darby H. Shepherd
 W. Hedberg

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Technical Analysis
U. S. Fuel Company
Hiawatha Complex
Lease U-51923
ACT/007/011-86A
Carbon County, Utah

March 11, 1987

Background

On February 17, 1987, U. S. Fuel Company (USF) submitted an Addendum to their overall Permit Application Package which is currently pending final federal and state approval. The Addendum deals with plans to mine federal lease U-51923. This lease is within the permit area boundary delineated in the Mining and Reclamation Plan (MRP) for the Hiawatha Complex, originally submitted in 1981. The Permit Application and Approval Package and associated Cumulative Hydrologic Impact Analysis (CHIA) prepared under the direction of the Office of Surface Mining in 1985, therefore cover this lease. Accordingly, this Technical Analysis will not re-review the entire MRP, but rather focus on specific sections of the regulations pertinent to the mining of this lease.

Introduction

USF was granted federal lease U-51923, a 160 acre coal lease, in October of 1985. Due to constrictions by outcrop on the north, east and south side of the lease it must be mined in conjunction with existing workings to the west. Mining is projected to be adjacent to this lease by March 15, 1987.

USF is the surface owner of this lease and the surface and underground owner of adjacent property. No new surface disturbance will be associated with mining this lease. Coal will be extracted through the existing King #4 Mine. Existing facilities will be used for handling and processing of the coal.

Mining operations will occur in both the A and the B seam, but only the B seam will be mined in the next five year permit term.

UMC 817.41 Hydrologic Balance: General Requirements - DD

Existing Environment and Applicant's Proposal

Groundwater

The applicant has established plans for conducting the mining activities within lease tract U-51923. Geologic and hydrologic information and data pertaining to the lease and adjacent areas have been submitted in Volume 3, Chapters VI and VII of the Permit Application Package (PAP).

Mining will not affect the prevailing hydrologic balance. The mining area within the lease is bounded by escarpment on all but the west side. The applicant does not expect to encounter or impact groundwater conditions since no groundwater was encountered adjacent to this lease and because there are no springs on or adjacent to the lease area.

Surface Water

All mining activity in the lease will be above stream channel elevation, and no underground development will be within 500 feet of the stream channels. There will be no portal access within the lease area and hence, no mine water discharge into adjacent streams.

Stream monitoring has been conducted on the north and south forks of the Right Fork of Miller Creek. Both are perennial tributaries. Baseline data for stations ST-2A, ST-2B and ST-1 (see map, Exhibit VII-1) are shown on Table VII-6. Subsequent data has been submitted on a quarterly basis. Monitoring of these sites will continue through the life of mine.

Compliance

The applicant has submitted sufficient information to comply with this section. In analyzing the information for the lease tract the Regulatory Authority (RA) has determined that mining will not degrade aquifers or groundwater resources within or adjacent to the lease tract. Groundwater recharge occurs at higher elevations of the Wasatch Plateau to the west of the lease. Mining has already taken place west of the tract, and any influences would have already occurred. Recharge from direct precipitation on the outcrop amounts to very low percentage. Most water infiltrating the outcrop would tend to discharge along the escarpment. In helping to establish an in-mine monitoring program for the mine Utah Division of Oil, Gas and Mining personnel went underground (January 1985) and examined the areas of mine inflow. The King #4 mine is relatively a dry mine toward the eastern workings. Water production occurs in the western portion of the mine in the vicinity of the Bear Canyon Fault system.

It is not expected that groundwater or surface water quality will change or degrade substantially due to mining of this lease, since very low quantities of groundwater are expected to be intercepted.

Stipulation

None.

UMC 817.52 Surface and Groundwater Monitoring - DD

Existing Environment and Applicant's Proposal

Surface water monitoring has been and will be conducted in the vicinity of the lease tract.

The applicant stated that no springs exist on the lease tract, and mining directly west of the tract has not produced groundwater. It is unlikely that groundwater will be intercepted. Therefore, no groundwater monitoring for this lease is proposed.

Compliance

The applicant complies with the surface water monitoring. From observations in the mine it is not expected that groundwater will be intercepted during mining of the lease. If groundwater is intercepted the applicant has established in mine monitoring procedures consistent with guidelines established by the RA.

Stipulations

None.

UMC 817.59 Coal Recovery - SCL

Existing Environment and Applicant's Proposal

Approximately half of the 160 acre coal lease has mineable coal reserves. Mining in lease U-51923 will take place in both the A seam and the B seam. Approximately 61 acres will be mined in the B seam, with the coal varying in height from 5 to 6 feet. Approximately 68 acres will be mined in the A seam, with the coal varying in height from 10 to 11 feet.

Mining will be conducted using typical room and pillar mining methods. A 200 foot barrier will be left between mined sections and the outcrop. Taking this barrier into account, and projecting a recovery factor of 80 percent, the applicant calculates that 580,000 tons of recoverable coal exists in the B seam and 1,200,000 tons in the A seam. This assumes optimal conditions. The actual recovery rate may be lower.

Compliance

The applicant complies with this section.

Stipulations

None.

UMC 817.71 Disposal of Excess Spoil and Underground Development
Waste: General Requirements - SCL

Existing Environment and Applicant's Proposal

The applicant states that no underground development waste will be generated as a result of mining this lease (Addendum, p.33).

Compliance

The applicant complies with this section.

Stipulations

None.

UMC 817.97 Protection of Fish, Wildlife and Related Environmental
Values - SCL

Existing Environment and Applicant's Proposal

The applicant states that no impacts to fish or wildlife populations will occur due to the fact that there will be no surface disturbance associated with mining this lease. No springs or seeps occur above the coal seam. There are no known raptor nests that could be impacted by subsidence. No threatened or endangered species exist in the permit area. There will be no transmission lines or haul roads developed through the lease area (Addendum, p. 37).

Compliance

The applicant complies with this section.

Stipulations

None.

UMC 817.121 - .126 Subsidence Control - DD

Existing Environment and Applicant's Proposal

The applicant has an established subsidence monitoring plan in cooperation with the U. S. Forest Service (Chapter III, p. 33 A, ACR Response).

U. S. Fuel Company is the surface owner of the lease tract.

A 200 foot buffer zone will be left between the mining area and the outcrop for each seam.

The potential area of impact is depicted on Exhibit VII-1C for the lease area as well as the entire permit area. It is likely that no subsidence effects will occur in the lease area based on the mining plan, cover over the mine workings, and past experience. The channels of North Fork Creek existing on this lease lie out of the potential zone of impact and are lower in elevation than the mine workings, so they would not be affected by underground mining in this lease block. No surface water sources are found to emanate from the lease block area. No water is produced in underground workings adjacent to this lease block.

As U. S. Fuel Company is the surface owner on this block, the question of effecting the rights of the surface owner should not result in litigation.

Compliance

The applicant complies with this section.

Only the Blackhawk Formation overlies the coal seams on and adjacent to the lease area. It is expected that subsidence will occur within the area due to the low cover. It is not expected that the subsidence will have adverse impacts to renewable resources. According to observations made in similar areas adjacent to the property fractures will occur parallel to the slope inside the buffer zone. These fractures could channel snowmelt into the minesite, but only small amounts are expected.

The pre- and postmining land use is wildlife habitat. Subsidence should not impact wildlife since the 200 feet buffer zone will help protect the slope. There are no known active raptor nests in the lease area. Most raptor nesting takes place in the Castlegate Formation to the northwest. The Castlegate Formation exhibits precipitous escarpments suited for aeries.

Stipulations

None.

UMC 817.133 Post Mining Land Use - SCL

Existing Environment and Applicant's Proposal

The applicant states that underground mining activities will not disrupt the present land usage on this lease, as no surface effects of the underground mining will occur. Therefore postmining land use will be the same as premining and use (Addendum p. 32).

Compliance

The applicant complies with this section.

Stipulations

None.

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