STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

(THIS LETTER SENT TO ALL AGENCIES ON ATTACHED LIST.)
February 29, 1984

(Name, Title)
(Company Name)
(Address)
(City, State Zip Code)

RE: Determination of Completeness
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder #2
Carbon County, Utah

Dear (Name):

The Utah Division of Oil, Gas and Mining (Division) and the Office of Surface Mining (OSM) have completed a review of the Permit Application Package (PAP) and amendments submitted by U. S. Fuel Company, for the Hiawatha Complex. The regulatory authorities have determined the plan to be apparently complete. In compliance with Section UMC 786.11(b) and (c) of the Utah Coal Mining Reclamation Act (UMC, Section 40-10-1 et seq.), notice is hereby given to all appropriate agencies having jurisdiction over or an interest in the area of the operations that a complete plan is available for public review for this operation.

The Hiawatha Mine Complex is located in and around the city of Hiawatha, Utah. U. S. Fuel Company controls, in fee and through a variety of leases, 20,700 acres in Carbon and Emery counties. The Hiawatha Complex represents a consolidation of mines, which have been active since the late 1890's.

The permit area, which can be found on the "Hiawatha" and "Poison Spring Bench" USGS 7.5 minute quadrangle maps, consists of 19,211 acres. Two hundred ninety five acres are currently disturbed by surface activities related to mining with twenty additional acres planned to be disturbed during the life of the mine, but not during this 5 year permit term.

Township 15 South, Range 7 East, SLBM, Utah

Sec. 13: Portions
Sec. 25: Portions
Sec. 36: Portions
Sec. 24: All

Township 16 South, Range 7 East, SLBM, Utah

Sec. 1: Portions
Sec. 12: Portions
Sec. 13: Portions

Township 15 South, Range 8 East, SLBM, Utah

Sec. 18: All
Sec. 19: All
Sec. 20: All
Sec. 21: All
Sec. 28: All
Sec. 29: All
Sec. 30: All
Sec. 31: All
Sec. 32: All
Sec. 33: All
Sec. 17: Portions
Sec. 26: Portions
Sec. 27: Portions
Sec. 34: Portions
Sec. 35: Portions

Township 16 South, Range 8 East, SLBM, Utah

Sec. 4: All
Sec. 5: All
Sec. 6: All
Sec. 7: All
Sec. 8: All
Sec. 9: All
Sec. 16: All
Sec. 17: All
Sec. 18: All
Sec. 3: Portions
Sec. 10: Portions
Sec. 11: Portions
Sec. 14: Portions
Sec. 15: Portions
Sec. 19: Portions
Sec. 20: Portions
Sec. 21: Portions
Sec. 22: Portions

A Technical Analysis (TA) will now be prepared to determine whether the plan meets all the criteria of the Permanent Program Performance Standards according to the requirements of UCA, Section 40-10-1 et seq.

Upon completion of the TA for said plan, a decision will be made as to approval or disapproval of the permit application. No decision will be taken by the Director for a minimum period of 30 days after submission of this Notice of Availability to the appropriate agencies. This plan is available for public review at: Division of Oil, Gas and Mining, 4241 State Office Building, Salt Lake City, Utah 84114.

Comments on the MRP may be addressed to the Director of this office:

Dr. Dianne Nielson, Director
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attention Mr. James W. Smith, Jr.

For further information, please contact: Mr. James W. Smith, Jr., Coordinator of Mined Land Development; or Ms. Susan C. Linner, Reclamation Biologist/Permit Supervisor at the above address.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:jvb
76780

cc: S. Linner, DOGM

Mr. Gene Nodine
District Manager
Bureau of Land Management
P. O. Box 970
Moab, Utah 84531 Mr. Nodine

Mr. Douglas F. Day, Director
Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116 Mr. Day

Mr. Kenneth Alkema
Department of Health
Division of Environmental Health
P. O. Box 2500
Salt Lake City, Utah 84116 Mr. Alkema

Mr. Melvin T. Smith
State Historic Preservation Officer
Division of State History
207 West 200 South, Suite 100
Salt Lake City, Utah 84101 Mr. Smith

Mr. Dee C. Hansen
State Engineer
Division of Water Rights
1636 West North Temple
Salt Lake City, Utah 84116 Mr. Hansen

Mr. Ralph Miles, Director
Division of State Lands & Forestry
3100 State Office Building
Salt Lake City, Utah 84114 Mr. Miles

Mr. Temple A. Reynolds, Executive Director
Department of Natural Resources
1636 West North Temple
Salt Lake City, Utah 84116 Mr. Reynolds

Mr. Allen Klein, Administrator
Western Technical Center
Office of Surface Mining
Brooks Towers
1020 Fifteenth Street
Denver, Colorado 80202 Mr. Klein

Mr. Robert Hagen
Office of Surface Mining
219 Central Avenue, NW
Albuquerque, New Mexico 87102 Mr. Hagen

Mr. John Welles
Regional Administrator
U. S. Environmental Protection Agency
Region VIII, 1860 Lincoln Street
Denver, Colorado 80295 Mr. Welles

Mr. Jim Paraskeva
Southeastern Utah Association
of Local Governments
P. O. Box A-I
Price, Utah 84501 Mr. Paraskeva

Mr. Walter T. Axelgard, Chairman
Commissioner for Safety
Industrial Commission of Utah
560 South 300 East
Salt Lake City, Utah 84111 Mr. Axelgard

Ms. Carolyn Wright
State Clearinghouse
Resource Development & Coordinating Committee
State Planning Coordinator Office
Room 116, State Capitol
Salt Lake City, Utah 84114 Ms. Wright

Mr. Jackson Moffitt, Chief
Mining Law & Solid Minerals
Bureau of Land Management
Unversity Club Building, Suite 1501
136 East South Temple
Salt Lake City, Utah 84111 Mr. Moffitt

Mr. Leon Berggren, Area Manager
Bureau of Land Management
Price River Resource Area
P. O. Box AB
Price, Utah 84501 Mr. Berggren

Mr. Robert Jacobsen
Field Supervisor
U. S. Fish & Wildlife Service
1426 Federal Building
125 South State Street
Salt Lake City, Utah 84138

Attention: Mr. Clark Johnson Mr. Jacobsen

Mr. Verl "Buzz" Hunt, Director
Division of Community Development
6233 State Office Building
Salt Lake City, Utah 84114 Mr. Hunt

Mr. J. Kent Taylor
U. S. Forest Service
Fishlake National Forest
P. O. Box 628
Richfield, Utah 84701 Mr. Taylor

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

February 28, 1984

Mr. Errol Gardiner
Vice President
U. S. Fuel Company
Hiawatha, Utah 84527

RE: Determination of Completeness
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Gardiner:

The Utah Divison of Oil, Gas and Mining and the Office of Surface Mining have completed their review of the Permit Application Package (PAP) and amendments submitted by U. S. Fuel Company for the Hiawatha Complex and have determined the plan to be apparently complete.

A Technical Analysis (TA) document will now be prepared to determine whether the plan meets all of the criteria of the Permanent Program Performance Standards according to the requirements of UCA, Section 40-10-1 et seq.

Per the enclosed letter, notice has been given to all appropriate agencies having jurisdiction over or an interest in the area of the operations that a complete plan is available for public review.

Upon receipt of this letter U. S. Fuel Company, must publish an advertisement in a local newspaper within the general area of the operation providing all information as required under UMC 786.11(a), with a copy of said notice sent to the Division.

Provided no public protests are initiated within the allotted time frames, pursuant to UMC 786.12(b), the Division will continue to proceed with the permit approval process, as per the established time schedule.

If you have any questions or comments, please contact me or Susan C. Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:jvb
76810

Enclosure

cc: Allen Klein, OSM, Denver
S. Linner, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

February 21, 1984

Mr. Douglas F. Day, Director
Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

RE: MRP Addendum
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Day:

Enclosed please find one (1) copy of the Mining and Reclamation Plan (MRP) Addendum referenced above. This Addendum is forwarded for review by the Division of Wildlife Resources (DWR) in accordance with our Divisions' Memorandum of Understanding (MOU).

As you may recall, the MOU between our Divisions' calls for the following:

B. Mine Plan Review

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will notify the DWR in writing of the need for consultation in evaluation of the plan with respect to fish and wildlife resources as required by MC 786.17(a)(2). DOGM will provide a copy of such plan to DWR when available.

2. The DWR will respond to DOGM in writing within 60 days of receipt of the plan with an evaluation of the adequacy or inadequacy of the fish and wildlife plan submitted by the operator to avoid, ameliorate or mitigate impacts of the proposed operation on wildlife resources.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact me or Susan Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

February 21, 1984

Mr. Dee C. Hansen
State Engineer
Division of Water Rights
1636 West North Temple
Salt Lake City, Utah 84116

RE: MRP Addendum
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Hansen:

Enclosed please find one (1) copy of the above referenced Mining and Reclamation Plan (MRP) Addendum. This Addendum is being forwarded for review by the Dam Safety and Water Rights sections of your office in accordance with our Divisions' Memorandum of Understanding (MOU).

As you will recall, the MOU between our Divisions' calls for the following for the Dam Safety Section:

B. Mine Plan Review:

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will forward a copy of the mining and reclamation plan to Dam Safety. If information additional to that contained in the operator's submission is required, Dam Safety is responsible for contacting the operator to obtain such information. Copies of such requests and also copies of the company's submittal in response to the request will be submitted to DOGM.

2. Within 30 days of receipt of the mining and reclamation plan, Dam Safety shall contact DOGM with their final response to the agency's proposed action on the operator's application.

3. If Dam Safety proposes to reject the plan for failure to meet water retention safety standards, the DOGM will call a conference between the state and the operator at the earliest possible date.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact myself or Susan Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

February 21, 1984

Mr. Kenneth Alkema
Department of Health
Division of Environmental Health
P. O. Box 2500
Salt Lake City, Utah 84101

RE: MRP Addendum
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Alkema:

Enclosed please find one (1) copy of the above referenced Mining and Reclamation Plan (MRP) Addendum. This Addendum is being forwarded for review by the Division of Environmental Health of your office.

As you will recall, the MOU between our Divisions' calls for the following:

B. Mine Plan Review.

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM, shall, in consultation with DOH, review the operator's list of licenses, permits or approvals to determine whether or not approvals from DOH have been issued.

2. If any permits or approvals from the DOH have not been issued, the DOGM will submit to the DOH those parts of the permit application containing matters within the DOH's jurisdiction or interest for review and response and inform the operator in writing that he must contact DOH for the appropriate permits and approvals.

3. If additional information is required by DOH for any permit or approval, the DOH shall contact the operator for such information. Copies of any such requests and the operator's reponse to such request shall be forwarded by DOH to DOGM.

4. Within two weeks of receipt by DOGM of the mining operator's submission and any additional information requested, each DOH bureau shall contact the DOGM with preliminary written notification of the status of any outstanding permits or approvals. If DOH determines to reject the operator's permit application or has any major problems with the operator's mine plan, the DOGM may convene a conference between the state agencies and the operator as soon as possible.

5. The DOH will make every effort to have their response to the mine plan and any other DOH permits and approvals finally completed within 60 days of the DOH receipt for the operator's complete application for DOH permits and approvals.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact me or Susan Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

February 21, 1984

Mr. Melvin T. Smith
State Historic Preservation Officer
Division of State History
307 West 200 South, Suite 100
Salt Lake City, Utah 84101

RE: MRP Addendum
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Smith:

Enclosed please find one (1) copy of the cultural and historic portions of the Mining and Reclamation Plan (MRP) Addendum referenced above. This Addendum is forwarded for review by the Division of State History in accordance with our Memorandum of Understanding (MOU).

As you may recall, the MOU between our Divisions' calls for the following:

B. Mining Plan:

1. Upon submission of a coal mining and reclamation plan to the Division of Oil, Gas & Mining, the Division of Oil, Gas & Mining will notify the SHPO in writing of the need for consultation and evaluation of the plan with respect to historic and cultural resources. The Division of Oil, Gas & Mining will provide a copy of the relevant portion of the plan to the SHPO.

2. The SHPO will respond to the Division of Oil, Gas & Mining in writing within 30 days of receipt of the notification. The SHPO will include in such response an evaluation of the adequacy or inadequacy of the plan submitted by the operator to avoid, ameliorate or mitigate impacts of the proposed operation on historic and cultural resources.

3. [illegible] the proposed mining plan, will, in the judgment of the SHPO, adversely affect sites listed on, or potentially eligible for listing on the National Register of Historic Places, the SHPO shall proceed pursuant to 36 CFR 800. The SHPO will further assist the Division of Oil, Gas & Mining in its [illegible] requirements set forth in MC 761.12(f) of the Coal Mining Regulations and make recommendations for survey and mitigation as appropriate.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact me or Dianne Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

[illegible]:btb

[illegible]ce

File ACT/007/011, File #2
Copy to Sue, Lynn
Send copy to Sarah Bransom, OSM, Denver

state of utah

DIVISION OF WILDLIFE RESOURCES
DOUGLAS F. DAY
Director
EQUAL OPPORTUNITY EMPLOYER
1596 West North Temple/Salt Lake City, Utah 84116/801-533-9333

Reply To SOUTHEASTERN REGIONAL OFFICE
455 West Railroad Avenue, Box 840, Price, Utah 84501
(801) 637-3310

February 14, 1984

Mr. Robert Eccli
Senior Engineer
U. S. Fuel Company
Hiawatha, Utah 84527

Dear Bob:

In regard to your recent inquiry concerning the Division's position relative to the roads in the Miller Creek Canyons, the following is offered for your consideration.

Obviously, at the time of decommissioning of the mining facilities, wildlife would be most benefited by decommissioning of the roads along with other surface facilities. However, it seems from the MRP as well as from your recent letter, that the roads will serve as access routes to culinary water sources for the town of Hiawatha. Bob, the Division would prefer to see the roads reclaimed and revegetated with a habitat more suitable to the needs of wildlife; however, it may be that the needs of the Hiawatha town for these roads outweigh the need for wildlife. Such a decision is not within the preview of the Division of Wildlife Resources.

I want to take this opportunity to thank you for your concern and consideration for the State's Wildlife Resource.

Sincerely,

John by Jerry & Dalton

John Livesay, Supervisor
Southeastern Region

JL:LBD:db

cc: Susan Linner
Darrell Nish

Copy To Sue
File ACT/007/011, #2

United States Department of the Interior

OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

JIM

FEB 21 1984

FEB 14 1984

Mr. James Smith
Coordinator of Mine Land Development
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Smith:

Enclosed are the results of our review of U.S. Fuel Company's January 9, 1984 response to the December 7, 1983 Determination of Adequacy (DOA). Four major issues have been identified as a result of our review:

1. The suitability of coal refuse materials as subsoils at the coal slurry embankment area;

2. Development of an adequate spring-monitoring program;

3. Documentation of the stability of underground impoundment structures in accordance with UMC 784.12 and 817.55; and

4. Revision of the permit application maps and text to accurately reflect the existing and proposed area of disturbance.

OSM staff met with the operator in Denver on February 2, 1984 to discuss these issues and a schedule for a response. The applicant will respond to the deficiencies by February 13, 1984. OSM is scheduled to make a determination of completeness by February 17, 1984.

If you have any questions regarding this matter, please call Steve Manger or Sarah Bransom at (303) 837-3806.

Sincerely,

Allen D. Klein

Allen D. Klein
Administrator
Western Technical Center

REVIEW OF U.S. FUEL'S (1/9/84) RESPONSE
TO THE DECEMBER 1983 DETERMINATION OF ADEQUACY

UMC 782.13 Identification of Interests

There are still some discrepancies between Appendix II-1 and Exhibits III-1 and IV-2. Discussion on 11 and 12 January 1984 with the consultant responsible for the maps should have eliminated those discrepancies and new, corrected exhibits are forthcoming.

UMC 783.17 Alternate Water Supply Information

The applicant has reevaluated the assessment of probable hydrologic consequences per UMC 784.14. According to that analysis, 12 springs with water rights and 11 springs used by domestic stock and wildlife will potentially be affected by subsidence associated with the King Mines. U.S. Fuels has demonstrated that they have the water rights associated with the water being discharged from the Mohrland Portal and that this water is available to replace affected water sources. The plan for alternate water provided in the recent response to the December 1983 DOA is to exchange water rights associated with the Mohrland Portal discharge for another undisturbed spring in the same approximate area of the affected water source. This approach is fine for situations where another water source remains in the vicinity of the affected spring. However, in situations where another water source is not readily available in the vicinity of the interrupted discharge of water, and the original water source is needed at the approximate same location, the applicant's proposed plan for alternate water supply will not be affective.

Therefore, the applicant must provide a plan for alternate water supply (i.e., for springs with water rights and important wildlife springs) that addresses the need for developing a new water supply in areas where other springs are not readily available to substitute for diminished water sources. With regard to wildlife sources of water that may be lost as a result of subsidence, replacement of the water

source at the approximate same location is considered necessary when there is no alternate source of water within 1/4 mile of the original spring location. An appropriate commitment to replace a source of wildlife water would be to provide a well and wind mill, or to build a guzzler (i.e., assuming the precipitation and topography are suitable).

UMC 783.19 Vegetation

The applicant must still address comment No. 3 of the DOA letter of December 7, 1983 (p. 2). The applicant must revise vegetation Exhibits IX-1 and IX-2A through IX-4C to correctly show all reference areas and all sampling sites. As was previously requested, Exhibit IX-1 must correctly show the locations of all the reference areas and sampling sites shown in greater detail on Exhibits IX-2A through IX-4C. Inconsistencies in the number, location, and identification of each type of station among the various exhibits must be eliminated. For example, revised Exhibits IX-3A (Jan. 5, 1984) shows two sample locations No. 3, one sample station No. 14, and one sample station No. 12 location which are not shown on revised Exhibit IX-1 (Jan. 5, 1984). Similarly, revised Exhibit IX-3B shows a sampling station No. 13 which is not shown on revised Exhibit IX-1. Revised Exhibit IX-4A shows station No. 4 as a sampling site but revised Exhibit IX-1 shows it as a reference area. Also the three unnumbered sampling sites shown near station No. 4 in Section 32 of revised Exhibit IX-1 are not shown on revised Exhibit IX-4A. Many questions arise because of such inconsistencies. Therefore, the applicant must check and revise exhibits IX-1 and IX-2A through IX-4C so that uniformity and correct data are provided for all exhibits.

Vegetation types are still mis-labelled in revised Exhibit IX-1. One mapping unit in Sections 29 and 30 (Middle Fork drainage) is labelled both P and G. There is no vegetation type abbreviated P. The applicant must provide correct mapping unit abbreviations and mapping unit boundaries as was requested in the last DOA.

UMC 784.12 Operation Plan: Existing Structures

The response to the questions regarding the underground impoundments is inadequate. These are found on pages III-3, III-9 and III-35 of the application and page 40 of the ACR responses, and Exhibits III-16, III-17 and III-18.

The information presented is conflicting in places and is not adequate to establish that the facility provides for the protection of the health, safety and general welfare of the mine workers and the general public as required in UMC 817.49 and .55 of subchapter K.

The ability of the bulkheads used to seal the mine portals to resist the hydraulic pressure exerted on them by the water stored in mine No. 2 cannot be determined from the data presented. The applicant must submit drawings which will show the dimensions of each seal subject to hydraulic pressure, the thickness of the seal, of what materials it is constructed, the size and location of reinforcing steel and how the seal is keyed into walls, floor, and ceiling. Analysis of the structural strength of the seal must indicate the maximum pressure which it is capable of safely containing, and what provisions are made to ensure that the maximum allowable pressure cannot be exceeded.

The applicant also must show what means are incorporated to ensure against flooding of the mine facilities and the town of Hiawatha which lie downstream of the portal seals. Analysis of the structural capability and hydraulic integrety of the seals or bulkheads must be done by, or under the direction of a qualified registered professional engineer.

UMC 784.13 Reclamation Plan: General Requirements

The applicant has not provided site-specific information and reclamation plans for two substitute topsoil borrow areas in the 9 January 1984 response to the December 1983 DOA.

UMC 784.13(b)(3)

The applicant has provided a detailed timetable for the completion of each major step in the reclamation of the two borrow areas and a

detailed cost est .te for completing reclamation perations for both sites [UMC 784.13(b)(1) and UMC 784.13(b)(2)]. The applicant has plans for backfilling, soil stabilization, compaction, and grading except for the North Fork Area (fan portal). To be in compliance, the applicant must address the following points:

- A detailed plan for backfilling, soil stabilization, compaction, and grading must be provided for the North Fork Area (fan portal).
- A detailed description of plans for shaping and grading the excavated topsoil borrow areas (A and D) must be provided with corresponding contour maps and cross-sections showing anticipated final surface configurations of the two borrow areas.

UMC 784.13(b)(4)

The applicant has provided plans for removal, storage and redistribution of topsoil and substitute topsoil (borrow areas and valley fill, pads); however, for the plans to meet the requirements of UMC 817.21-817.25, the applicant must address the following points.

- Accurate and consistant estimates of substitute topsoil volumes for borrow areas A and D must be provided. To arrive at these estimates, the applicant must identify an acreage for each of the two substitute topsoil borrow areas and use these acreage figures in the text, exhibits, and calculations of volumes.
- An apparent mis-labeling of Area D on Tables III-20 and VIII-2 must be corrected or clarified with reference to the use of the B station for the second of the two borrow areas. In addition, the table numbered Table III-20, Substitute Topsoil Borrow Site Reclamation Cost Estimate should be re-numbered as a Table III-20 already exists (Table III-20, Reclamation Timetable, Substitute Topsoil Borrow Sites).
- The locations of sampling sites for the mine pad sources along with the pad sources (topsoil substitute source areas) must be provided on a map. In addition, a narrative description of sampling methods must be provided.

- Sources of substitute topsoil in the disturbed portions of the North Fork Area must be sampled and the samples analyzed to evaluate suitability and determine volumes of pad material for use as topsoil.

UMC 784.13(b)(5) Revegetation

The application must still address portions of DOA comment No. 3 (p. 4 of December 7, 1983 letter). Comment No. 3 requested information on the location and size of each test plot for seed mixtures Nos. 3 and 4.

The revised application apparently proposed 12 candidate sites for seed mixture testing. However, the application does not specify which seed mixtures would be tested at each candidate site or general candidate areas. None of the candidate sites appears suitable for testing seed mixture No. 4 (riparian vegetation), since all are upland areas of either pinyon-juniper, mountain brush, or mixed conifer. The applicant must provide a series of suitable candidate sites for testing mixture No. 4 or describe how adequate soil moistures would be maintained at the upland sites during testing of this seed mixture. It would be to the applicant's advantage to designate and select candidate test sites in the riparian zone for testing mixture No. 4.

Seed test plot sizes were not specified. It is understood that final plot sizes would be established in cooperation with UDOGM reclamation specialists. However, for the purposes of conducting the upcoming technical analysis an estimate of the likely plot size(s) is required. Therefore, the applicant must provide an estimate of the probable plot size that would be used. The applicant may prefer to provide a range of reasonable sizes. The final plot size(s) would be confirmed following field activities this spring.

On page 54 (second paragraph) of the revised application (Section UMC 784.13(b)(4)) for reclamation of the Middle Fork area, the applicant proposes to defer decisions on the specifics of seed mixtures, seeding rates, etc. for revegetation until after field trial results are available for consideration. This approach is inconsistent with the information provided in Tables IX-1 to IX-4, and IX-8 and other

sections which apparently commit the applicant to specific seed mixtures, seeding and planting rates, etc. The approach as suggested on p. 54 is also unacceptable for permit application package (PAP) approval. The applicant can request modifications in the original proposed seed mixtures based on the results of field trials as the data become available. The applicant must explain and/or eliminate the apparent inconsistencies between the statement on p. 54 and other related sections of the PAP.

The revised application proposes to use 6 inches of substitute topsoil over the former coal refuse piles and slurry ponds to support future revegetation efforts at these sites (Section UMC 817.103, pp. 133-134). The application provides inadequate data to support a conclusion that 6 inches is sufficient for successful revegetation. Although laboratory data on trace metal concentrations and pH of the coal refuse material are provided (Revised Table VIII-11), no analytical data on other important chemical and physical characteristics are presented. Texture, percentage of coal fines, water holding capacity, cation exchange capacity (EC), soil salinity (EC), SAR, and other characteristics are of equal or greater importance in evaluating the suitability of the refuse materials and slurry impoundment materials. Plant growth on the existing refuse materials has been observed, but it constitutes less than one percent cover (estimated from field reconnaissance). This observation suggests potential revegetation difficulties because of poor growth medium. In addition, the applicant proposes to use seed mixture No. 1 on the slurry impoundment which contains many deep-rooted species. A six-inch deep growth medium on top of adverse subsoil material is inadequate. Published studies involving the placement of various depths of toposil over adverse substrate indicate 18 inches of topsoil is generally the minimum thickness which will support successful reclamation. Due to the lack of information, the applicant must address the following points.

- The applicant must identify the types and characteristics including thickness of the final waste materials to occupy the refuse and slurry pond areas;

- The waste material(s) occupying the refuse and slurry pond areas must be analyzed for the physical and chemical parameters mentioned above any any other remaining analyses conducted for the substitute topsoil materials not included in the list;
- The results of analyses must be evaluated in terms of assessing the suitability of the refuse and slurry materials for use as plant growth media;
- A discussion must be provided describing how reclamation of the refuse and slurry pond areas will be achieved. Possible means to achieve reclamation success include: removal and disposal of the waste material(s); burial under at least four feet of suitable subsoil material; and placement of an approved thickness of substitute topsoil over the waste material(s). The thickness of respread substitute topsoil must be supported by the results of field trials.

784.13 Reclamation Plan and 817.46 Sedimentation Ponds

The latest response (1/9/84) from U.S. Fuel proposes removing topsoil from two borrow sites (A and D). The water quality control schedule consists of: 1) installing straw dikes; 2) stripping the topsoil; and 3) building a sedimentation pond and leaving the sedimentation pond in place until successful revegetation has been achieved.

UMC 817.46(a)(1) requires that construction of the sedimentation pond be done before any disturbance of the undisturbed area drained into the pond. Therefore, U.S. Fuel must rework their schedule so that the sedimentation pond is constructed prior to stripping of the topsoil.

U.S. Fuel has one deficiency in the design for sedimentation ponds for area A and D. U.S. Fuel must provide an estimate of the runoff resulting from 25-year 24-hour precipitation event. U.S. Fuel must also demonstrate that the minimum elevation of the top of the settled

embankment shall be 1.0 foot above the water surface in the pond with the emergency spillway flowing at design depth. The plans that U.S. Fuel provided shows that pond A has 1.0 feet and pond D and 0.5 feet between the bottom of the emergency spillway and the crest of the pond embankment.

UMC 784.14 Reclamation Plan: Protection of the Hydrologic Balance

Two issues remain with respect to the determination of probable hydrologic consequences provided by the applicant: 1) it is considered likely that impacts associated with the King Mines may affect spring discharge on the west side of the Bear Canyon Fault; and 2) the assessment of subsidence effects to streams does not acknowledge any direct decrease in flow to streams. The discussion provided under 817.52 presents the rationale for why mining impacts to springs may occur across the Bear Canyon Fault. The discussion of impacts to streams resulting from subsidence mentions that stream losses may occur if subsidence fractures reach the stream channel; however, the only assessment of decrease in streamflow centers on the loss of springs within the subsidence zone. Therefore the following information is needed in order to better understand the impacts of mining at the King Mines to the surrounding hydrologic balance:

1. A re-analysis of the potential for the King Mines to affect springs on the west side of the Bear Canyon Fault, including a review of the trend in spring discharge over the period of monitoring.
2. An analysis of the effect of subsidence fractures directly intercepting both ephemeral streams and streams fed by base flow.

UMC 784.21 Fish and Wildlife Plan

The application must still address comments requesting details on the riparian habitat buffer zone (DOA December 7, 1983 pp. 7-8). The revised application commits to providing riparian habitat buffer zones (p. 87), but fails to specify the width of the protective buffer zone. The applicant must specify a minimum riparian buffer zone width that

would be established. The application (p. 87) also implies that buffer zone establishment would be conditional (...by providing buffer zones where possible..."). The application should explain what type of anticipated conditions would preclude establishment of a buffer zone. It would seem that the design of future project facilities could avoid designated protection areas once established.

The revised application appears to imply that new conveyor systems (exclusive of the overhead conveyor) associated with King IV and V Mines are being proposed for approval (Section 784.21, p. 88). The applicant must clarify whether the conveyor systems are to be included as part of the current PAP. If not, the applicant should delete all reference to these facilities. If the facilities are part of the current PAP, then the data requested in the DOA letter dated December 7, 1983, must be provided.

The revised application contains apparent inconsistencies regarding the eventual fate of the sedimentation ponds in the Middle and South Forks of Miller Creek. The application proposes to retain the ponds as wildlife mitigation features (Section 784.21 p.90). However, the proposed Reclamation Time Tables (tables III-17, p.48; III-18, p.50; and III-19, p.51) indicate that the sedimentation ponds would be removed. The applicant must resolve this apparent inconsistency and revise the application accordingly. If the sedimentation ponds are to be retained, then the applicant must provide all the information required to determine compliance with UMC 817.49 (Hydrologic Balance: Permanent and Temporary Impoundments). Also explain if the of the borrow area sedimentation ponds described on pp. 45 and 46 are to remain as a post mining land use feature.

The application has committed to replacing springs and seeps important to wildlife with an alternate water supply (pp. 87 and 88). However, several important considerations from a wildlife standpoint are not clear. The application does not specify: (1) what defines an important water source and who would make the determination (p. 88); (2) where the alternative supply would be provided in relation to the lost source; (3) what defines "nearby"; and (4) whether the replacement flow would be equivalent to the original flow. Since the commitment

(p. 88, paragraph 1) appears conditional based on interpretation of key terms "important", "nearby", and "alternative supply", the applicant must describe in detail how concerns 1 through 4 above will be resolved. Also refer to comments for Section UMC 783.17.

The revised application specifies that a total of about 2.7 acres of riparian habitat has been or will be disturbed or lost (UMC 786.19, p. 110) by mining activities. However, the application does not specify how many acres of riparian habitat will be restored during reclamation. The applicant must clearly commit to reestablishing as much riparian habitat as was lost because of mining. Note that on p. 110, references to conveyor intrusions on the riparian zone of the Middle Fork are present. This reference should be modified in accordance with paragraph 2 of the comments under UMC 784.21.

UMC 785.19 Alluvial Valley Floors

With regard to 785.19 adequate information has been provided with regard to Cedar Creek. The response to the DOA provides considerable information with regard to the valley of Miller Creek. It is concluded on the basis of this new information that the stream laid deposits of Miller Creek are not suitable for flood irrigation agricultural activities.

However, the response to the DOA reveals that some of the terraces of Miller Creek are subirrigated to agriculturally useful species of plants. The subirrigation investigation included soil test pits and mottling was used as the indicator of subirrigation. The conclusion reached in the response to the DOA is that, "These (subirrigated) terraces are very small in size (10 acres or less) and have either moderately steep slopes (10 to 15 percent), excessive cobbles (20 to 45 percent), or marginal soil characteristics (shallow, coarse grained, or seasonal high water table) sufficient to limit their overall capabilities for uses associated with agricultural practices more intensive

than grazing (see SCS letter dated December 29, 1983)." By definition the term agricultural activities includes grazing of livestock (see UMC 700.5). The discussion presented in the response to the DOA that states the subirrigated areas are limited to grazing use does not exclude these areas from being AVFs.

The question that remains is whether the subirrigated areas are large enough to support a subirrigated agricultural activity. In the recent AVF guideline the discussion provided relative to the minimum size of subirrigated areas is, "....Site specific to each region, those potentially subirrigated areas that are viewed by the regional agricultural community as being important to grazing patterns should be identified. If there is consensus in a region that certain areas are too small to matter in grazing land use, or are characterized by unpalatable species, they need not be identified." Therefore, if the subirrigated areas on Miller Creek do not have agricultural importance by regional standards then these areas do not make Miller Creek an AVF.

With regard to the identified subirrigated areas on Miller Creek, the applicant must evaluate the agricultural importance of these areas. The regional assessment should include discussions with not only land management agencies but also with ranchers in the area. The question that should be posed is if the rancher or land manager controlled a piece of subirrigated bottomland similar to that identified on Miller Creek, how would that area be managed with respect to grazing? In addition, if the subirrigated areas are large enough to support a subirrigated agricultural activities then the applicant must also respond to UMC 785.19(d) and (e).

UMC 786.19(a) Criteria for Permit Approval or Denial

There are numerous discrepancies contained in the permit application facility location maps. For example, Exhibit III-1a shows a proposed conveyor; III-3 shows "possible slurry pond sites" and proposed unit train loadout facilities. This exhibit also shows a permit bound-

ary noninclusive of existing slurry ponds and diversions. It is unclear as to what facilities have been constructed and what is propose Also, the permit boundary must include all disturbed areas (i.e. surface or subsurface). The applicant must review and revise the facility maps to ensure accuracy and completeness.

UMC 817.22(e) Topsoil: Removal.....Substitutes and Supplements

The applicant has provided detailed pedon descriptions and associated results of laboratory analyses for the two substitute topsoil borrow areas. An evaluation of these data indicate the proposed large scale field study for the substitute topsoil borrow areas is satisfactory in scope and design.

The absence of data on the characteristics of the coal refuse and slurry pond materials prohibits the design of a field trial for assessing the feasibility of reclamation for the waste areas using a cover of substitute topsoil. Therefore the proposed field trial cannot be approved or revised until the necessary additional laboratory data and subsequent plan for reclamation of these waste areas are provided. Should evaluation of the coal refuse and slurry pond laboratory data indicate these materials are suitable material, a field trial testing several seed mixtures response to a number of substitute topsoil thicknesses (0, 6, 12, 18, 24 inches) over the final thickness of waste material(s) and aspect (N and S) would likely support the evaluation of reclamation feasibility.

The applicant has provided results of laboratory analysis for samples collected from 12 potential mine pad sources of topsoil. An evaluation of the results indicate the proposed small scale field studies are satisfactory on scope and design. However, final approval of the small scale studies must await site selection in terms of number of studies and any changes to study design based on site characteristics.

UMC 817.52 Ground Water Monitoring

The applicant has committed to an adequate in-mine ground water monitoring program. The ground water monitoring of springs is not adequate to document the effects of mining.

The response to the DOA presents 10 springs that will be monitored as part of the on going monitoring program at the King Mines. Three springs were proposed by the applicant to be substituted for springs that were previously part of the monitoring program. The new springs are considered, by the applicant, to better represent the areas and geologic formations that are expected to be affected by the mining operations. It should be noted that there is disagreement with the applicant concerning the lack of potential for mining impacts to extend across the Bear Canyon Fault. It is felt that the study used to support the contention that mining impacts would not extend beyond the Bear Canyon Fault did not include the appropriate period of record todocument the impacts associated with the King Mines. In other words, the Danielson 1981 study looked at the period of record from 1978 to 1979 which was long after the ground water inflow was encountered to the King Mines along the Bear Canyon Fault. In addition, a review of the spring monitoring data for a spring in Gentry Hollow for 1983 (during a field visit in August of 1983) indicated that the flow had diminished over what had occurred in previous years. It is curious why the spring flow would decrease in a year of such high precipitation. Therefore, it is considered possible that the King Mines could have an impact on springs on the west side of the Bear Canyon Fault.

The December DOA requested U.S. Fuels to provide a monitoring plan that would include all important springs in the area that might be affected. The DOA stated that important springs were considered to be those that had water rights or were considered important to wildlife. No apparent attempt was made by the applicant to comply with this request.

Because of the comments noted above, the applicant must reevaluate their spring monitoring plan to reflect the following:

1. Monitoring of all springs with water rights not belonging to U.S. Fuels within the adjacent area 9i.e., area of potential impact) of the King Mines.

2. Monitoring of a representative number of springs that would reflect variability of springs issuing from the geologic source, and local ground water systems that may be affected by the King Mines. Springs on both sides of the Bear Canyon Fault should be included in the monitoring plan unless the applicant can produce more convincing evidence that impacts will not be possible across the fault. Springs should also be selected for monitoring based on their potential importance to wildlife, to the degree possible.

UMC 817.150, .160, .170: Roads, General

The applicant has made no provision in the application for removal and reclamation of the existing roads as part of the post mining reclamation plan. If the roads are to remain as part of the post-mining land use then the necessary post mining maintenance must be assured as well as drainage control. In addition, the applicant must demonstrate how the roads fit into the post mining land use. These requirements are stated for Class I and Class II roads in subparagraph (C), (1), (2), and (3) of UMC 817.150 and 817.160. Regulation UMC 817.170 requires that all Class III roads be removed, regraded and revegetated.

FEB 3 1984

MEMORANDUM

TO: Hiawatha Mine Plan File

FROM: Sarah Bransom
Project Leader

SUBJECT: Meeting Report

On February 2, 1984, a meeting was held with U.S. Fuel Company to discuss the 1/17/84 DOA. (See attached attendance list). The following is a summary of the meeting.

1. UMC 782.13: Maps are being corrected and will be forwarded.

2. UMC 783.17: USF will provide a range of alternatives to supply water to areas where mining is shown to have an impact on existing seeps and springs. They will not commit to the 1/4 mile limit for wildlife.

3. UMC 783.19: Corrections to the maps will be made as per the DOA request.

4. UMC 784.12: MSHA (Monty Cristo) attended this session and discussed the agency's needs in order to approve the bulkheads in Hiawatha #1 and #2. The applicant was instructed to answer both OSM's concerns regarding the structures and MSHA's requirements to conduct a "risk analysis." USF will conduct the analysis for the 100 year/6 hour event. Potential subsidence impacts to the structures will also be assess in accordance with 817.126.

5. UMC 784.13(b)(5): Seed mixture #3 will be used in the North Fork Area. FBD pointed out where the information could be found in the 1/9/84 response. USF will estimate the size of the test plots. They will strike any references (p. 54) deferring commitment on the test plot design and seed mixtures from the text. (b)(3): Cross sections of the topsoil borrow sites will be extended and presented. Information on the backfilling and grading of the North Fork portal was presented in the 1/84 response. (b)(4): Corrections will be made to the volumetric calculations for the borrow areas. Methods for sampling the pad sources will be provided. Material will be hauled from the borrow area to the North Fork Portal to avoid the need to do tests at this time. (b)(5): USF has the chemical and physical analyses of the slurry material and will provide this information. USF requested the references sited in the DOA regarding suitable depths of substitute topsoil over subsoil materials.

6. UMC 784.13 and 817.46: USF will correct the sequence of the plan for sedimentation control at the borrow pits. They will redesign the pond and provide certified maps.

7. UMC 784.14: USF will do life-of-mine analysis for potential subsidence. They will futher clarify their conclusions based on data obtained from the Wilberg Mine. They will expand upon their knowledge of mining near the vicinity of the Bear Canyon Fault.

8. UMC 784.21: USF will delete references to leaving the ponds for wildlife use after mining. They will further clarify their commitment on riparian buffer zones. They will delete references to future conveyor systems.

9. UMC 785.19: USF will further clarify their position on the non-existence of the AVF on Miller Creek.

10. UMC 786.19(a): USF would like to begin contruction on a train loadout facility this spring. OSM's position is that, since no information has been generated on the facility, USF should complete the existing PAP first, and submit a revised application later. The applicant agreed to provide updated maps on the existing facility locations.

11. UMC 817.22(e): The applicant will provide the necessary information to determine if the slurry material is a suitable plant growth medium. They will test for 6" and 12" in their test plot design.

12. UMC 817.52: The applicant will consider the comments on the need to monitor springs with water rights, not belonging to USF.

13. UMC 817.150: The applicant is attempting to obtain an agreement from the town of Hiawatha regarding the maintenance of the roads after mining ceases. They will also demonstrate how these roads fit into the proposed post mining land use, i.e. wildlife habitat.

The applicant will deliver a response to the 1/17/84 DOA no later than 2/13. OSM will make a DOC by 2/17.

U.S. Fuels Meeting
February 2, 1984

Name	Representing	Phone #
Mike Bishop	Engineering-Science	(303) 455-4427
Sarah Bransom	OSM	837-3806
Steve Manger	OSM	837-3806
Bruce Snyder	ES	455-4427
Richard Bell	ES	455-4427
[illegible]	ES	[illegible]
[illegible]	OSM	303-837-5555
Robert Eccli	U.S. Fuel Co.	801-343-2471
Randy Gainer	EarthFax	801-268-8062
Tom Sinclair	Ford Bacon & Davis	801-583-3773
Jean Semborski	U.S. Fuel Co.	801-343-2471
Jack Elder	Ford, Bacon & Davis	(801) 583-3773
Richard B. White	EarthFax Engineering, Inc.	(801) 268-8062

File

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

February 6, 1984

Mr. Errol Gardiner
Vice-President
U. S. Fuel Company
Hiawatha, Utah 84527

Attn: Ms. Jean Semborski

RE: Final Approval Middle Fork Breakout
Emergency Ventilation
Hiawatha Mine Complex
ACT/007/011, Folder #3&4
Carbon County, Utah

Dear Mr. Gardiner:

The Division has received your letter dated January 27, 1984 which provides formal written acceptance to our conditional approval letter of January 25, 1984.

This letter will serve as final notice of approval to proceed with the breakout for the Emergency Ventilation Portal at the Middle Fork Mine Yard.

Should any questions arise please contact me or D. Wayne Hedberg of the technical staff. We appreciate your patience and continued cooperation.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS:DWH:re

cc: Allen D. Klein, OSM (Denver)
Sarah Bransom, OSM (Denver)
Sue Linner, DOGM
D. W. Hedberg, DOGM

~~J. Smith~~
To Sue

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Wildlife Resources

1596 West North Temple • Salt Lake City, UT 84116 • 801-533-9333

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Douglas F. Day, Division Director

JIM

ACT/007/011 FEB 02 1984

January 30, 1984

Dr. Diane Nielson, Director
Utah Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, UT 84114

Subject: U.S. Fuel Company's Response to DOA for MRP at Hiawatha Complex

Dear Diane:

The Division has evaluated U.S. Fuel Company's revised response to OSMs Determination of Adequacy review for the Mining and Reclamation Plan at the Hiawatha complex.

The Division on November 2, 1983 recommended that the application at the time of decommissioning retain some or all of their sedimentation basins as permanent water sources for wildlife. Page 90, paragraph 4, of the MRP indicates the applicant would make the arrangement. However, page 46, the last paragraph, indicates sediment control facilities will be removed following successful revegetation. The Division's position concerning the sediment basins remains unchanged. Possibly, the applicant only intends upon removing some types of sediment control facilities and not the sediment basins. Thus, the MRP should be made to be more clear.

The Division's earlier comments (January 20, 1984) for Table IX-1 remain unchanged.

At this time, the Division has no further comment relative to the MRP.

Sincerely,

Douglas F. Day, Director
DIVISION OF WILDLIFE RESOURCES

Acting Director

File ACT/007/011
File #2
copy to Sue

SCOTT M. MATHESON
GOVERNOR

STATE OF UTAH
DEPARTMENT OF COMMUNITY AND
ECONOMIC DEVELOPMENT

Division of
State History
(UTAH STATE HISTORICAL SOCIETY)

MELVIN T. SMITH, DIRECTOR
300 RIO GRANDE
SALT LAKE CITY, UTAH 84101-1182
TELEPHONE 801/533-5755

January 19, 1984

James W. Smith, Jr.
Coordinator of Mined Land Development
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attn: Susan C. Linner

RE: Determination of Adequacy Review Response, U. S. Fuel Company, Hiawatha Complex, ACT/007/011, Folder No. 2, Carbon County, Utah

In Reply Refer To: E409

Dear Mr. Smith:

The Utah Preservation Office has received for consideration your letter of January 9, 1984, requesting review of the determination of adequacy review response by U.S. Fuel Company for their Hiawatha Complex in Carbon County, Utah.

After consideration of the material provided, our office notes no changes or updates to our knowledge in this determination of adequacy concerning cultural resources, therefore our office has no comment at this time.

Since no formal consultation request concerning eligibility, effect or mitigation as outlined by 36 CFR 800 was indicated by you, this letter represents a response for information concerning location of cultural resources. If you have any questions or concerns, please contact me at 533-7039.

Sincerely,

James L. Dykman
Cultural Resource Advisor

JLD:jrc:E409/0017V

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Wildlife Resources

1596 West North Temple • Salt Lake City, UT 84116 • 801-533-9333

~~J Smith~~
To Sue
File ACT/007/011, File #2

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Douglas F. Day, Division Director

Copy to Sue Lynn

January 18, 1984

JIM
FEB 01 1984

Dr. Diane Nielson, Director
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attention: James Smith

RE: U. S. Fuel Company's Response to ACR for MRP at Hiawatha Complex

Dear Diane:

The Division has evaluated U.S. Fuel Company's response to the Apparent Completeness Review for the Mining and Reclamation Plan at the Hiawatha Complex. Enclosed are the Division's specific comments and recommendations.

Thank you for an opportunity to review the MRP and provide comment.

Sincerely,

Douglas F. Day
Director

DFD:db

Enclosure

UTAH DIVISION OF WILDLIFE RESOURCES' COMMENTS
RELATIVE TO U.S. FUEL COMPANY'S RESPONSE
TO THE APPARENT COMPLETENESS REVIEW
FOR THE MINING AND RECLAMATION PLAN (MRP)
AT THE HIAWATHA COMPLEX

Page III - 31A and 31B, UMC 783.13(5) - Revegetation Plan, Species and Amounts Per Acre of Seeds and Seedlings

The MRP has some inconsistencies in regards to revegetation. The MRP suggests that recommendations provided to the applicant by DWR (Tables 1-12 in Chapter X) will be followed for reclamation. Those recommendations identify the pounds per acre of seed to be applied. The revegetation plan proposed for the King 6 Mine does not clearly identify application rates for seed or seedling stock.

Chapter 10

The MRP remains vague and without definitive description concerning how mitigation for loss of wildlife habitat will be achieved. The MRP does elude that some high valued habitat will be lost due to facility development. These habitat losses must be quantified and specific mitigation identified.

The MRP still remains unclear as to just which DWR mitigation recommendations will be incorporated. It is anticipated that the company will take advantage of a coal mining wildlife film as part of their complete training program. This film was developed for mitigation purposes and is available for purchase by the mining industry at a nominal cost.

J. Smith
To See

STATE OF UTAH
NATURAL RESOURCES & ENERGY
Wildlife Resources

1596 West North Temple • Salt Lake City, UT 84116 • 801-533-9333

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Douglas F. Day, Division Director

January 19, 1984

Dr. Diane Nielson, Director
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

JIM
FEB 01 1984

Attention: James Smith

RE: DOGM/OSM DOC for MRP at U.S. Fuel Company's Hiawatha Complex

Dear Diane:

The Division has evaluated the joint Office of Surface Mining/Division of Oil, Gas and Mining Determination of Completeness Document for the Mining and Reclamation Plan at the U.S. Fuel Company's Hiawatha Complex. The Division concurs with all of the directives except items No. 7 and No. 8 on page 14. These two directives demand that the company determine numbers of elk and deer that utilize various rankings of seasonal big game range on the mine plan area. As you know, big game herds are dynamic in population structure, daily movement, as well as seasonal and annual distribution on their use areas. It is for this reason that a ranking of relative biological value (critical, high-priority, substantial and limited value) for the various habitats and seasonal use areas was developed. This information has been provided to the applicant and should appear in the MRP. Numbers of animals, however, are not of significance for evaluation of the MRP and mitigation planning. The Division, as well as the U.S. Fish and Wildlife Service, primarily evaluate impacts and mitigation in relation to habitats and not animal numbers. Thus, numbers of animals present need not be a part of the MRP.

Thank you for an opportunity to review the MRP and provide comment.

Sincerely,

Douglas F. Day
Director

DFD:db

To Wayne

United States Department of the Interior

OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

JIM
JAN 20 1984

JAN 1 8 1984

RECEIVED
JAN 20 1984
DIVISION OF
OIL, GAS & MINING

Arboles #2 T3

Mr. James W. Smith, Jr.
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Mr. Smith:

Attached are the results of the review of U. S. Fuel Company's proposed ventilation breakout at the Middle Fork mine. The comments were developed by this office with the assistance of Engineering Science, Inc. as part of the overall permit application review.

Two main deficiencies were identified during our review:

1) the bond must be adjusted to cover the additional proposed disturbance, and

2) the applicant's proposal for topsoil removal and storage are not in compliance with UMC 817.21 and UMC 817.22 (see item number 3 in the attached letter). It is our opinion that if topsoil sampling has not occurred, it should be conducted immediately. Due to the emergency need for the ventilation portal, the results of the soil samples may be submitted at a later date and assessed as part of the permit application review. Also, all topsoil material should be removed during the portal construction and segregated with respect to profile horizons (soil texture and rock fragments).

All other aspects of the proposed breakout were found to be in compliance. As you discussed with Steve Manger, upon the applicant's response to the remaining deficiencies, the Division will issue the emergency modification approval.

If you have any questions, please contact Sarah Bransom or Walter Swain at (303) 837-3806.

Sincerely,

Allen D. Klein

Allen D. Klein
Administrator
Western Technical Center

ES ENGINEERING-SCIENCE

10 LAKESIDE LANE • DENVER, COLORADO 80212 • 303/455-4427

January 4, 1984

Ms. Sarah Bransom
U.S. Office of Surface Mining
1020 15th Street
Denver, Colorado 80202

Subject: Emergency breakout, U.S. Fuels Hiawatha
Middle Fork Mine Yard ventilation portal

Dear Sarah:

Engineering-Science, Inc. (ES) has completed a review of the emergency breakout requested by U.S. Fuels in an August 30, 1983 letter to Mr. Jim Smith of the Utah Division of Oil, Gas and Mining (UDOGM). In our review we have considered UDOGM's comments to U.S. Fuels conveyed in a September 20, 1983 letter to Ms. Jean Semborski, with U.S. Fuels. In addition, ES has reviewed the recent material (November 7, 1983) pertinent to the breakout in the "Response to the Determination of Adequacy".

The following comments are concerned with bonding and topsoil operations. All other issues raised in UDOGM's letter of September 20, 1983, have been adequately responded to and the other aspects of the ventilation portal breakout are considered in compliance.

1. With respect to the second question conveyed to U.S. Fuels by UDOGM in their September 20, 1983 letter, the design information for the new conveyer system is not available. U.S. Fuels states they will furnish the design information after the conveyer is completed. This is unacceptable, and the review of the U.S. Fuels response to the October 19 1983 Determination of Adequacy states under UMC 784.21, "Unless the applicant provides the required plans for (the conveyer), no permitting action will be taken to approve the conveyer systems." This issue stands unresolved at this time.

2. With respect to the fourth question in the UDOGM September 20, 1983 letter, additional bond is necessary to cover the increased disturbed acreage of 0.47 acres.

3. To be in compliance with UMC 817.21 and UMC 817.22, the applicant must address the following requirements.

   The applicant has indicated on page 2 of the 30 August 1983 letter to James W. Smith, Jr. of UDOGM that surficial soil veneer will be removed to a depth of 1.5 ft. and stockpiled at a specified site (Exhibit VIII-4, 27 August 1983). Depth of removal will fluctuate depending on configuration of underlying bedrock.

   - The location(s) of soil sampling sites must be identified on a map.
   - Soil sampling procedures must be described.
   - Suitability criteria used to assess the proposed topsoil material must be provided.
   - All suitable topsoil material must be removed and stockpiled for the following reasons: 1) soil thickness fluctuates with depth to bedrock (generally < 3 ft.) and a topsoil removal depth of 1.5 ft. over the entire disturbance area may not be possible; and 2) the high percentage of coarse material (>2 mm) in the soil (laboratory analyses) requires a maximum thickness of redistribution to enhance moisture and nutrient retention important to the success of revegetation.
   - An estimate of the volume of suitable topsoil material based on the correct acreage figure for the disturbance area and a calculated mean depth of topsoil removal must be provided.

Please let me know if you have any questions concerning these issues.

Sincerely,

mike

Mike Bishop
Assistant Project Manager

***** SUMMARY TABLE FOR TOTAL WATERSHED *****

STORM DURATION	=	24.00	HOURS
PRECIPITATION DEPTH	=	2.25	INCHES
RUNOFF VOLUME	=	.4624	ACRE-FT
PEAK DISCHARGE	=	3.0679	CFS
AREA	=	7.7000	ACRES
TIME OF PEAK DISCHARGE	=	12.10	HRS

* * * * * * * * * * * * *
NULL STRUCTURE
* * * * * * * * * * * * *

*** RUN COMPLETED ****

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

January 9, 1984

Mr. Douglas F. Day, Director
Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

RE: Dertermination of Adequacy
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Day:

Enclosed please find one (1) copy of U. S. Fuel Company's response to the Division's Determination of Adequacy Review. This Response is forwarded for review by the Division of Wildlife Resources (DWR) in accordance with our Divisions' Memorandum of Understanding (MOU).

As you may recall, the MOU between our Divisions' calls for the following:

B. Mine Plan Review

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will notify the DWR in writing of the need for consultation in evaluation of the plan with respect to fish and wildlife resources as required by MC 786.17(a)(2). DOGM will provide a copy of such plan to DWR when available.

2. The DWR will respond to DOGM in writing within 60 days of receipt of the plan with an evaluation of the adequacy or inadequacy of the fish and wildlife plan submitted by the operator to avoid, ameliorate or mitigate impacts of the proposed operation on wildlife resources.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

January 9, 1984

Mr. Dee C. Hansen
State Engineer
Division of Water Rights
1636 West North Temple
Salt Lake City, Utah 84116

RE: Dertermination of Adequacy
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Hansen:

Enclosed please find one (1) copy of U. S. Fuel Company's response to the Division's Determination of Adequacy Review. This Response is being forwarded for review by the Dam Safety and Water Rights sections of your office in accordance with our Divisions' Memorandum of Understanding (MOU).

As you will recall, the MOU between our Divisions' calls for the following for the Dam Safety Section:

B. Mine Plan Review:

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will forward a copy of the mining and reclamation plan to Dam Safety. If information additional to that contained in the operator's submission is required, Dam Safety is responsible for contacting the operator to obtain such information. Copies of such requests and also copies of the company's submittal in response to the request will be submitted to DOGM.

2. Within 30 days of receipt of the mining and reclamation plan, Dam Safety shall contact DOGM with their final response to the agency's proposed action on the operator's application.

3. If Dam Safety proposes to reject the plan for failure to meet water retention safety standards, the DOGM will call a conference between the state and the operator at the earliest possible date.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact myself or Susan C. Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

January 9, 1984

Mr. Kenneth Alkema
Department of Health
Division of Environmental Health
P. O. Box 2500
Salt Lake City, Utah 84101

RE: Dertermination of Adequacy
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Alkema:

Enclosed please find one (1) copy of U. S. Fuel Company's response to the Division's Determination of Adequacy Review. This Response is being forwarded for review by the Division of Environmental Health of your office.

As you will recall, the MOU between our Divisions' calls for the following:

B. Mine Plan Review.

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM, shall, in consultation with DOH, review the operator's list of licenses, permits or approvals to determine whether or not approvals from DOH have been issued.

2. If any permits or approvals from the DOH have not been issued, the DOGM will submit to the DOH those parts of the permit application containing matters within the DOH's jurisdiction or interest for review and response and inform the operator in writing that he must contact DOH for the appropriate permits and approvals.

3. If additional information is required by DOH for any permit or approval, the DOH shall contact the operator for such information. Copies of any such requests and the operator's reponse to such request shall be forwarded by DOH to DOGM.

4. Within two weeks of receipt by DOGM of the mining operator's submission and any additional information requested, each DOH bureau shall contact the DOGM with preliminary written notification of the status of any outstanding permits or approvals. If DOH determines to reject the operator's permit application or has any major problems with the operator's mine plan, the DOGM may convene a conference between the state agencies and the operator as soon as possible.

5. The DOH will make every effort to have their response to the mine plan and any other DOH permits and approvals finally completed within 60 days of the DOH receipt for the operator's complete application for DOH permits and approvals.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

January 9, 1984

Mr. Melvin T. Smith
State Historic Preservation Officer
Division of State History
307 West 200 South, Suite 100
Salt Lake City, Utah 84101

RE: Dertermination of Adequacy
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Smith:

Enclosed please find one (1) copy of U. S. Fuel Company's response to the Division's Determination of Adequacy Review. This Response is forwarded for review by the Division of State History in accordance with our Memorandum of Understanding (MOU).

As you may recall, the MOU between our Divisions' calls for the following:

B. Mining Plan:

1. Upon submission of a coal mining and reclamation plan to the Division of Oil, Gas & Mining, the Division of Oil, Gas & Mining will notify the SHPO in writing of the need for consultation and evaluation of the plan with respect to historic and cultural resources. The Division of Oil, Gas & Mining will provide a copy of the relevant portion of the plan to the SHPO.

2. The SHPO will respond to the Division of Oil, Gas & Mining in writing within 30 days of receipt of the notification. The SHPO will include in such response an evaluation of the adequacy or inadequacy of the plan submitted by the operator to avoid, ameliorate or mitigate impacts of the proposed operation on historic and cultural resources.

3. Where the proposed mining plan, will, in the judgment of the SHPO, adversely effect sites listed on, or potentially eligible for listing on the National Register of Historic Places, the SHPO shall proceed pursuant to 36 CFR 800. The SHPO will further assist the Division of Oil, Gas & Mining in its requirements set forth in MC 761.12(f) of the Coal Mining Regulations and make recommendations for survey and mitigation as appropriate.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,

James W. Smith, Jr.
Coordinator of Mined
Land Development

JWS/SCL:btb

Enclosure

File ACT/007/011
Folder No. 2

STATE OF UTAH
NATURAL RESOURCES
Water Rights

1636 West North Temple • Salt Lake City, UT 84116 • 801-533-6071

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dee C. Hansen, State Engineer

Copy to Sue
Rick, Dave D.
JIM

DEC 15 1983

December 13, 1983

Mr. James W. Smith, Jr.
Coordinator of Mined Land Development
Utah Division of Oil, Gas and Mining
1588 West North Temple
Salt Lake City, Utah 84115

Re: U.S. Fuel Company
Hiawatha Complex
ACT/007/011
Carbon County, Utah

Dear Mr. Smith

We have completed our review of the water-related topics in the Determination of Completeness and Response to Determination of Adequacy for the above-mentioned project. The pond systems have been approved by previous correspondence, and these documents do not appear to contain any new impoundments.

Yours truly,

Dee C. Hansen

Dee C. Hansen, P.E.
State Engineer

DCH:rlm

cc: Price Area Office
U.S. Fuel Company

RECEIVED
DEC 15 1983
DIVISION OF
OIL, GAS & MINING

File ACT/007/011, File #2
Copy to Sue Debbie

DEC 9 1983

RECEIVED
DEC 08 1983
DIVISION OF
OIL, GAS & MINING

MEMORANDUM

TO: U. S. Fuel
Hiawatha Mine - File

FROM: Sarah Bransom SB
Project Leader

SUBJECT: Meeting Report

On December 8, 1983 a meeting was held in Salt Lake City at the offices of Ford, Bacon and Davis (FBD) to discuss the Hiawatha DOA letter (see attached for meeting attendees). The following is a summary of the issues that were discussed:

1. Cultural Resources

USF will provide requested information.

2. 702.13 Identification of Interests

USF will provide an explanation of terms and use a narrative to correct the discrepancies.

3. 782.19 Licenses and Permits

USF will provide the approval date (nationwide C.O.E. approval).

4. 783.17 Alternate Water Supply

All parties agreed that water replacement must be in the general location of that which is lost.

5. 783.19

USF will correct maps.

6. 784.13(a) Reclamation

See Mark Humphrey's memo. USF agreed to drop the term "experimental". Lynn Kunzler (DOGM) has agreed to visit the mine with FBD to select test plots. I requested that FBD coordinate this activity with Mark Humphrey. Mark indicated that U.S. Fuel did not have to do fieldwork at this time to select test plots, but could provide a commitment to finalize reclamation plan in the PAP.

7. 784.13(b)(5) Revegetation

USF will estimate (quantity) previously/future disturbed expansion areas. Test plots still need to be selected and tested; however, Humphrey stated commitment was acceptable. USF will include productivity as a criteria for revegetation success.

8. 784.14 Hydrologic Balance

USF agreed to research subsidence potential/occurence at surrounding mines and present a "worse case" scenario for potential subsidence at Hiawatha. They will be specific where possible, e.g. locate consolidated vs. unconsolidated material in relation to subsidence areas. USF will address impacts to springs and streams.

Mike Bishop agreed that a water sample in the slurry pond (vs. runoff from pond) could be used to determine potential contamination to Miller Creek.

9. 784.21 Fish and Wildlife Plan

USF will clarify its statements concurring "maintaining flows" in Miller Creek. They will also address the riparian habitat buffer zone as it relates to the proposed crossing of Miller Creek to develop a topsoil borrow site. USF was informed that DOGM was opposed to the crossing.

USF agreed to evaluate subsidence as it relates to wildlife use of springs (i.e. potential loss of available water).

10. 785.19 AVIF

Current snow-cover prohibits USF from doing the necessary fieldwork. They will use other criteria (slope, SCS data, size, irrigation practices) to justify eliminating the AVF concerns. Mike Bishop agreed that Map #1 (785.19(c)(1)(i) would be sufficient for delineating the AVF study area.

11. 817.22(e) Topsoil

See Humphrey's memo.

12. 817.52 Ground Water Monitoring

The applicant will re-evaluate its position in the recommended in-mine monitoring program. They will also develop a mitigation program for those springs where water rights occur and are important for wildlife use.

13. 817.97 Fish, Wildlife

FBD indicated that existing reference areas were not suitable in judging success of reclamation; they proposed selecting new reference areas. Mark agreed that selecting new reference areas was appropriate and told USF to make a commitment to change the reference areas in the PAP.

Attendance for Meeting December 8, 1983

Name	Representing	Telephone
Jack Elder	FB&D	(801)583-3773
Rich White	EarthFax Engineering	(801) 268-8062
Randy Gainer	EarthFax Engineering	(801) 268-8062
Mike Bishop	Engineering-Science	(303) 455-4427
Sarah Bransom	OSM	" 837-3806
Mark Humphrey	OSM	(303) 837-3806
Robert Ecti	U.S. FUEL	(801) 343-2471
Jean Semborski	U.S. Fuel Co	" "
[illegible]	[illegible]	[illegible]
Tom Suchoski	FBD	801/583-3773
Franklin K. Anderson	FBD	(801) 583-3773
Robert Overmyer	FBD	(801) 583-3773

MEMORANDUM

TO: Sarah Bransom
Project Leader

FROM: Mark Humphrey

SUBJECT: U. S. Fuel's Hiawatha application
(Topsoil, field test plots, and reference areas)

Problems have come to my attention in the topsoil handling operations, field test plots and the reference area portions of U. S. Fuel's application.

The topsoil handling operations section of the application contained some confusion as to where the borrow area material would be applied. To clarify this confusion U. S. Fuel proposes to use material from the valley fills at portals (4, 5, and 6) as topsoil material. The problem is that U. S. Fuel has not conducted analysis of this material to determine its suitability. I have discussed this problem with Frank Anderson (Ford, Bacon and Davis) and Bob Eccli (U. S. Fuel). I identified two options available to U. S. Fuel; 1) conduct physical and chemical analysis of the valley fills, and develop criteria for suitability; 2) demonstrate that the material from existing stockpiles and borrow area has sufficient volume to reclaim the disturbances. Both options have a deadline of January 9, 1984.

Based upon our meeting with Ford, Bacon and Davis, and U. S. Fuel on December 8, 1983, the field test plots proposed on the valley fill material must be incorporated into the application. Currently, the application does not address physical and chemical analysis of the proposed topsoil material identified in the valley fills. For this reason the applicant was told at the meeting that the field test plot designs must address the sampling of all topsoil substitutes. In a phone conversation with Frank Anderson and Bob Eccli, I suggested that a schedule be added to the application which would show a commitment to conduct these analysis.

In the meeting on December 8, 1983, the issue of having reference areas for proposed post mining vegetation types was addressed. I recommended that these reference areas be kept in the application as to avoid any further delay by revision of the permit. Therefore, U. S. Fuel may revise the reference areas after a permit is issued.

I have discussed the topsoil issues with Tom Portal (UDOGM). He has indicated that there isn't any apparent problem with our approach.

File ACT/007/011
Folder No. 2
Copy to Wayne

November 30, 1983

SCOTT M. MATHESON
GOVERNOR

STATE OF UTAH
DEPARTMENT OF COMMUNITY AND
ECONOMIC DEVELOPMENT

JIM

Division of
State History
(UTAH STATE HISTORICAL SOCIETY)

MELVIN T. SMITH, DIRECTOR
300 RIO GRANDE
SALT LAKE CITY, UTAH 84101-1182
TELEPHONE 801/533-5755

James W. Smith, Jr.
Coordinator of Mined
Land Development
Division of Oil Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attn: D. Wayne Hedberg

RE: Determination of Completeness Review Response, U. S. Fuel Company, Hiawatha Complex, ACT/007/011, Folder No. 2, Carbon County, Utah

Dear Mr. Smith:

After review of the material provided by the Division of Oil, Gas & Mining, the Utah Preservation Office has found that a cultural resource survey has been completed and portions reported in the apparent completeness review response. The survey located no known cultural resources and was carried out by professional standards. Therefore, our office has no comment concerning the mine plan, and believes that the material is adequate for submission to the Office of Surface Mining.

Since no formal consultation request concerning eligibility, effect or mitigation as outlined by 36 CFR 800 was indicated by you, this letter represents a response for information concerning location of cultural resources. If you have any questions or concerns, please contact me at 533-7039.

Sincerely,

James L. Dykman
Cultural Resource Advisor

JLD:jrc:E409/7566c

FILE ACT/007/011
Folder #2

November 21, 1983

Mr. Mark Humphrey
U. S. Office of Surface Mining
1020 - 15th Street
Denver, Colorado 80202

Dear Mark:

Please find enclosed Engineering-Science's revised determination of adequacy for the Soldier Canyon Mine. This copy now contains all of the suggested changes received from the UDOGM and OSM staffs.

The review of U. S. Fuel's response to the determination of adequacy is also included in this submittal. The primary problem areas that have been identified are soil resources, wildlife resources, revegetation and hydrology. Many of the problems that remain center on the amount of time the applicant had to respond and the additional detail that would be necessary for a complete response. Per Sarah's request, Engineering-Science will be available to discuss the time frames associated with these information requests on Tuesday, 22 November 1983.

Sincerely,

mike

Mike Bishop
Assistant Project Manager

Enclosure

DRAFT

REVIEW OF U. S. FUELS RESPONSE
TO THE 19 OCTOBER 1983 DETERMINATION OF ADEQUACY

782.13 Identification of Interests

(b-e) All points responded to adequately for TA.

Appendix II-1, however, has some discrepancies during a spot check comparison of the table and Exhibit IV-1 (Surface Ownership Map). The applicant must define its use of the terms: patent, conveyance, warranty deed, quit claim deed. If the legal document for the right to enter a parcel of land is a patent and the coal is owned by the USA, is another lease required? An area in T.15 S., R. 8 E., sec. 17, is shown as Plateau Mining Co. having coal ownership. Does the applicant have a right to enter and mine this area? Another area, T. 15 S., R. 8 E., sec. 21, E 1/2, E 1/2, shown on Exhibit IV-2 (Subsurface Ownership) as belonging to Plateau Mining Co. does not show on Appendix II-1. The applicant must review Exhibits IV-1 and IV-2 with Appendix II-2 to eliminate all discrepancies including/and in addition to those noted above.

782.19 Identification of Other Licenses and Permits

The applicant must provide the approval dates for the U. S. Army Corps of Engineers approval of the coal refuse piles and the slurry impoundments. In addition, the U. S. Geological Survey Conservation Division approval date of the mining plan must also be provided.

783.17 Alternate Water Supply Information

The applicant responded (p. 23, Volume 1, November, 1983) to the 19 October 1983 DOA (p. 7) by stating that a maximum of 100 gallons per minute (gpm) may be depleted by mining (i.e. 50 gpm water rights not belonging to U. S. Fuels, 40 gpm other springs and 10 gpm stream losses). The applicant must respond to the following questions still remaining with regard to the potential losses of water and how the applicant plans to alleviate potentially affected water users:

1. The applicant must revise the discussion of alternate water supply information based on the revised estimate of probable hydrologic consequences (see comments concerning 784.14).

2. It is not clear that the applicant has the water rights to the 105 gpm discharged to Cedar Creek from the Mohrland Portal that is proposed as replacement water for potentially affected water users.

3. It is not clear that water that the applicant may have available (i.e., from the Mohrland portal) can be delivered to approriate locations to replace affected water users.

UMC 783.19 Vegetation

The vegetation type map (Exhibit IX-1, Vol. 3, Nov. 1983) remains inadequate for the following reasons:

(1) Several mapping units are unlabelled. One occurs in Section 30 of the mine permit area and two occur in Sections 15 and 16 of the future mine permit area. None of the riparian vegetation units are labelled;

(2) The boundary between a pinon juniper mapping unit and a mixed conifer mapping unit is not provided; and

(3) Not all the sampling sites in the proposed disturbance areas are shown in Exhibit IX-1. There should be an agreement of the station numbers and locations between Exhibit IX-1 subsequent Exhibits IX-2A through IX-4C.

The applicant must revise the vegetation map to correct the problems described above.

UMC 784.13(a) Reclamation Plan: General Requirements

The applicant's response (p. 30, Volume 1, Nov. 1983) to comments in the DOA letter of 19 October 1983 (p. 12) does not provide specific reclamation plans for the four substitute topsoil source areas. The yet unavailable laboratory data for each distinct soil type occurring

in each substitute topsoil source area must be utilized to determine the quality and quantity of substitute topsoil material available.

When the applicant obtains the complete laboratory data for each soil type that allows a determination of the suitable substitute topsoil resource, the applicant must prepare detailed information plans for each substitute topsoil source area that provide: 1) a detailed estimate of costs for reclamation (as required by UMC 800-808); a plan for backfilling, soil stabilization, compaction, and grading with appropriate contour map and cross-sections (as required by UMC 817.100-817.106); 2) a plan for removal, storage, distribution of topsoil, equipment and facilities, and supplemental nutrient and soil amendments (as required by UMC 817.21-817.25); 3) a plan for revegetation (as required by UMC 784.13(b)(5) and 817.111-817.116); and 4) a description of steps to mitigate impacts to air quality resulting from fugitive dust and to control water quality impacts from erosion to Miller Creek, as required by the Clean Air act, Clean Water Act and UMC 817.45. Again, each substitute topsoil source area must be covered by its own site-specific reclamation plan.

UMC 784.13(b)(3)

The applicant's response on page 33 to comments in the DOA letter of 19 October 1983 (page 13) does not provide detailed cost estimates for reclaiming the proposed topsoil borrow sites. The yet unavailable soils laboratory data discussed previously in this letter [UMC 784.13(a)] must be utilized to develop spepcific reclamation plans and associated detailed costs for the topsoil borrow sites.

UMC 784.13(b)(4)

The applicant's response on pages 39 through 43, Volume 1, November, 1983, to comments in the DOA letter of 19 October 1983 (pp. 13 and 14) is incomplete. Separate topsoil handling plans for the areas to be reclaimed are presented; however, none provide a complete set of required information. The applicant must include a map of the depths and sources of replaced topsoil, calculations of substitute material, stockpile, and topsoil volumes for reclamation of each facility, and

site specific methods to prevent excess compaction and reduction of erosion to determine feasibility of reclamation as required by UMC 786.19. The applicant must consistently describe in detail and on a site-specific basis the methods for handling topsoil.

UMC 784.13(b)(5): Revegetation

The following discussion addresses the applicant's responses as provided under UMC 786.19, which more appropriately should have been organized under this regulation. The applicant's responses to the DOA

comments remain inadequate in several areas. The applicant's discussions have also raised some additional comments.

(1) The applicant makes reference to past and future disturbances of riparian vegetation (p. 84, Vol. 1, Nov. 1983) but does not quantify the disturbances. The applicant must provide an estimate of how many acres of riparian vegetation have been lost or disturbed in the past and an estimate of the anticipated future losses and disturbances.

(2) The applicant must describe the details and scope of activities of the "less intensive" field studies proposed for the mine pad and riparian areas as described on p. 84 (Vol. 1, Nov. 1983). The details must include the size and number of each type of plot as mentioned on p. 86.

(3) The applicant has not identified the locations and sizes of the test plots that will be used to evaluate seed mixtures No. 3 and No. 4. The applicant must provide these data before a technical analysis can be completed.

(4) The applicant must present the seeding rates for proposed seed mixtures Nos. 1, 2, 3, and 4 in terms of pure live seed (PLS) as requested in the DOA, p. 15. The applicant must also specify the seeding rates (PLS) that will be used on areas scheduled for drill seeding.

(5) The applicant must provide a description with an accompanying figure(s) of the proposed spacing and spacial arrangements of tree and shrub plantings as requested in the DOA,, P. 15.

(6) The applicant has not provided a clear description of the criteria and tests that will be used to demonstrate that successful revegetation of disturbed areas will be achieved as requested by the DOA, p. 15. The applicant must provide the standards for successful revegetation that will be employed to demonstrate that the revegetated areas are equal to or better than the approved reference areas as required by UMC 817.117. Such data will be required for bond release. The inconsistencies in success standards presented in the

July, 1983 ACR Responses (Revegetation Plan p. 8 and P. III-31D) are still present.

UMC 784.14 Reclamation Plan: Protection of the Hydrologic Balance

The applicant's response to the concern regarding subsidence and erosional stability of stream in the area (DOA, 19 October 1983, #1 page 18) does not support the conclusions that subsidence effects will not reach the surface. Statements like "This massive sandstone ... should act as a bridge" do not justify the contention that streams will not be affected by subsidence. Please note that at the Gordon Creek No. 2 Mine subsidence effects have reached the surface in areas with overburden in excess of 700 feet thick. In addition, the UDOGM staff recently found stream flow that was completely lost into subsidence fractures in the vicinity of the Gordon Creek Mines. At the Belina Mines a spring was noted that flowed into subsidence fractures. An overburden limit of 400 feet was established as the zone where subsidence effects would reach the surface at the Belina Mines. It should be emphasized that field information based on past experiences with subsidence at these respective mines has been used to justify the predicted subsidence effects.

With respect to the Hiawatha King Mines the discussion of subsidence effects to streams (i.e. erosional stability and potential water losses) and springs must include a discussion of the subsidence effects that have been observed at the Hiawatha King Mines. Particular concern is raised with respect to those areas with less overburden such as in Miller Creek (i.e., less than 300 feet of overburden). In the areas of lower overburden, where subsidence effects are most likely, the applicant must discuss the nature of the potential subsidence fractures (i.e. how much change in elevation can be expected as a result of subsidence). In addition, the applicant must describe the characteristics of the stream channel materials in the areas of potential subsidence and their ability to resist erosion in areas of predicted subsidence effects.

The applicant's response to the concern expressed in the 19 October 1983 DOA (pp. 18-19) regarding springflow and stream flow is

not adequate. The applicant uses very little data in his response and admits that there are certain hydraulic relationships that remain unknown with respect to potential impacts to streams and springs. However, the bottom line in the applicant's response is that future impacts to springs and streams are not expected or will be short lived.

The applicant must review the spring mine water inflow, and stream monitoring data available in the vicinity of the Hiawatha ~~King~~ Mines with respect to any mining effects to springs and streams that may be observable. In addition, outside studies that are used in the response such as Danielson et al, 1981 must be explained with regard to the proximity of the study to the Hiawatha King Mines. For example, where are the springs that were studied? The revised subsidence evaluation (i.e., based on field information from the Hiawatha King Mines) must also be considered with respect to streams and springs in the area. Discussion of the predicted hydrologic effects of the Hiawatha King mines must also consider which surface or ground water rights may be affected.

With respect to the DOA concern #5 regarding the water quality and effects of water losses from the slurry ponds and coal refuse piles (p. 19, 19 October 1983), the applicant is waiting for analyses of waters from these sources prior to considering the need for a determination of impacts to surrounding water resources.

Pending the receipt of the water analyses from the slurry pond No. 4, and a sample of runoff from the coal slurry pond, the applicant must evaluate if waters lost from these sources have the potential to degrade local water resources. If these waters may potentially degrade local water resources, the applicant must develop a water balance that determines what effect water losses from the slurry ponds and the coal refuse piles will have on local surface and ground water resources.

UMC 784.21 - Fish and Wildlife Plan

The applicant's responses to deficiencies identified in the October 19, 1983 DOA are not adequate for some issues.

(1) The following remaining deficiencies are summarized and keyed to the items as numbered in the DOA:

DOA p. 21, Item No. 3: Although the applicant has described what planting mixture and rates will be used for riparian habitat restoration, the applicant has not provided specific information on several points. The applicant must (1) specify what flow rate(s) will be maintained in Miller Creek and its tributaries to maintain a riparian habitat; (2) provide a description of how the flows will be provided; (3) specify whether the flow rates will vary seasonally or not; and (4) provide the details of what the seasonal flow rates will be. A commitment to provide "adequate flows" was made on p. 62 (Vol. 1) of the Nov. 83 submittal. The applicant must specify what flow provisions are proposed for that portion of Cedar Creek within the permit area, if any. The applicant also commits to providing riparian habitat buffer zones (p. 62) but fails to specify what conditions will dictate the need to provide buffer zones and how wide the buffer zone will be. The applicant must describe the conditions and locations that will necessitate riparian buffer zones and explain the buffer zone width.

DOA, P. 21, Item No. 4: The applicant has not described what specific measures will be taken to minimize road crossing impacts to aquatic communities as requested. The primary concern is the avoidance or reduction of sedimentation effects.

DOA, p. 21, Item 5: Although the applicant has committed to restoring wildlife habitat and has also provided adequate details on many aspects, the proposed plan is unclear in two respects. First, the applicant commits to planting and establishing tree and shrub clumps for wildlife benefits but does not provide specific details on the acreage, number, size, or spacial arrangement of the clumps (p. 48, Nov. 1983 submittal). The applicant must provide this data for the

technical analysis. Second, the applicant implies (p.61, Vol. 1, Nov. 1983) that only about 118 acres of the 277 acres of wildlife habitat lost will be restored. The applicant must describe how the remaining 159 acres of disturbed/-destroyed habitat will be treated in the reclamation phases. A complete inventory of how all 277 acres will be treated should be provided.

DOA, p. 23, Item 3: The applicant has not provided engineering drawings of the proposed conveyor systems for King IV and V Mines. The applicant proposes to submit the plans to the Division at some future, unspecified time. The applicant must commit to providing the engineering drawings by a specified date. The permit application will remain incomplete until these plans are provided and approved.

DOA, p. 22, Item 7: The applicant has not provided an adequate response to the issue of mining impacts on springs and seeps and the subsequent effects on wildlife use. The applicant provides conflicting information on the probability of subsidence effects on spring/seep flow depletion. On p. 63, (UMC 784.21) response, the applicant indicates no anticipated effects on springs. However, in UMC 783.17 (P. 23), the applicant indicates reductions in spring flows due to subsidence effects. For a more detailed discussion of the conflicting information presented in the responses, see comments for UMC 784.14. In terms of the proposed mitigation measures for the loss of springs/seeps that might occur, the applicant implies that mitigation will only be provided for the monitored springs (number unspecifed that exhibit reduced flows (p. 63, Vol. 1, Nov. 1983 submittal) the applicant does not address the potential losses of spring seeps that are not monitored. The applicant does not indicate the number of springs/seeps that may be affected. The extensive use of springs and seeps by at least deer is documented in Table VII-2c (Vol. 1, Nov. 1983 submittal). In light of these conditions the applicant must provide (a) a description of

how the losses of unmonitored springs and seeps will be mitigated; (b) a description of probable effects of mining on spring and seep flows that eliminates the contradictions noted earlier.; (c) an estimate and description of the number of springs that will be affected during the life of the mine operations by subsidence; and (d) the number of springs that will be monitored (see UMC 817.52 below). The volume of water reductions caused by subsidence is important information, but the number and location of springs likely to experience dewatering effects are of equal importance for wildlife welfare.

(2) The application does not provide engineering designs for the proposed sediment control facilities along Miller Creek associated with the topsoil borrow sites (described p. 33, Vol. 1, Nov. 1983). The plans and designs are promised for submittal by January 16, 1983. The application remains incomplete until these plans are submitted and appoved.

UMC 785.19 Alluvial Valley Floors

The applicant's response to the 19 October Determination of Adequacy (DOA) is confusing and does not resolve the two issues raised in the DOA; 1) Whether the valleys of Cedar Creek or Miller Creek are suitable for flood irrigation within the mine plan and adjacent area of the Hiawatha King Mines, and 2) The extent of subirrigation which occurs on these valley floors. The response centers on the permit area, whereas the DOA and the regulations (i.e., 785.19) require information on the mine plan and adjacent areas. In addition, the applicant does not provide information that demonstrates that the valley bottom areas in Cedar Creek and Miller Creek are not suitable for flood irrigation activities while downstream areas in both drainages are currently under irrigation practices (i.e. specific data are not provided). The following information is necessary in order to find compliance with UMC 785.19.

1. The applicant must provide a map showing the extent of unconsolidated streamlaid deposits holding streams (785.19(c)(1(i).

2. The applicant must provide the resource information necessary for the areas mapped as streamlaid deposits within the permit and adjacent areas of the Hiawatha King Mines in order to determine whether the valleys of Miller Creek and Cedar Creek are AVFs. The appropriate combination of studies (i.e., items i to vi of 785.19(c)) must be provided in order to determine the suitability of the respective valleys for flood irrigation or subirrigation agricultural activities. The applicant is encouraged to key on those areas that indicate these valleys are clearly not suitable for flood irrigation or subirrigation agricultural activities. A suitable response concerning these characteristics of the valleys that would demonstrate the suitability of the vallelys for flood irrigation or subirrigation agricultural activities would include the appropriate combination of:

A. Soils physical and/or chemical data;

B. A discussion of the topography of the valleys, including appropriate measurements of slope in relation to the potential for flood irrigation activities;

C. A discussion of water quality and quantity potentially available for flood irrigation activities, excluding any discussion of water rights. It appears that there is sufficient water quality and quantity available from Cedar Creek and Miller Creek because of the current irrigation operations downstream.

D. Documentation and mapping of areas that are subirrigated (i.e., using the appropriate combination of plant indicator species, test pits, water measurements, infrared photography, etc.)

The applicant is encouraged to use OSM's Alluvial Valley Floor Identification and Study Guidelines (August, 1983) and to consult Mike

Bishop with Engineering Science (303) 455-4427 when questions arise.

UMC 789.19 Criteria for Permit Approval or Denial

A review of the applicant's proposed field trial studies (pages 68 through 100, Volume I, Nov. 1983 submittal) shows the proposed studies would address the reclamation situations for the coal slurry impoundments, the substitute topsoil borrow sites, the mining pads and associated facilities, and the disturbed riparian areas. These proposed studies were developed in response to comments in the DOA letter of 19 October 1983 (page 27).

The proposed in-depth plot studies for the coal slurry impoundments and substitute topsoil borrow area are sound field trial studies; however, an evaluation of the experimental design indicates the applicant has assumed that 1) the soil material remaining after borrowing is representative of that particular substitute topsoil reserve and 2) the soil materials of that particular substitute topsoil reserve are representative of the three other borrow reserves scheduled to be used in the reclamation of the disturbed areas. The absence of a complete data base of detailed pedon descriptions and associated laboratory analysis precludes at this time the ability to assess characteristics and degree of homogeneity within a single borrow area and among borrow areas. The applicant must develop field test plots based on the results of a complete soil analysis including laboratory analysis.

With the receipt of finalized pedon descriptions and laboratory data, the applicant should reevaluate the vegetation-soil plot studies to be sure they will demonstrate the capabilities of the substitute topsoil materials for use in interim and final reclamaiton. The pedon descriptions and analytical results should also be used as guides in the development of treatments to demonstrate the feasibility of the applicant's topsoil handling plan and the proposed seed mixtures. Do not complicate the experimental design with treatments which in terms of feasiblity for use in the reclamation plan is unlikely, but be sure the probable reclamation situations are included in the design to demonstrate the feasibility of reclamation.

With regards to the smaller scale study plots, the applicant must provide the results of laboratory analyses to evaluate the suitability of the potentially contaminated soil materials occuring in the mine facility pad areas and disturbed riparian areas. Should the analytical results indicate an adverse or toxic constituent, the applicant must provide a plan of mitigation such as removal of the adverse material and burial at an approved depth during backfilling operations. The applicant must also provide a detailed description of the study design including the means by which the feasibility of the applicant's reclamation plan can be assessed.

UMC 817.52 Ground Water Monitoring

The DOA requested that the applicant commit to in-mine monitoring on a monthly basis. This frequency is justified because it is important to document the variation in flow that may be encountered within the mine, particularly as these ground water inflows relate to surface water discharges. The applicant responded (p. 100, Vol. 1, Nov., 1983) that they are willing to monitor ground water inflow to the mine on a quarterly basis.

As stated in the DOA, the applicant must commit to monitoring ground water inflow to the mine on a monthly basis with monitoring records being submitted to the regulatory authority quarterly.

An additional issue has arisen on the basis of the determination of hydrologic consequences provided by the applicant in response to UMC 784.14. Confusion still remains concerning what the hydrologic consequences of the Hiawatha King Mines will be.

Based on the reassessment of probable hydrologic consequences requested with respect to UMC 784.14, the applicant must provide a revised spring monitoring plan that will provide documentation of losses of important springs. The determination of what springs are important must include those with water rights, and those that are important to wildlife.

UMC 817.97 Protection Fish, Wildlife ...

(1) The applicant's adequacy response to Item No. 1 (pp. 101, Vol. 1, Nov. 1983) states that "special wildlife areas" will recieve "optimized planting" to enhance forage value. The applicant has not provided any supporting information specifying how or where these commitments will be implemented. The applicant must (1) provide a map and description showing the number and locations of the proposed "special wildlife areas" and (b) provide a description of what constitutes "optimized plantings." Both types of information are required in order that a technical evaluation of these activities can be conducted.

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

November 16, 1983

Mr. Douglas F. Day, Director
Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

RE: Determination of Completeness
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Day:

Enclosed please find one copy of U. S. Fuel Company's response to the joint DOGM/OSM Determination of Completeness (DOC) Review referenced above. This Response is forwarded for review by the Division of Wildlife Resources (DWR) in accordance with our Divisions' Memorandum of Understanding (MOU).

A copy of the joint review document (DOC) was forwarded to your office by letter dated October 31, 1983 for reference to this response.

As you may recall, the MOU between our Divisions' calls for the following:

B. Mine Plan Review

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will notify the DWR in writing of the need for consultation in evaluation of the plan with respect to fish and wildlife resources as required by MC 786.17(a)(2). DOGM will provide a copy of such plan to DWR when available.

2. The DWR will respond to DOGM in writing within 60 days of receipt of the plan with an evaluation of the adequacy or inadequacy of the fish and wildlife plan submitted by the operator to avoid, ameliorate or mitigate impacts of the proposed operation on wildlife resources.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact myself or D. Wayne Hedberg of my staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

November 16, 1983

Mr. Dee C. Hansen
State Engineer
Division of Water Rights
1636 West North Temple
Salt Lake City, Utah 84116

RE: Determination of Completeness
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Hansen:

Enclosed please find one copy of U. S. Fuel Company's response to the joint DOGM/OSM Determination of Completeness (DOC) Review. This Response is being forwarded for review by the Dam Safety and Water Rights sections of your office in accordance with our Divisions' Memorandum of Understanding (MOU).

A copy of the joint review document (DOC) was forwarded to your office by letter dated October 31, 1983 for reference to this response.

As you will recall, the MOU between our Divisions' calls for the following for the Dam Safety Section:

B. Mine Plan Review:

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will forward a copy of the mining and reclamation plan to Dam Safety. If information additional to that contained in the operator's submission is required, Dam Safety is responsible for contacting the operator to obtain such information. Copies of such requests and also copies of the company's submittal in response to the request will be submitted to DOGM.

2. Within 30 days of receipt of the mining and reclamation plan, Dam Safety shall contact DOGM with their final response to the agency's proposed action on the operator's application.

3. If Dam Safety proposes to reject the plan for failure to meet water retention safety standards, the DOGM will call a conference between the state and the operator at the earliest possible date.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact myself or D. Wayne Hedberg of my staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 16, 1983

Mr. Kenneth Alkema
Department of Health
Division of Environmental Health
P. O. Box 2500
Salt Lake City, Utah 84101

RE: Determination of Completeness
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Alkema:

Enclosed please find one copy of U. S. Fuel Company's response to the joint DOGM/OSM Determination of Completeness (DOC) Review. This Response is being forwarded for review by the Division of Environmental Health of your office.

A copy of the joint review document (DOC) was forwarded to your office by letter dated October 31, 1983 for reference to this response.

As you will recall, the MOU between our Divisions' calls for the following:

B. Mine Plan Review.

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM, shall, in consultation with DOH, review the operator's list of licenses, permits or approvals to determine whether or not approvals from DOH have been issued.

2. If any permits or approvals from the DOH have not been issued, the DOGM will submit to the DOH those parts of the permit application containing matters within the DOH's jurisdiction or interest for review and response and inform the operator in writing that he must contact DOH for the appropriate permits and approvals.

3. If additional information is required by DOH for any permit or approval, the DOH shall contact the operator for such information. Copies of any such requests and the operator's reponse to such request shall be forwarded by DOH to DOGM.

4. Within two weeks of receipt by DOGM of the mining operator's submission and any additional information requested, each DOH bureau shall contact the DOGM with preliminary written notification of the status of any outstanding permits or approvals. If DOH determines to reject the operator's permit application or has any major problems with the operator's mine plan, the DOGM may convene a conference between the state agencies and the operator as soon as possible.

5. The DOH will make every effort to have their response to the mine plan and any other DOH permits and approvals finally completed within 60 days of the DOH receipt for the operator's complete application for DOH permits and approvals.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact myself or D. Wayne Hedberg of my staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb

Enclosure

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 16, 1983

Mr. Melvin T. Smith
State Historic Preservation Officer
Division of State History
307 West 200 South, Suite 100
Salt Lake City, Utah 84101

RE: Determination of Completeness
Review Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Smith:

Enclosed please find a copy of U. S. Fuel Company's response to the joint DOGM/OSM Determination of Completeness Review (DOC) for the cultural and historic portions of the Mining and Reclamation Plan (MRP) referenced above. This Response is forwarded for review by the Division of State History in accordance with our Memorandum of Understanding (MOU).

A copy of the joint review document (DOC) was forwarded to your office by letter dated October 31, 1983 for reference to this response.

As you may recall, the MOU between our Divisions' calls for the following:

B. Mining Plan:

1. Upon submission of a coal mining and reclamation plan to the Division of Oil, Gas & Mining, the Division of Oil, Gas & Mining will notify the SHPO in writing of the need for consultation and evaluation of the plan with respect to historic and cultural resources. The Division of Oil, Gas & Mining will provide a copy of the relevant portion of the plan to the SHPO.

2. The SHPO will respond to the Division of Oil, Gas & Mining in writing within 30 days of receipt of the notification. The SHPO will include in such response an evaluation of the adequacy or inadequacy of the plan submitted by the operator to avoid, ameliorate or mitigate impacts of the proposed operation on historic and cultural resources.

3. Where the proposed mining plan, will, in the judgment of the SHPO, adversely effect sites listed on, or potentially eligible for listing on the National Register of Historic Places, the SHPO shall proceed pursuant to 36 CFR 800. The SHPO will further assist the Division of Oil, Gas & Mining in its requirements set forth in MC 761.12(f) of the Coal Mining Regulations and make recommendations for survey and mitigation as appropriate.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. If you have any questions, please contact myself or D. Wayne Hedberg of my staff.

Sincerely,

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/DWH:btb

Enclosure

File ACT/007/011
Folder No. 2
copy to Wayne, Mary
JIM

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

NOV 10 1983
RECEIVED
NOV 10 1983
DIVISION OF
OIL, GAS & MINING

November 10, 1983

Sarah E. Bransom
U.S. Department of the Interior
Office of Surface Mining
Technical Analysis and Research Division
1020 15th Street
Denver, Colorado 80202

SUBJECT: Cover letter for U.S. Fuel Company's response to the OSM's Determination of Adequacy

Dear Ms. Bransom:

With this cover letter we herein transmit seven copies of U.S. Fuel's response to the OSM's Determination of Adequacy (DOA), as contained in your 27 October letter and attached comments to U.S. Fuel. As you are aware, U.S. Fuel has retained Ford, Bacon & Davis, Incorporated to assist in preparation of this document. The time frame for their participation has been short (approximately 2 weeks), so by necessity they have responded to the comments exactly in the order that they appear in the 27 October DOA. Attachments associated with our response to each OSM comment appear with that response instead of in the form of a compendium at the end of the report. In that way we believe that OSM reviewers can more easily assess the completeness of the response. Because of non-availability of data, a few OSM comments could not be answered. These are identified in the text along with dates which responses can be expected.

The material contained in this response will ultimately be reorganized and placed in the Mining and Reclamation Plan (MRP). Most tables, figures, and exhibits have been keyed to their appearance in the MRP, but in a few cases where the exact location of an addition to the MRP has not been determined, a temporary number has been assigned.

U.S. Fuel in accordance with agency recommendations, has elected to sever the application for King VII and VIII (Mohrland) from this permit application. We request that data and references previously submitted on King VII and VIII remain in the documents as conceptual plans. Exhibit IV-3 has been revised to show the new permit boundary

(continued)

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

and that of the proposed Mohrland permit boundary. A complete MRP will be prepared for King VII and King VIII in the near future. Therefore, OSM comments that pertain to Mohrland have not been addressed in this response.

Please note that the last section of this response answers the comments of DOGM on their 20 September 1983 letter in regards to the planned breakout at King IV. We wish to include this breakout as part of the present permit application.

We trust that you will find this response complete and adequate. Should you have any questions please contact me.

Sincerely,

Robert Eccli

Robert Eccli
Senior Mine Engineer

RE/km

enclosures

November 10, 1983

Memo to Coal File:

RE: U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

The attached compliance schedule letter for the above-referenced mine was returned to the Division by the Office of Surface Mining (OSM). The OSM would not accept the Division's proposal for a more reasonable and achievable permit application review and approval schedule of this federal mine for which OSM has assumed lead review responsibility. They instead forwarded their own letter and compliance schedule.

JAMES W. SMITH, JR.
COORDINATOR OF MINED
LAND DEVELOPMENT

JWS/btb

Attachments

cc: Dianne Nielson, DOGM

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

November 7, 1983

Ms. Jean Semborski
U. S. Fuel Company
Hiawatha, Utah 84527

RE: Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Ms. Semborski:

The following is the assignment of the compliance schedule for processing the permanent program permit applications for the Hiawatha Complex, ACT/007/011.

On June 13, 1983, we notified you that the Office of Surface Mining (OSM) and the Utah Division of Oil, Gas, and Mining (DOGM) had adopted a joint review process and provided you with a schedule for review of your application for a mining and reclamation permit under the Utah State program, and for a mining plan under the authority of the Secretary of the Interior. Since that date, both agencies have experienced serious problems in obtaining the necessary information in a timely manner to meet the schedule. Therefore, we have developed a more detailed schedule which is enclosed.

In order to complete the administrative review and decision process by the deadline, OSM and DOGM have established a more detailed compliance schedule (see enclosure). This schedule recognizes that since December 11, 1981 all existing mines in Utah have continued to operate under the administrative delay provision of UMC 771.13(b), which provides for continued mining under an existing permit while DOGM and OSM process each permit application. Because the right to operate under administrative delay is not intended to continue indefinitely, the assigned compliance schedule for the Hiawatha Complex provides that by January 20, 1984, OSM and DOGM will proceed to render an initial decision under the Utah State program based upon the information available at that time.

The permit application materials that have been submitted as of this date must be augmented. A public notice pursuant to UMC 786.11(a) must be published after submittal of the additional material. Therefore, this permit application review schedule is already in jeopardy.

The compliance schedule assumes that all Findings of Compliance (UMC 786.19) will be based upon a complete and accurate permit application. It is your responsibility to assure that your application meets these requirements. Because the deadline indicated in the attached schedule is rapidly approaching, there is only limited time for you to demonstrate compliance with applicable regulations. Compliance is necessary to enable OSM and DOGM to make the required findings prior to the issuance of any permit. If, on the date established in the compliance schedule, your application is determined not to be adequate to meet the program requirements, you will have failed to satisfy the requirements of UMC 771.13(b)(1), 786.19(a) and your compliance schedule and, therefore, your application will be disapproved. The authority to operate under administrative delay pursuant to UMC 771.13(b) is available only until DOGM and OSM issue its initial administrative decision. Therefore, upon notification of a disapproval based on not meeting the program requirements, your authority to continue operations under administrative delay will terminate. The authority to conduct surface coal mining operations subsequently will be dependent upon the approval of a complete and accurate permit application under OSM's Federal Land Program and the Utah State program when all information has been provided to OSM and DOGM.

If the information submitted satisfies your compliance schedule, you will be notified to begin public notice of filing of the application. DOGM and OSM will evaluate your application to determine if it complies substantively with the permitting requirements and will then prepare its written Findings of Compliance with the permitting regulations. In addition, OSM will determine whether other appropriate Federal statutes and regulations have been satisfied and will prepare NEPA compliance documents in order to recommend approval or disapproval of the mining plan. If, at any point in the technical review DOGM and OSM determine that the requirements for one or more Findings of Compliance have not been met and any required information cannot be obtained from the applicant under the compliance schedule, a decision to disapprove the permit application will be made without further supplementing or processing of the application.

The attached schedule shows the minimum time required to complete the review process. DOGM and OSM will not be able to consider any changes or submittals that would delay this schedule.

Upon receipt of this letter, please contact Dianne R. Nielson (801) 533-5771, or Allen Klein (303) 837-5421 to discuss this matter further.

Sincerely

Dianne R. Nielson

Dianne R. Nielson
Director
Utah Division of Oil,
Gas and Mining

Allen D. Klein
Administrator
Western Technical Center

DRN/jvb

Enclosure

cc: Scott M. Matheson, Governor, Utah
James R. Harris, OSM
Allen D. Klein, OSM
Robert Hagen, OSM

COMPLIANCE SCHEDULE

U. S. Fuel Company
Hiawatha Complex
ACT/007/011

	REVIEW ACTION	COMPLETION DATE
1.	Determination of permit application completeness.	1-20-84
2.	Draft Findings of Compliance/Technical Analysis.	3-8-84
3.	Final Findings of Compliance/Technical Analysis.	4-27-84
4.	Final State/OSM Decision.	6-8-84

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 7, 1983

Ms. Jean Semborski
U. S. Fuel Company
Hiawatha, Utah 84527

RE: Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Ms. Semborski:

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If the information submitted satisfies your compliance schedule, you will be notified to begin public notice of filing of the application. DOGM and OSM will evaluate your application to determine if it complies substantively with the permitting requirements and will then prepare its written Findings of Compliance with the permitting regulations. In addition, OSM will determine whether other appropriate Federal statutes and regulations have been satisfied and will prepare NEPA compliance documents in order to recommend approval or disapproval of the mining plan. If, at any point in the technical review DOGM and OSM determine that the requirements for one or more Findings of Compliance have not been met and any required information cannot be obtained from the applicant under the compliance schedule, a decision to disapprove the permit application will be made without further supplementing or processing of the application.

The attached schedule shows the minimum time required to complete the review process. DOGM and OSM will not be able to consider any changes or submittals that would delay this schedule.

Upon receipt of this letter, please contact Dianne R. Nielson (801) 533-5771, or Allen Klein (303) 837-5421 to discuss this matter further.

Sincerely

Dianne R. Nielson

Dianne R. Nielson
Director
Utah Division of Oil,
Gas and Mining

Allen D. Klein
Administrator
Western Technical Center

DRN/jvb

Enclosure

cc: Scott M. Matheson, Governor, Utah
James R. Harris, OSM
Allen D. Klein, OSM
Robert Hagen, OSM

COMPLIANCE SCHEDULE

U. S. Fuel Company
Hiawatha Complex
ACT/007/011

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NATURAL RESOURCES
Oil, Gas & Mining

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Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dr. G. A. (Jim) Shirazi, Division Director

November 7, 1983

Mr. Jack Elder
Ford, Bacon & Davis, Inc.
375 Chipeta Way
Salt Lake City, Utah 84108

RE: Receipt of Determination of
Adequacy Response
U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Folder No. 2
Carbon County, Utah

Dear Mr. Elder:

This letter acknowledges receipt of U. S. Fuel Company's Hiawatha Complex' Determination of Adequacy Response received in our offices on November 7, 1983.

The Division will now proceed with its review of this response. Thank you for your cooperation.

Sincerely,

Thomas Munson

THOMAS MUNSON
RECLAMATION HYDROLOGIST

TM/btb

DETERMINATION OF ADEQUACY

#2

U. S. Fuel Company
Hiawatha Complex
ACT/007/011, Carbon County, Utah

November 1, 1983

OSM Compliance with EO11593 and the National Historic Preservation Act

Revised to provide further clarification:

The applicant must submit the following information for OSM to be in compliance with Federal cultural resources legislation and to allow the preparation of the Technical and Environmental Analyses on U. S. Fuel's application:

Although the applicant has provided a research and inventory report for 50 to 60 acres of expansion area in Cedar Creek, a pedestrian inventory for cultural resources of the following areas in which disturbance has been proposed (page III--1, Volume 1) must be completed:

1. Middle Fork of Millers Creek surface facilities;

2. North Fork of Millers Creek ventilation shaft;

3. Hiawatha Processing Plant and Waste Disposal sites;

4. South Fork of Millers Creek surface facilities;

5. Substitute topsoil locations (Exhibit VIII-4A); and

6. Any other areas in which ground surface disturbance will occur.

Because it is likely that at least some of the previously disturbed areas in the vicinities of the above facilities are historic mining sites, pedestrian inventory of all areas which will be disturbed by construction proposed under this permit must be completed. The pedestrian inventory must be completed prior to the initiation of any ground surface disturbance at or near previously disturbed areas (including historic mine portals and other facilities, foundations and other structural remains, etc.). If construction/ ground surface disturbances has been completed in any of the above areas, inventory will not be required. The applicant must, however, state that ground disturbing activities have been completed and whether or not any historic mining remains exist within or near the construction areas.

The applicant shall conduct or cause to be conducted, historic research of the Town of Hiawatha. The objective of this research will be to provide an historic narrative outlining the community's role in the historic development of the region (similar to that provided for Old Mohrland in the Neilson and Merril report). The information is necessary to allow OSM to justify a decision regarding the eligibility or ineligibility of the permit area as a National Register district.

The subsidence monitoring plan has been determined adequate. It should be assumed that long wall mining will result in some degree of uniform subsidence and pillar removal following completion of room-and-pillar mining will result in surface tension cracking and a rapid lowering of the land surface. If subsidence within the underground mining areas as documented through the monitoring program appears sufficient to threaten cultural site integrity, or if archaeology sites that are sensitive to subsidence (rock art, rock shelters, multicomponent sites) are located in these areas, OSM and/or the SHPO may require additional inventory of lands above underground workings, beyond that specifically required for the approval of this permit.

Applicant's Compliance with Utah's Permanent Program

UMC 761.11 Areas Where Mining is Prohibited or Limited

Pedestrian inventory for cultural sites has not been conducted within all proposed direct impact areas (areas in which disturbance will occur). The remaining inventory requirements must be completed prior to ground surface disturbance within the permit area (see "OSM Compliance with EO11593 and the National Historic Preservation Act").

The Town of Mohrland site (42 EM 1642) has been recommended as eligible for nomination to the National Register of Historic Places (NRHP), and the additional pedestrian inventory (see "OSM compliance with EO11593 and the National Historic Preservation Act") may result in the identification of other NRHP-eligible sites. If 42 EM 1642 or any other cultural sites are determined eligible, disturbance of the site will be prohibited until impact mitigation procedures sufficient to allow a Determination of No Adverse Effect have been completed.

UMC 771.23 Permit Applications

Revised as per the appicant's explanation of maps (October 13, 1983): the applicant has provided a map (Exhibit IV-3) to cover all requested information; however, questions remain regarding this map as detailed in the following comments.

UMC 782.13 Identification of Interests

Revised:

Exhibit IV-3 shows an area crossed by the words "Manti-LaSal National Forest" and U. S. Fuel Corporation fee land, which conflicts with the property boundaries found on the U. S. Geological Surface (USGS) topographic maps. The surface ownership must be more clearly defined on this map.

(3) The reviewer is referred to Appendicies II-1 and II-2 for the holders of record of any leasehold interest in areas to be affected by surface operations or facilities and the holders of record of any leasehold interest in the coal to be mined. Appendix II-1 does not explain what it is supposed to demonstrate. A subheading of Appendix II-1 is labeled "acres" and is divided into give other unexplained subdivisions. An apparent legend (unreferenced) at the end of the table has seven designations. The table has no sections with seven divisions. The addition of the numbers provided in the table includes categories (i.e., surface and subsurface rights) which should not add up to the total permit area as shown in the table. Apparent, no other leaseholders besides U. S. Fuel have interest in the areas, but this is not specified. Appendix II-2 does not apply to this regulation because it relates to unsuitability for mining. These problems must be resolved in order to analyze the plan.

(b) The permit application does not state whether the applicant is a corporation, partnership, single proprietorship, association or other business entity. This must be specified.

(d) The applicant lists Carpenter Town Coal and Coke Company under UMC 782.13(b)(3) but does not relate any permits to mine coal under that name as being held or applied for. The applicant must list any current or previous coal mining permits in the United States which Carpenter Town Coal and Coke or Sharon Steel has held since 1970.

Revised:

(e) The reviewer is referred to Exhibits IV-3 for information on contiguous area ownership. This exhibit does not appear to provide information on contiguous coal ownership and corresponding addresses. This information must be provided.

UMC 782.15 Right of Entry and Operation Information

Revised:

(a) The applicant refers the reader to a table (Appendix II-1) for information on its right of entry documents. A section of the table is labeled "Area" with the numbers 1-5 below that as discussed in the comments under UMC 782.13(3). The appendix table does not list lessors. The

application must clarify what is involved in the table before a complete evaluation can be made of its right to enter and mine. The applicant must provide a list of lessors in order to establish its right of entry.

UMC 782.16 Relationship to Areas Designated Unsuitable for Mining

(b) The applicant must state whether or not there is an administrative proceeding to designate the area unsuitable for mining.

(c) The applicant must state whether or not surface operations or facilities will be located within 300 feet of an occupied dwelling. If a dwelling will be so affected, a waiver from its owner must be included.

UMC 782.17 Permit Term Information

Revised:

The applicant must provide the estimated termination dates for all of the mines being permitted, and vertical extent of the mine workings as required by UMC 783.23. Exhibits III-6A through III-15 give the length and width (horizontal), but not the vertical. These maps also show the year of start up for mines, but do not give the estimated termination dates.

UMC 782.18 Personal Injury and Property Damage Insurance

The company's insurance policy expired May 31, 1983, although the policy says the insurance will remain in force until the completion of reclamation. Evidence that the policy is still in effect must be provided.

UMC 782.19 Identification of Other Licenses and Permits

The applicant does not provide addresses of the permitting agencies or identification numbers of the permits. This information must be provided.

UMC 782.21 Newspaper Advertisement and Proof of Publication

The applicant must provide the newspaper advertisement which will be published once the application is determined to be complete (requirements for the advertisement are under 786.11).

UMC 783.12 General Environmental Resources Information

(b) Pedestrian inventory for cultural sites must be completed and approved prior to initiation of ground disturbance within the permit area (see 761.11).

UMC 783.15 Ground Water Information

*The applicant has described the ground water system in the vicinity of the Hiawatha Complex-King Mines in very general terms with very little data to substantiate the narrative. To show compliance with 783.15 the applicant must provide the following information:

* 1. A discussion of all drill hole logs in the area showing the continuity or discontinuity of potential water bearing zones (i.e. sandstone strata), and cross sections with drill hole data points to substantiate the interpretation of potential water bearing zones.

* 2. A spring inventory that shows all springs within 2 miles of the adjacent area of the King mines and a discussion of what strata or geologic structures that springs are associated with. The applicant must also provide a discussion of the use being made of the springs, and other water sources, including wildlife utilization. (See also UMC 817.97)

* 3. A more thorough discussion of the ground water flow system associated with the Bear Canyon Fault. This fault zone most likely will account for the majority of water that will be encountered in the King Mines. What areas recharge this fault system and what discharge zones (i.e., springs) are specifically connected to the fault zone?

UMC 783.16 Surface Water Information

U. S. Fuel must commit to expanding their water monitoring program in order for the regulatory authority to show compliance with UMC 817.52 (Hydrologic Balance: Surface and Ground Water Monitoring). Specifically, U. S. Fuel must commit to including station ST3-A, S74-A, and S76-A in their permanent monitoring program. Monitoring at these stations must be performed in accordance with the initial comprehensive schedule (Table VII-7) until the regulatory authority approves use of the routine schedule (Table VII-3).

UMC 783.17 Alternate Water Supply Information

* The ACR (November 8, 1982) requested a description (including quality and quantity) of water available as an alternate source in the event that a water supply is affected by the mine. The applicant responded that mine water from the Mohrland Portal in Cedar Creek Canyon could be used as an alternate source of water. U. S. Fuel Company has a water right to use .446 cfs (U.W.C. CERT. #4148) from the Mohrland Portal mine water discharge (Table VII-2). U.S. Fuel must provide the comparison of the amount of water available from this water right compared to the revised assessment of probable hydrologic consequences (with respect to UMC 784.14) in order to assure that all potential water losses can be replaced.

* U. S. Fuel must include all ground water intercepted in the mine that would otherwise be consumed by other water users. In addition, the consumptive use of water during the mining operation, including ventilation evaporation losses, must be included as part of the water right not available for replacement to other affected users.

UMC 783.19 Vegetation

* The application contains several maps (ACR Responses, Chapter IX) that lack basic map features. Specifically, Figures 2 through 6 lack coordinates (i.e., township and range), and map location references. Figure 1's scale (1:24,000) is incorrect. The actual measured scale as depicted in Figure 1 is 1:50,000 which is unacceptable according to UMC 771.23(e). Figure 2 is missing a scale and north indicator. Figure 3 has Reference Area 3 placed outside the limits of the map. Figure 4 is lacking a north indicator, and Figures 5 and 6 are at different scales than Figures 3 and 4. The applicant should correct Figure 1 through 6, correct the scale to 1:6,000 for areas disturbed and proposed disturbed areas and indicate the permit area boundries as required by UMC 771.23(e) and 783.24.

UMC 783.24 Maps: General Requirements

Revised:

* The permit application includes an Exhibit IV-3 which shows a "permimeter boundary line" surrounding the mining operation. As discussed at the October 13, 1983 meeting, the applicant must define this boundary as the permit boundary or mine plan boundary, whichever is appropriate. In addition, the following list of maps must provide adequate coordinates or reference points so that they (i.e., the facilities and resources) can be located on Exhibit IV-3:

Original Application

III-1A through 2
III-4B through IV-2
VI-1 through 5
VII-1 and 2
VIII-1 through 3B
IX-1 through 5
XIII-1A through 1E
XIV-1 through 5

ACR Responses

III-5A, 5B, 6A, 6B, 12A, 13, 14, 15
IV-3, 3A, 4
VII-1, 19, 20
XIII-2A through 4

In addition, wildlife resource maps (Exhibits X-1 through X-3) must clearly show specific wildlife information relative to the mine plan area at a scale of at least 1:24,000 as required by UMC 771.23(e).

UMC 784.11 Operational Plan: General Requirements

* Maps No. 1, No. 2, and No. 3 furnished for the noncoal waste storage and disposal areas must be replaced with adequate copies bearing title blocks, scale of map, direction arrow, and must be presented in a clear, neat, and legible copy.

* Additional information is required in the permit application to evaluate the operation plans for King Mines 7 and 8. The applicant must provide a narrative that describes the proposed facilities, construction activities, use, maintenance and removal of the following for King mines 7 and 8 as required by UMC 784.11:

Revised:

1. Overburden, topsoil handling and storage areas and structures;

2. Coal removal, hauling, storage, cleaning, and transportation areas and structures; and

3. Mine facilities (i.e., conveyors for the Mohrland portal and IV and V portals, bathhouse, warehouse, etc.). See comments under UMC 784.23.

UMC 784.12 Operation and Plan: Existing Structures

* The application fails to provide cross-sectional drawings for the entire length of the existing overland conveyor system at King Mine VI. The application must provide cross-sectional drawings to supplement Drawing EFC-133,G-21 for the existing overland conveyor system at King mine VI. These cross-sections must show the clearance between the ground level and the lowest portion of the structure as built (UMC 784.12[a]).

* U. S. Fuel states (page VII-15B) that water from the left fork of the North Fork of Miller Creek is diverted from the creek to an underground storage reservoir in the old Hiawatha #2 Mine. In order for us to demonstrate compliance with section UMC 817.55, U. S. Fuel must provide the following information: (1) rates and quality of water at the diversion; and (2) approval of the Mine Safety and Health Admininstration for the diversion of water into the old Hiawatha #2 Mine; (3) design of the diversion structure and associated conveyence structures; and (4) the relationship between water storage (i.e., in the mine workings) versus pressures observed at the bulkhead (UMC 817.55).

UMC 784.13 Reclamation Plan

* (a) The application fails to provide specific reclamation plans for the four locations to be used for substitute topsoil. The applicant must provide detailed reclamation plans that provide: (1) a detailed timetable for completion of each step in the reclamation plan; (2) a detailed estimate of

costs for reclamation (as required by UMC 800-808), a plan for backfilling, soil stabilization, compaction, and grading with appropriate contour map and cross-sections (as required by UMC 817.100-.106); (3) a plan for removal, storage, distribution of topsoil, equipment and facilities, and supplemental nutrient and soil amendments (as required by UMC 817.21-.25); (4) a plan for revegetation (as required by UMC 784.13[b][5] and 817.111-.116); and (5) a description of steps to mitigate impacts to air quality resulting from fugitive dust and to control water quality impacts from erosion to Miller Creek, as required by the Clean Air Act, Clean Water Act and UMC 817.45.

* (b)(1) The applicant must provide a detailed timetable showing the completion of each major step in the reclamation plan, including, but not limited to, the following operations, as required by UMC 784.13(b)(1) and (5)(i):

1. Equipment and facility removal.

2. Portal sealing.

3. Backfilling and grading.

4. Topsoil operations:

    a. vegetation removal from the proposed topsoil borrow site;
    b. topsoil removal and distribution over backfilled and graded spoil material;
    c. topsoil redistribution over topsoil borrow site;
    d. soil nutrient tests.

5. Revegetation operations:

    a. topsoil preparation (i.e., scarification);
    b. seeding and planting;
    c. mulching;
    d. fertilization.

(b)(2) The applicant has submitted an ACR response that provides detailed cost estimates for reclaiming the mining operations in the three forks of the Miller Creek, Mohrland area and the processing plant and loadout facilities in Hiawatha. However, the proposed topsoil borrow sites have not been included in the reclamation cost estimates. Operating the topsoil borrow site is considered a part of the reclamation plan. The applicant must provide the same level of detailed cost estimates for operating and reclaiming the topsoil borrow sites as required by UMC 784.13(b)(2).

* (b)(4) The application provides a general topsoil handling plan for what is assumed to be the entire Hiawatha Complex. The only specific topsoil handling description is found in a July 1982 report located in the back of Chapter VIII of the ACR responses. The applicant must provide specific topsoil handling plans for King 4 & 5, King 7 & 8, the preparation plant, and

the substitute topsoil source sites. These plans must provide a map of the depths and sources of replaced topsoil, calculations, of substitute material volumes and stockpile and topsoil volumes for reclamation of each facility, and specific methods to prevent excess compaction and reduction of erosion to determine feasibility of reclamation as required by UMC 786.19.

* (b)(3) Map Exhibits F III-11 through F III-15 show the outlines of portions of the mine complex disturbed by filling, excavating and topsoil placement for reclamation of the mine entrance sites. It is not readily determinable whether the material available on the sites is enough to satisfy the fill requirements. If it is not, then additional material must be borrowed from somewhere. Conversely, if excess material must be wasted, then additional spoil areas must be developed. In order to determine the case with reasonable accuracy, finished contours should be shown on the maps, and additional cross-sections plotted. From these sections, a reasonable calculation of fill/waste balance may be made. It is also necessary for the applicant to demonstrate, through calculation of storm runoff, that the sectional area of the proposed diversion of South Fork of Miller Creek is adequate for the anticipated storm water flow.

To resolve those questions, the applicant must provide contour maps of the mine portal sites together with additional post-mining contours showing the conditions intended upon completion of reclamation work. Also, it is necessary for the applicant to furnish cross-sections, cut and fill volume/balance calculations, and storm water run-off/capacity calculations of the proposed Miller Creek restoration to demonstrate that the stream channel erosional stability will be maintained. The submittals shall be in compliance with the requirements of UMC 784.13-.25 and 783.24.

* (b)(5) The application must provide specific seed mixtures (including pounds of Pure Live Seed [PLS] by species) that are designed for site specific conditions at all disturbed and proposed disturbed areas. (Volume III, Chapter X, Appendix B). Also, the application must provide planting techniques (i.e., spacing and arrangement) or type of stock for planting shrubs and tree species as required by UMC 784.13(b)(5)(iii) and 817.117(c)(2). The application does not specify the seeding rate as required by 784.13(b)(5)(ii). Tables 1 through 12 referenced in the ACR response (page III-31B) provide a range in total rates based on the severity of disturbance. The applicant must commit to specific seeding rates to be used in final revegetation as required by UMC 784.13(b)(5)(ii). (Also see UMC 817.57 and 817.97.)

* The ACR response (page III-31D) states that the applicant does not intend to reclaim previously disturbed areas, currently used or proposed for use during this permit, to a vegetative cover at least equal in extent of cover to the natural vegetation of the surrounding area as required by UMC 817.111(b)(3). The applicant must achieve the standards for successful revegetation as required by UMC 817.116 and 817.117 for all areas proposed for use by surface mining activities under this permit application.

Clarification:

Further clarification of the review comment regarding the applicant's proposed approach to restore vegetative cover on previously disturbed areas is required. The applicant appears to propose (ACR Response, page III-31D) to revegetate previously disturbed areas to a cover condition that is at least equivalent to the ground cover that existed on the disturbed area before the new disturbance occurred. UMC 817.111(b)(3) requires that vegetative cover restored on disturbed areas be at least equal in extent (equivalent) to the cover of the natural vegetation of the area. Cover of natural vegetation of the area, which has not been disturbed by past mining and cover of volunteer vegetation that has developed on previously disturbed areas probably will not be equivalent because of the residual effects of mining on the kind, rate and extent of vegetative cover. Vegetative cover on previously disturbed areas may only constitute a small proportion of the original cover assumed to be the same as nearby natural vegetation. Therefore, the extent of the proposed restored cover should be at least equal to the cover of the undisturbed natural vegetation found in the reference areas. The applicant should make the cover on reference areas in undisturbed natural vegetation and not with whatever cover was present on the previously disturbed areas prior to new disturbances. The applicant must commit to following the same revegetation procedures and applying the same success standards on previously disturbed areas as were proposed for previously disturbed areas (ACR Response, page III-31C).

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance

The ACR (section UMC 783.24[g]) requested a map describing the water rights for surface and ground water in adjacent areas within a minimal two mile radius of the permit boundry. U. S. Fuel responded by locating some of their water rights on Exhibit VII-1. A review of the water rights in the area show over 35 springs within water rights (mostly owned by the U. S. Forest Service) within a two mile radius of the permit boundry. Six of these springs are within the permit boundary.

* U. S. Fuel must document these water rights. Documentation should include a table listing the water use claim numbers, owner, source (including the geologic formation from which the spring issues), flow, purpose (e.g., stock-watering) and period of use. U. S. Fuel must locate these springs and all of their water rights on a map as required by UMC 784.14.

The applicant states that significant quantities of water have been and will continue to be encountered in the mine from the Bear Fault. In addition, the discussion of mine subsidence (ACR Responses Chapter VII-19) indicate that surface and ground water resources could be affected by the mine. The discussion of probable hydrologic effects with respect to the previously mentioned potential impacts is very general. For example, regarding the effects of mine subsidence, the following statements are made: "Fractures resulting from subsidence as well as natural fractures encountered in mining

could contribute to changes in existing water patterns. Springs, seeps, and stream flows could possibly be affected and changes in drainage patterns could result. . . . The effects of past mining on water resources is not known, except that significant flows have resulted from contact with major fractures such as the Bear Canyon Fault. Large areas of the King 1 and King 2 mines were mined out from 10 to 50 years age by room and pillar methods, yet numerous springs and seeps overlying these mines are still flowing. Whether or not they have diminished as a result of mining is unknown.

The previous narrative is not an acceptable description of probable hydrologic consequences. The regulatory authority must know to what degree specific water resources may be affected by mining in order to determine what the probable hydrologic consequences of mining will be. This information will be used to determine if material damage will occur to the hydrologic balance in the permit and adjacent areas. Therefore, the applicant must provide the following information:

* 1. An assessment of the effects of mine subsidence on the geomorphic stability of the overlying landscapes. More specifically, discuss the effect of mine subsidence on stream gradients and corresponding erosional stability.

* 2. An assessment of changes in streamflow that may result from mining at the King Mines. Changes in stream flow that must be considered include losses resulting from subsidence or from interception of ground water in the mines that otherwise would provide baseflow to streams.

* 3. An assessment of springs or wells that may be affected by the King Mines (including additional springs located per requirements under UMC 783.15). The assessment must detail what water users (including wildlife) will be impacted by losses of springs and stream flow. Particular emphasis should be placed on the major water bearing zone observed to date, the Bear Fault Zone. The applicant must describe what springs are related to the fault zone and how their flow may be diminished by the interception of ground water flow in the mine.

* 4. An assessment of post mining ground water quality, using existing data for waters flowing from old mine workings. Also provide a comparison of post-mining ground water quality with streams and springs that will receive the ground water discharge.

* 5. With respect to each of the coal refuse piles and associated slurry ponds the applicant must provide the following information:

A. Quality of water in the slurry ponds representative of seepage that may be lost from the ponds;

B. Quality of runoff from the coal embankments;

C. If the analyses of waters associated with the slurry ponds and refuse piles indicate that these waters would degrade the water quality of nearby surface or ground water resources, then a water balance on water leaving the ponds and refuse piles is necessary. The water balance should consider runoff and percolation losses from the areas in question. The amount and quality of water leaving the site should be mass balanced with receiving surface or ground waters.

UMC 784.15 Reclamation Plan: Postmining Land Use (Wildlife)

* The applicant should directly and clearly state in this section what the postmining land use will be and that wildlife habitat will be a primary post mining land use as it is implied in the applicant's response to comments on UMC 784.21 (Chapter X, pp. X-6C, July 1983). Including this statement in the post mining land use section would reduce a substantial amount of uncertainty about the applicant's future intentions. (See also 817.97)

UMC 784.19 Underground Development Waste

* On the presumption that underground development waste will at some time be wasted on surface areas, the permittee must furnish full data on the geotechnical investigation, design, construction, operation, maintenance and removal, as appropriate for disposal of this waste as required under UMC 784.19 of the regulations and in accordance with the ACR comments.

UMC 784.21 Fish and Wildlife Plan

* The applicant's Fish and Wildlife Plan still remains seriously deficient. The original ACR comments from OSM and from DOGM (dated November 8, 1982) identified numerous significant deficiencies in the Fish and Wildlife Plan caused by: (1) an absence of detailed information on how the applicant would comply with the requirements of this regulation and with UMC 817.97; and (2) a lack of commitment to comply with the recommendations of the Utah Division of Wildlife Resources (UDWR). The recent responses to the ACR (July 1983) do commit the applicant to certain protection measures, however, the applicant's responses to the ACR requiring specific description of methods (Chapter X, ACR Responses Volume, July 1983 pages X-6A to X6C and Appendix D) still do not adequately address many of the major issues raised by the ACR. The applicant's responses still lack specific detail on implementation of the following issues:

1. What mitigation measures will be used to protect wildlife and how these measures will be employed (Chapter X, pp. X-6B, ACR Volume, July, 1983);

2. How high value wildlife areas will be avoided, restored, and/or enhanced (page X-6B);

3. How impacts to riparian areas will be reduced or avoided, and how damaged habitat will be restored (page X-6C);

4. How road crossing impacts to aquatic communities will be minimized (page X-6C);

5. How wildlife habitat will be restored during the reclamation phases of the mine operation (page X-6C);

6. How much acreage of wildlife habitat will be lost or seriously degraded by mining operations (OSM ACR dated November 8, 1982);

7. Description of wildlife use of the springs, seeps, and streams in the permit area and a prediction of mining impacts on these wildlife habitat features (OSM ACR dated November 8, 1982). An analysis that supports the applicant's conclusion that no detrimental effects will be caused should be provided.

* The applicant must provide the detailed and site-specific information related to topics listed in items 1-7 above. The descriptions must include detailed explanations of: (1) what specific procedures will be used; (2) how the applicant will implement the procedures; (3) what areas of the permit area will be involved, and (4) detailed drawings of any facilities modified or constructed to accommodate wildlife. All mining areas, including the proposed portals 7 and 8 areas, must be included.

The applicant must also provide the following information:

1. Documentation of the U.S. Fish and Wildlife Service raptor survey findings as described in Chapter X, page X-6A, July 1983;

2. Documentation from the UDWR that a minimum of one m clearance on the conveyor systems in Middle Fork and at Mohrland will provide passage for big game, regardless of location (page X-6B, July 1983);

3. Entire route alignments and general cross-sectional drawings showing minimum clearance along the total length of the proposed conveyor belt system for King Mines 4 and 5, and proposed portals 7 and 8. Also, supplemental cross-sectional drawings for those portions of the existing conveyor belt at King Mine 6 not shown on drawing EFC-133, G-21 as well as cross-sectional and plan drawings for adjacent barriers such as guard rails (UMC 784.23[b][8] and 784.12[a]);

4. Mapping of wildlife resources shown in Exhibits X-1 to X-3, Vol. 3, Chapter X at a scale of 1:24,000 as required by UMC 771.23(e)(1). The mapping of critical wildlife resources provided as Exhibits X-1 to X-3 is at a scale too large to allow a technical evaluation of the

effects of mining facilities on critical wildlife resources. UMC 771.23(e)(1) requires these features to be mapped at a scale between 1:6000 and 1:24,000. Also provide legends for defining map symbols in Exhibits XI to X3;

5. A commitment that wildlife habitats will be restored to premining species composition, species distribution, and frequency as emphasized by UDWR (Volume 3, Chapter X, page X-9). A method for implementing this commitment must be provided;

6. A description of acreages and condition of critical and high-priority big game wildlife areas on the permit area as requested by the UDWR (Volume 3, Chapter X, pages X-12 and X-13);

7. Estimates of the average number of elk that use each of the following key habitats within the mine permit areas as shown in Exhibit X-2, Volume 3. Estimates can probably be obtained from the UDWR.

   - Critical elk winter range
   - High-priority elk winter range
   - High-priority elk summer range

8. Estimates of the average number of mule deer that use each of the following key habitats within the mine permit area as shown in Exhibit X-1, Vol. 3. Estimates can probably be obtained from the UDWR.

   - Critical deer winter range
   - High-priority deer summer range.

UMC 784.22 Diversions

U. S. Fuel has been previously asked for a design of the existing trash racks for the stream diversion under the portal at King No. 4 and 5. U. S. Fuel must provide this information.

The reclamation plan for the diversion (page VII - 15B) lacks sufficient detail. U. S. Fuel should demonstrate that the restored channel will safely convey the runoff resulting from 100-year, 24-hour precipitation event (including the channel, bank, and floodplain). U. S. Fuel should also demonstrate that the channel gradient will be stable. If channel stabilizing material will be used (e.g., riprap), then U. S. Fuel should give the size and gradation of the material. A reclamation plan describing the seed and shrub mixture and soil stabilizing practices should also be presented with the goal of restoring natural riparian vegetation on the banks of the stream.

UMC 784.23 Operation Plan: Maps and Plans

* (b) U. S. Fuel has failed to provide maps, plans, and cross-sections for King Mines 7 and 8 that show all of the proposed surface facilities. Exhibits III-5A and III-5B must be revised to comply with UMC 784.23 that include, at a minimum, the following:

1. Buildings and facilities to be used;

2. Coal storage, processing and loading areas;

3. Topsoil, spoil, coal waste, underground development waste and noncoal storage areas;

4. Facilities to be used to protect and enhance fish and wildlife related values;

5. Explosive storage and handling facilities; and

6. Location of each facility that will remain as a permanent feature, after completion of underground mining.

* (b)(6) The conveyance devices for the water storage facilities in the King VI area (Exhibit II-4a) and the Mohrland area (Exhibit III-5b) are not clearly described on these maps. Legends for all exhibits are essential. Exhibits III-4a and III-5b must be redrawn to indicate the water conveyance from the King VI mine and the Mohrland are to the storage facilities near the Town of Hiawatha.

* (b)(7) U. S. Fuel must provide a map indicating the disposal of each source of coal processing waste and each waste disposal facility in relation to the proposed permit area.

* (b)(13) The applicant must provide maps and plans for the location of each facility that will remain on the permit area as a permanent feature.

UMC 785.19 - Alluvial Valley Floors

* The ACR (November 8, 1982) requested information regarding Miller Creek and Cedar Creek and their potential to be alluvial valley floors (AVF). The applicant responded in the ACR Response (July 1983) that artificial flood irrigation practices are practiced on both valley floors approximately four miles below the mine. Clearly the lower valleys are AVF's. The applicant did not define the limit of this AVF study as the "adjacent area", but rather used a two mile limit around the Hiawatha Mine. Within the two mile limit on Miller Creek and Cedar Creek there are no recent irrigation practices; however, water from a small pond on Miller Creek had been pumped up onto higher terraces in the past. The presence of historic irrigation (i.e., pumping from stream level) suggests that sufficient water is also available

for flood irrigation activities in the upper part of the valley. The applicant considers the Miller Creek and Cedar Creek valleys within two miles of the mine to be too small, irregular, and to have unsuitable slopes for irrigation development. In addition, subirrigated areas were interpreted (i.e., where meadow grasses and rushes were present) to be present only along the active flood plain and stream banks incised below the valley floor. The following information is requested in order to clarify issues concerning AVF's:

1. The lower valleys of Miller Creek and Cedar Creek have active flood irrigation operations. By comparison, what makes the upper valleys within the two mile radius of the mine unsuitable for irrigation activities? Provide specific information that would preclude these areas from being irrigated (i.e., less than 10 acres in size, less than 50 feet wide, insufficient water supply, etc.);

2. Regarding the floodplain areas that are considered subirrigated to agriculturally useful species of plants, provide the width and size of these areas.

UMC 786.19 Criteria For Permit Approval or Denial

The ACR response (page III-31D) states that interim revegetation has been accomplished at King VI coal loading facility, King IV ventilation tunnel and various other sites. The applicant must provide a summary of data collected from these areas to demonstrate that reclamation can be feasibly accomplished under the proposed reclamation plan contained in the application as required by UMC 786.19(b).

The applicant must provide a plan to demonstrate the capabilities of the proposed topsoil substitute material for use in interim and final reclamation. The applicant must develop field test plots, based on soil analysis, to demonstrate the feasibility of using the applicant's proposed topsoil plan and the proposed seed mixtures. The applicant must consult with the Division prior to developing this plan to fully understand the purpose and scope of the information required to demonstrate the feasibility of reclamation.

UMC 817.52 - Ground Water Monitoring

In order to better document ground water resources in the area and the potential impacts of the Hiawatha Complex Mines to these ground water resources, U. S. Fuel must develop and implement an in-mine ground-water monitoring program for the approval by the regulatory agency. The in-mine ground-water monitoring plan must include a map of all ground water seepage points in the mine. Monthly measurements of flow and field quality (i.e., specific conductance, temperature and pH) must be taken of all seepage into the mine that occurs at flow rates greater than one gallon per minute. If the number of leakers flowing greater than one gpm becomes excessive, negotiations with the regulatory authority may allow U. S. Fuel to limit the number of monitoring points. For seepage zones with flows less than one gallon per

minute, monthly measurements of field water quality parameters are sufficient. Quarterly, water quality samples must be taken from areas with inflow rates greater than one gallon per minute and analyzed for the complete suite of parameters listed in the UDOGM guidelines for establishedment of surface and ground-water monitoring programs. U. S. Fuel shall notify the regulatory agency as soon as possible upon encountering a source of ground water inflow greater than 50 gallons per minute. These flow and quality monitoring data should be submitted to the regulatory agency on a quarterly basis. In addition, U. S. Fuel must account for all ground-water consumption in the mine (i.e., used in mining or consumed by evaporation) and all ground water pumped out of the mine. The map locating all ground water seepage points should also locate all sumps used to collect ground water in the mine.

UMC 817.57 Hydrologic Balance: Stream Buffer Zones

The results of the applicant's aquatic survey of upper Cedar Creek (Chapter X, Appendix D, Responses to ACR Comments, July 1983) indicate that this regulation will apply to future road construction and other mining activities associated with portals 7 and 8.

The current mine plan is deficient because it does not: (1) provide detailed road alignments and sizes that recognize the need to protect the buffer zone along Cedar Creek; and (2) provide a detailed plan for protecting and/or restoring the riparian habitat within the buffer zone as required by UMC 817.44(d)(1).

The mine plan must provide the following information:

*1. A detailed map showing the proposed road alignment, size, and right-of-way width for portals 7 and 8 in relation to riparian habitat and the stream buffer zones.

*2. A detailed description of how riparian habitat will be protected from road construction and/or if some riparian habitat is destroyed, how it will be restored. The description should include:

- Species composition of the replacement plants
- Seed Stock
- Seed mixture (pounds per acre Pure Live Seed)
- Seeding Schedule
- Planting methods
- Planting Stock
- Planting schedule
- Maintenance provisions
- Total acreage to be replaced

(See UMC 784.13[6][5])

UMC 817.62-.68 Use of Explosives

The application indicates that explosives are used in construction of surface facilities (ACR Response, page VIII-1) at the Hiawatha Complex. The application must provide blasting information required by UMC 817.62-.68 and indicate on a map the storage and handling facilities for explosives required by UMC 784.23(b)(9).

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

Serious deficiencies still exist with the responses to ACR comments dated July 1983. The major concerns focus on the lack of detailed site-specific information on how the applicant will comply with the commitments made in responses to UMC 784.21 (Chapter X, pages X-6A to X-6). Most of the areas of primary concern were already identified and discussed as part of the UMC 784.21 analyses (items 1 to 7) and will not be repeated here. In addition to those requirements, the following information must be provided in accordance with this regulation:

*1. The applicant should describe which seed mixes listed in Chapter X, Appendix B, Tables 1-12 will actually be used and where. The tables provided by UDWR offer a series of options which the applicant may select depending on site-specific characteristics and the intended habitat restoration plan. The applicant must specify which seed mixtures, seeding rates, and species compositions are proposed for the areas designated for wildlife habitat restoration. (This concern was initially identified in UDOGM ACR comments dated November 8, 1982, page 15). The areas designated for wildlife habitat restoration should also be mapped. (See UMC 784.13[b][5], and 817.57)

*2. The applicant should describe how it will be determined that the conveyor systems do or do not create a wildlife barrier and/or demonstrate that there are no migration routes where the conveyor system creates a barrier to wildlife (UDOGM ACR, page 15 dated November 8, 1982).

*3. Provide documentation of the extent of utilization of water sources (springs and stockponds) by wildlife as required by UMC 783.15.

UMC 817.100 Contemporaneous Reclamation

The application mentions reclaimed areas in the vicinity of the portals, specifically King VI Mine. The applicant should provide a map (or maps) at a scale of 1:6,000 depicting past interim reclamation and proposed final reclamation in relation to the post mining contours. These maps (or an additional table) should relate directly to the reclamation time table and revegetation schedule requested under UMC 784.13(b) to demonstrate contemporaneous reclamation under UMC 817.100.

U. S. Fuel has not addressed the following ACR comments of November 8, 1982:

UMC 817.93 Coal Processing Waste: Dams and Embankments: Design and Construction

* (2) The minimum safety factors are given for slurry impoundment #1 and #5. The same information must be submitted for all other impoundments.

UMC 817.99 Slides and Other Damage

A commitment is needed to agree to notifying the Division by the fastest available means and comply with any remedial measures required by the Division anytime a slide occurs which may have a potential adverse effect on public, property, health, safety or the environment.

UMC 817.101 Backfilling and Grading: General Requirements

* No specific address is made to this item other than general backfilling and grading mentioned in the reclamation plan. U. S. Fuel must address specific areas in conjunction with UMC 817.101-.106.

UMC 817.103 Backfilling and Grading: Covering Coal and Acid- and Toxic-forming Materials.

* The applicant has addressed the grading of refuse banks only in the most general terms. Provide the following information on the final grade of all areas of refuse storage: (1) depth and volume of cover; and (2) and the source of material.

Indications from research on refuse piles indicate a tendency of refuse piles at the minesite to become acidic. U. S. Fuel must address the acid and toxic potential of this refuse materials, and propose appropriate cover and other mitigation.

How will the stability of these refuse disposal areas be ensured? Provide cross-sections and relevant engineering data detailing slope stability factors.

UMC 817.150-.176 Roads: Class I

The proposed Mohrland Road has been submitted as one alternative. The specific plans pursuant to UMC 784.24 of the road to be constructed should be submitted.

UMC 817.153-.163 Roads: Class I and III: Drainage

(c) Culverts must be sized to pass the peak flow from a 10-year, 24-hour precipitation event. Culvert size computations presented in the Vaughn Hansen report are for the 25-year, 6-hour storm; how do the two storm sizes compare? The applicant must demonstrate that the peak flow from the 25-year, 6-hour storm is equal to or greater than the peak flow generated from the 10-year, 24-hour storm. Provide computations for the 10-year, 24-hour storm.

Socioeconomics

Please clarify whether or not the employment numbers submitted by U. S. Fuel in the July 1983 ACR response included the proposed 7 and 8 portals. If so, please delineate that portion of the total employment forecast that would be required to construct and operate portal areas 7 and 8.