



STATE OF UTAH
 NATURAL RESOURCES
 Wildlife Resources

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

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

RECEIVED
 NOV 27 1984

November 20, 1984

DIVISION OF
 OIL, GAS & MINING

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

*ACT/007/011
 #2*

Attention: James Smith

Subject: U. S. Fuel Company's Revision to MRP at the Hiawatha
 Complex for New Coal Loadout and Preparation Facility.

Dear Dianne:

The Division has evaluated U. S. Fuel Company's proposal to revise the Mining and Reclamation Plan at the Hiawatha Complex to include a new coal loadout and coal processing facility.

Our only concerns at this time are for mule deer migration beyond the new 1,363 foot long (planned) coal conveyor system and appropriate safeguards for raptors on new (planned) electric transmission poles. Adequate information concerning mule deer/conveyor and raptor/electrocution issues was earlier provided to the company. Please insure that mitigation specifications are met during construction.

Note that the Division has no comment concerning the three maps provided for review as supplemental material on July 27, 1984.

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

Sincerely,

William H. Geer

William H. Geer, Acting Director
 DIVISION OF WILDLIFE RESOURCES

*orig memo file
 cc R. Daniels
 W. Hedberg
 S. Hinner*



STATE OF UTAH
 NATURAL RESOURCES
 Wildlife Resources

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

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

November 18, 1984

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

*MEI/007/011
 #2*

Attention: James Smith

Dear Dianne:

The Division has evaluated the supplemental material (revised 8-31-84) provided by U.S. Fuel Company for the Mining and Reclamation Plan at the Hiawatha Complex. Construction of the underpass associated with the new (planned) railroad loadout will permanently destroy 0.73 acre high priority valued deer winter range. The MRP does not identify mitigation for this impact. Additionally, our comments dated May 15, 1984 have not yet been addressed. As you know, those earlier comments reflect a lack of appropriate mitigation planning by the company.

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

Sincerely,

William H. Geer
 William H. Geer, Acting Director
 DIVISION OF WILDLIFE RESOURCES

Acting For

WHG:db

*orig mine file
 cc R. Daniels
 W. Hedberg
 S. Linner*



United States Department of the Interior

OFFICE OF SURFACE MINING

Reclamation and Enforcement

BROOKS TOWERS

1020 15TH STREET

DENVER, COLORADO 80202

NOV 1 4 1984

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

Dear Mr. Eccli:

On October 25, 1984, a meeting was held in your office to discuss the remaining issues pertaining to the permit application package (PAP) for U. S. Fuel's Hiawatha Mine. The Office of Surface Mining (OSM) is preparing its recommended decision. Those issues that remain unresolved may result in a partial approval or complete disapproval of the permit application. It is incumbent upon the applicant to promptly provide the necessary information that demonstrates compliance with the Utah Regulatory Program. The deficient sections were discussed at the meeting and are reiterated below.

1. Underground reservoir.

a. The safety and stability of the reservoir seals have not been demonstrated. Based on information presently submitted by U.S. Fuels, the continued use of the reservoir cannot be approved.

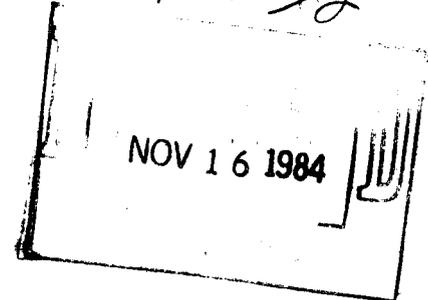
b. The proposed retention of the reservoir as a postmining land use facility cannot be approved because of the uncertain postmining viability of the Town of Hiawatha and the long and short term problems associated with seal integrity. The most direct approach to resolving this issue would be for U.S. Fuel to submit reclamation plans and bonding estimates for the underground impoundment seals, the diversion and the access roads, and a commitment to implement the plans as part of final reclamation. If so desired, U.S. Fuel may include a statement to the effect that the proposed postmining land use plan may be revised at a future date, subject to regulatory authority approval, to include the reservoir and its support facilities (roads and diversion).

2. All outstanding violations must be abated or abatement actions approved for OSM to recommend approval of the permit application.

3. The applicant must provide written approval from the State Health Division for sewage disposal into a slurry pond.

*Orig Mine file
cc R. Daniels*

*ACT 1007/011
#2*



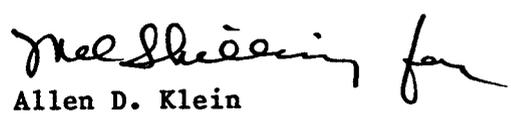
4. To allow full review of all submitted materials, the Hiawatha PAP must be updated to include all submissions and a table of contents based on the regulatory requirements.

5. The county approval of the road relocation and underpass construction must be documented for OSM to recommend approval of those construction activities.

Utah Division of Oil, Gas and Mining (UDOGM) has raised a number of issues based on a review of the PAP. Those concerns focus on hydrology and vegetation. Upon completion of our analysis of the comments by UDOGM, we will notify you if additional information is necessary. UDOGM and OSM staffs are meeting during the week of November 5 through November 9 to identify any specific remaining concerns.

If you have any questions, please call Walter Swain or Bill Kovacic at (303) 844-3806.

Sincerely,



Allen D. Klein
Administrator
Western Technical Center

cc: Dianne Nielson, DOGM ✓
Susan Linner, DOGM
Robert Hagen, OSM - Albuquerque
Paul Shenk, Sharon Steel



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

October 17, 1984

Mr. Allen Klein, Administrator
Office of Surface Mining
Brooks Towers
1020 15th Street
Denver, Colorado 80202

Dear Mr. *Allen* Klein:

RE: U. S. Fuel Company, Hiawatha Mine Complex Permit Application Package, ACT/007/011, Folder No. 2, 6 & 7, Carbon County, Utah

Recently our office verbally expressed concern to your staff over the adequacy of sections of U. S. Fuel Company's, permanent Permit Application Package (PAP) for it's Hiawatha Mine Complex. Additionally, there are several outstanding NOV's which address certain parts of the mining and reclamation plan that are either inadequate or nonexistent in the PAP. The purpose of this letter is to set forth our concerns for your consideration.

The "current" Hiawatha PAP is poorly organized, confusing and in complete disarray. There is no index or cross reference to aid in locating any particular section of the PAP. In fact, there are so many responses to comments made by regulatory authorities that it is difficult to determine which response was found complete and adequate and which have since been updated or revised. The Division recognizes the fact that this is a problem that plagues many of the older interim permit application packages, but we also are of the opinion that this situation could be rectified during the current technical review of the Hiawatha PAP by the OSM.

One example of this problem involves the hydrology section of the PAP. The original PAP references a 1978 Vaughn Hansen hydrology report. The Vaughn Hansen report was later supplemented by a Rollins, Brown & Gunnell report in May of 1979. Data from both of these were used in the Hydrologic Information for Sedimentation Pond for King VI Mine 42" Overland Conveyor Belt submittal of July 1980, which in turn, was partially modified in October of 1980. Once again, even these plans have been modified by an NOV, N84-8-1-3 (#1 of 3), abatement plan.

Granted, revisions are part of the permitting process, however section UMC 771.23, Permit Applications - General Requirement for Format and Contents, subparagraph (b) states that: "Information set forth in the application shall be current, presented clearly and concisely, and supported by appropriate references to technical and other written information available to the Division". Subparagraph (e)(1) states in part that: "Maps submitted with applications shall be presented in a consolidated format, to the extent possible, ...". The hydrology section of the U. S. Fuel's PAP contains numerous submittals and responses, each with a number of updated, revised or current maps. There has been no attempt on the part of the operator to consolidate or organize either the maps or the technical material. This causes much frustration and confusion for the reviewer as to what is current versus what has been superseded.

A second point of Division concern is with the adequacy of the PAP. The hydrology section contains many problem areas. As an example, the maps in the 1978 Vaughn Hansen report cited in the PAP are inadequate. Specifically:

1. There is no definition of the undisturbed area contributing to the sediment ponds.
2. The diversion structures are not shown and some culverts are missing.
3. The existing inflow locations are not shown.
4. The pond locations are "tentative".
5. The scale on several of the maps is inappropriate for critical analysis (Some maps have no scale at all).
6. Several maps are not certified.

These deficiencies make it impossible to perform an indepth technical review of the sizing calculations used to design the ponds. Adequate maps should clearly show all of the contributing area to each pond including all of the ditches, berms and culverts used to route the runoff into or away from the pond. The scale should be appropriate for the determination of the technical adequacy of the plans under design conditions.

Beyond these deficiencies there are also sections of the PAP that do not exist. For example, there is no road drainage control plan for the Middle Fork road. Because there is no plan, violations have been issued by the inspection and enforcement staff on culvert spacing, erosion control, and sediment contribution. While this enforcement approach would eventually produce a complete plan, it is a costly, confusing and very time consuming method for resolving technical deficiencies which should have been addressed and resolved during the processing of the PAP. The enforcement approach serves only to propagate the problems of clarity mentioned above.

There are also problems with the vegetation data and selection of reference areas (See Vegetation Information submitted July 1983 in response to DOGM ACR review) as follows:

1. Tables 60 and 61 reveal that the cover and woody plant density in affected areas and corresponding reference areas are not similar.
2. Similarity based on species composition meets only DOGM's minimum similarity guideline of 70% for one of the twelve reference areas and corresponding affected area.
3. Reference areas MBR-1 and MCR-2 were not resampled as required by the apparent completeness review. Reported values for cover are unrealistic for these vegetation types (Original sampling was done with unacceptable methods).
4. Reference areas must be in fair or better condition or must be fenced or otherwise managed to improve condition to fair or better at the time of bond release. Page 14 indicated that all reference areas are poor to fair and that the company does not intend to fence or manage them.
5. Without additional data and/or management plans to justify variances to DOGM guidelines, none of the proposed reference areas are acceptable which means the company would have no approved standard on which to base reclamation success.

The Division is concerned that there may be potential problems which exist in other disciplines of the PAP as well.

Page 4
Mr. Allen Klein
October 17, 1984

It is the Division's position that OSM should reevaluate the technical adequacy of the PAP, with particular attention being applied to the deficient hydrologic design sections. The operator should be required to assemble a current, complete and concise hydrologic drainage control plan which addresses the entire Hiawatha Mine Complex. The Division staff is willing to discuss the problems uncovered to date with OSM if desired.

The Division would appreciate an expeditious response to these concerns. Unless these concerns cannot be resolved as part of the formal PAP permitting process (which OSM is now undertaking), the Division will not be in a position to support positive findings, or an OSM approval recommendation for this permit application.

Please let me know if these concerns need further clarification or discussion.

Best regards,



Dianne R. Nielson
Director

jvb
cc: Robert Hagen
Walt Swain
Ron Daniels
Wayne Hedberg
Lynn Kunzler
Susan Linner
Dave Lof
Jim Smith
John Whitehead
Jack Wittman

97730



STATE OF UTAH
 NATURAL RESOURCES
 Water Rights

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

October 5, 1984

Copy To Sue

File ACT/007/011, Folder #2

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

RECEIVED

JIM

OCT 11 1984

OCT 11 1984

DIVISION OF OIL
 GAS & MINING

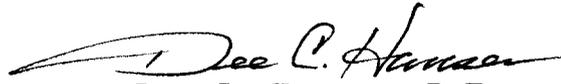
Mr. James W. Smith, Jr., Administrator
 Mineral Resource Development of Reclamation Program
 Division of Oil, Gas & Mining
 4241 State Office Building
 Salt Lake City, Utah 84114

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

Dear Mr. Smith:

This office has reviewed the supplemental material for the above-mentioned mine. The sedimentation ponds don't appear to be involved. Therefore, our approval letters are still in effect.

Yours truly,


 Dee C. Hansen, P.E.
 State Engineer

DCH:rlm

cc: Mark Page, Area Engineer
 Price Area Office

File ACT 1007/011
Folder #2

RECEIVED

OCT 2 1984

DIVISION OF OIL
GAS & MINING



SCOTT M. MATHESON
GOVERNOR



STATE OF UTAH
DEPARTMENT OF COMMUNITY AND
ECONOMIC DEVELOPMENT

September 27, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 841114

Attn: Susan C. Linner

RE: Supplemental Material for Hiawatha Complex, U.S. Fuel,
ACT/007/011 #2, Carbon County, Utah

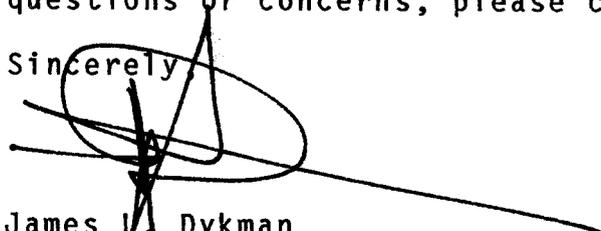
In Reply Refer To Case No. E409

Dear Mr. Smith:

The Utah Preservation Office has received for consideration your letter of September 12, 1984, concerning the supplemental material for the Hiawatha Complex Mine belonging to U.S. Fuel, located in Carbon County. After review of the material, our office notes no changes concerning cultural resources, and therefore our office has no comment.

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
Office of State Historic
Preservation Officer

JLD:jrc:E409/0887V



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

September 24, 1984

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

Dear Mr. Eccli:

Re: Division Review of September 4, 1984 Plan to Reclaim the Burn Area, Hiawatha Complex, ACT/007/011, Folder No. 3, Carbon County, Utah

The Division has reviewed the above referenced plan and has the following comments: Repeated passes of equipment as described on page 2 of the September 4, 1984 letter may cause excessive compaction and therefore not be in accord with UMC 817.24(b)(2).

The method or number of passes associated with cutting vegetation into "fine pieces" should be further described with emphasis on preventing soil disturbance.

The necessity of grinding vegetative material into "fine pieces" should be weighed versus potential topsoil compaction, loss of micro habitat for seedling establishment and loss of habitat for small animals.

The methods by which fertilizer will be applied and incorporated into the root zone must be described pursuant to UMC 817.25.

Would it be possible to spread fertilizer and rip or disc in a single operation to minimize soil compaction?

A plan which provides the specific seeding method, likewise, must be provided.

Page 2
Robert Eccli
ACT/007/011
September 24, 1984

A roughened topography vs a smooth, uniform surface would provide a diverse micro habit which would in turn enhance the chances for revegetation success.

Please provide a plan which: coordinates responses to the above comments into a program designed to minimize equipment passes over soils. Include specific methods, implements for each method and the exact number of passes necessary to accomplish its objectives.

If you have any questions please don't hesitate to call me.

Sincerely,



Susan C. Linner
Reclamation Biologist/
Permit Supervisor

TLP:jvb
cc: Sarah Bransom
Jack Elder
Lynn Kunzler
Tom Portle
91550-12



United States Department of the Interior

OFFICE OF SURFACE MINING

Reclamation and Enforcement

BROOKS TOWERS

1020 15TH STREET

DENVER, COLORADO 80202

SEP 14 1984

*orig min file 023
a file*

*ACT/007/011
#2 #3*

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SEP 19 1984

DIVISION OF OIL
GAS & MINING

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

Dear Mr. Gardiner:

This letter is in response to your September 4, 1984 letter and a follow-up to our August 21, 1984 telephone conversation regarding the U.S. Fuel Company's proposed unit train loadout. The purpose of this letter is to reaffirm to you that until certain requirements are met, U.S. Fuel may not begin construction on the unit train facility.

As you requested in your May 14, 1984 letter, OSM has incorporated the unit train proposal within the current review process of the permit application. In our June 15, 1984 letter to you and in our telephone conversation on August 21, 1984, several issues were outlined which needed to be resolved prior to rendering a decision on the permit application. These issues include: 1) provision of adequate abatement plans for all outstanding violations issued by the Utah Division of Oil, Gas and Mining; 2) submittal and resolution of remaining reclamation plan issues as conveyed to U.S. Fuel by Sarah Bransom, OSM Project Leader, on August 23, 1984; and 3) approval by local officials and completion of public participation requirements for relocation of State Highway 122 and County Road 338 as required by UMC 784.18 Relocation of Public Roads. To date, these issues remain unresolved.

According to the Division, abatement plans have been submitted for the twelve violations issued on May 11, 1984 and August 10, 1984, however, these plans have not been approved and incorporated into the permit application as required by the Division in its August 2, 1984 letter to U.S. Fuel. Until the review of the outstanding violations is completed by the Division, OSM cannot make the necessary finding under UMC 786.19(g) that requires all outstanding violations be abated or in the process of being abated. The second issue involves reclamation of the refuse and non-refuse area and access to the proposed topsoil borrow areas. OSM is in the process of reviewing your September 4, 1984 submittal for completeness and technical adequacy. If complete and adequate, this information will have to be incorporated into the decision package. OSM will then determine if reclamation is feasible. Finally, OSM has not received documentation from Carbon County approving the road relocation as required by UMC 786.12(d). The public comment period established by the Division for the road relocation is still in progress. In addition, it is necessary for OSM to review the proposed new location and additional information on the unit train facility submitted by U.S. Fuel on September 10, 1984. If these issues are not resolved OSM will be compelled to eliminate the unit train loadout from consideration under this permitting action.

The resolution of the remaining three issues and the review of newly submitted materials will delay the permit decision schedule beyond the anticipated October 1, 1984 date we discussed on August 21, 1984. At this time, a revised schedule cannot be developed primarily due to the uncertain outcome of the violation abatements. OSM cannot give assurance that U.S. Fuel will be able to initiate construction on the facility this fall.

This office will keep U.S. Fuel informed of the status of the permit decision document. If you have any questions, please call Walter Swain or Ron Naten at (303) 844-3806.

Sincerely,



Allen D. Klein
Administrator
Western Technical Center

cc: Susan Linner, UDOGM
Dr. Dianne Nielson, UDOGM ✓
Jack Elder, FBD



United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202
SEP 14 1984

File ACT/007/011, Folder #2

Copy to Sue

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SEP 19 1984

DIVISION OF OIL
GAS & MINING

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

Dear Mr. Gardiner:

This letter is in response to your September 4, 1984 letter and a follow-up to our August 21, 1984 telephone conversation regarding the U.S. Fuel Company's proposed unit train loadout. The purpose of this letter is to reaffirm to you that until certain requirements are met, U.S. Fuel may not begin construction on the unit train facility.

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According to the Division, abatement plans have been submitted for the twelve violations issued on May 11, 1984 and August 10, 1984, however, these plans have not been approved and incorporated into the permit application as required by the Division in its August 2, 1984 letter to U.S. Fuel. Until the review of the outstanding violations is completed by the Division, OSM cannot make the necessary finding under UMC 786.19(g) that requires all outstanding violations be abated or in the process of being abated. The second issue involves reclamation of the refuse and non-refuse area and access to the proposed topsoil borrow areas. OSM is in the process of reviewing your September 4, 1984 submittal for completeness and technical adequacy. If complete and adequate, this information will have to be incorporated into the decision package. OSM will then determine if reclamation is feasible. Finally, OSM has not received documentation from Carbon County approving the road relocation as required by UMC 786.12(d). The public comment period established by the Division for the road relocation is still in progress. In addition, it is necessary for OSM to review the proposed new location and additional information on the unit train facility submitted by U.S. Fuel on September 10, 1984. If these issues are not resolved OSM will be compelled to eliminate the unit train loadout from consideration under this permitting action.

The resolution of the remaining three issues and the review of newly submitted materials will delay the permit decision schedule beyond the anticipated October 1, 1984 date we discussed on August 21, 1984. At this time, a revised schedule cannot be developed primarily due to the uncertain outcome of the violation abatements. OSM cannot give assurance that U.S. Fuel will be able to initiate construction on the facility this fall.

This office will keep U.S. Fuel informed of the status of the permit decision document. If you have any questions, please call Walter Swain or Ron Naten at (303) 844-3806.

Sincerely,



Allen D. Klein
Administrator
Western Technical Center

cc: Susan Linner, UDOGM ✓
Dr. Dianne Nielson, UDOGM
Jack Elder, FBD

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Copy to Sue
File ACT/007/011

SEP 14 1984

3482
SL-025431
(U-921)

DIVISION OF OIL
GAS & MINING

JIM
SEP 17 1984

September 7, 1984

Memorandum

To: Walter Swain, OSM Senior Project Manager for the State of Utah,
Denver

Attn: Ms. Sarah Bransom

From: Chief, Mining Law and Solid Minerals, BLM, SO,
Salt Lake City, Utah

Subject: United States Fuel Company, Hiawatha Complex, Carbon and
Emery Counties, Permit Application Package (PAP)

The subject maps and pages forwarded with your letter dated August 9, 1984, and identified as "07/20/84 receipt of revisions for mining and reclamation plan - no cover letter" have been reviewed for conformance with the requirements of 43 CFR 3482.1(c) rules and regulations.

We do not have any necessary conditions for final action on the underground mining part of the subject PAP. Our subject letter dated July 20, 1984, is still considered to be our final concurrence letter for the Resource Recovery and Protection Plan part of the PAP.

Orig. Sgd: J.W. Moffitt

cc: U.S. Fuel Co.
Moab District Office
✓ DOGM

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3
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1

Orig mine file
cc file
J. Smith



United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

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File ACT/07/011
SEP 10 1984
Folders #2

DIVISION OF OIL
GAS & MINING

SEP 6 1984

JIM

SEP 18 1984

Mr. John W. Barton, District Manager
Mine Safety and Health Administration
Post Office Box 25367
Denver, Colorado 80225

Dear Mr. Barton:

This letter is a follow-up to your August 24, 1984 letter to this office concerning the U.S. Fuel Company's proposed unit train loadout facility at the Hiawatha Mines Complex, Carbon County, Utah. Your August 24, 1984 letter implies that MSHA intends to review and take some action on reviewing this proposal, which includes modification of a coal refuse pile (No. 1, I.D. No. 1211-UT-9-0007) for construction and placement of coal stockpiles and a conveyor system.

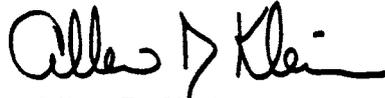
On August 22, 1984, this office received a structural analysis report prepared on July 25, 1984 by the MSHA Safety and Health Technology Center concerning the proposed facility. The U.S. Fuel Company confirmed on August 24 that they had also received a copy of this report. Under the provisions of the Utah state program, UMC 817.81 through 817.88 (coal waste banks) and 817.180 (transportation facilities), the applicant must meet certain requirements for constructing and maintaining this facility on the coal processing waste piles. (Please see enclosure) Since there are no provisions in the Utah Regulatory Program that require MSHA's approval prior to OSM making a decision on the proposal, OSM will review the proposed structure under the above referenced regulations, and any additional requirements imposed by your office must be coordinated and resolved between U.S. Fuel and MSHA. We have informed the company that they must satisfy your concerns prior to project construction; however, OSM will proceed with its permit decision as currently scheduled, and will condition approval requiring the applicant to obtain MSHA's concurrence prior to beginning construction.

In order to keep the permit application current, OSM has requested that the operator submit to OSM and the Utah Division of Oil, Gas, and Mining the appropriate numbers of copies of all information provided to MSHA. We also request that MSHA forward a copy of your final approval of the proposed facility for our files.

*Orig Mine file
cc J. Smith*

If you have any questions, please call Sarah Bransom or Walter Swain at (303) 844-3806.

Sincerely,

A handwritten signature in black ink that reads "Allen D. Klein". The signature is fluid and cursive, with the first name "Allen" and last name "Klein" clearly legible.

Allen D. Klein
Administrator
Western Technical Center

cc: Bob Eccli, U.S. Fuel Company
Dr. Dianne Nielson, UDOGM
Jack Elder, Ford, Bacon and Davis
Mike Bishop, Engineering Science

(a) All coal processing waste shall be hauled or conveyed and placed in new and existing disposal areas approved by the Division for this purpose. These areas shall be within a permit area. The disposal area shall be designed, constructed and maintained-

(1) In accordance with Sections UMC 817.71 and 817.72, and 817.73 where applicable, this Section, and Sections UMC 817.82-817.88; and

(2) To prevent combustion.

(b) Coal processing waste materials from activities located outside a permit area, such as those activities at other mines or abandoned mine waste piles, may be disposed of in the permit area only if approved by the Division. Approval shall be based on a showing by the person who conducts underground coal mining activities in the permit area, using hydrologic, geologic, geotechnical, physical, and chemical analysis, that disposal of these materials does not-

(1) Adversely affect water quality, water flow, or vegetation;

(2) Create public health hazards; or

(3) Cause instability in the disposal areas.

UMC 817.82 Coal Processing Waste Banks: Site Inspection

(a) All coal processing waste banks shall be inspected, on behalf of the person conducting underground coal mining activities, by a qualified registered engineer or other person approved by the Division.

(1) Inspections shall occur at least quarterly, beginning within 7 days after preparation of the disposal area begins. The Division may require more frequent inspections based upon an evaluation of the potential danger to the health or safety of the public and the potential harm to land, air and water resources. Inspections may terminate when the coal processing waste bank has been graded, covered in accordance with Section UMC 817.85, topsoil has been distributed on the bank in accordance with Section UMC 817.42, or at such a later time as the Division may require.

(2) Inspections shall include such observations and tests as may be necessary to evaluate the potential hazard to human life and property, ensure that all organic material and topsoil have been removed and that proper construction and maintenance are occurring in accordance with the plan submitted under UMC 784.16-784.19 and approved by the Division.

(3) The engineer or other approved inspector shall consider steepness of slopes, seepage, and other visible factors which could indicate potential failure, and the results of failure with respect to the threat to human life and property.

(4) Copies of the inspection findings shall be maintained at the mine site.

(b) If any inspection discloses that a potential hazard exists, the Division shall be informed promptly of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the regulatory authority shall be notified immediately. The Division shall then notify the appropriate agencies that other emergency procedures are required to protect the public from the coal processing waste area.

UMC 817.83 Coal Processing Waste Banks: Water Control Measures

** (a) (1) Unless otherwise approved by the Division in accordance with Subparagraph (a) (2) of this Section, a properly designed sub-drainage system shall be provided, which shall-

** (i) Intercept all ground water sources;

** (ii) Be protected by an adequate filter; and

** (iii) Be covered so as to protect against the entrance of surface water or leachate from acid or toxic-forming coal processing waste.

(2) The Division may exempt the operator from all or any of the requirements of Subparagraph (a) (1) of this Section where the operator has demonstrated that an alternative construction method will ensure structural integrity of the waste bank and protection of surface and ground water quality.

(b) All surface drainage from the area above the coal processing waste bank and from the crest and face of the waste disposal area shall be diverted, in accordance with Section UMC 817.72(d).

(c) Slope protection shall be provided to minimize surface erosion at the site. All disturbed areas, including diversion ditches that are not riprapped, shall be vegetated upon completion of construction.

(d) Discharges of all water from a coal processing waste bank shall comply with UMC 817.41, 817.42, 817.45-817.46, 817.52, and 817.55.

817.71 and 817.72, and where applicable 817.73, except to the extent the requirements of those Sections are specifically varied in this Section.

(b) Coal processing waste banks shall have a minimum long-term static factor of safety of 1.5.

(c) Compaction requirements during construction or modification of all coal processing waste banks shall meet the requirements of this paragraph, instead of those specified in Section UMC 817.72(c). The coal processing waste shall be-

(1) Spread in layers no more than 24 inches in thickness; and

(2) Compacted to attain 90 percent of the maximum dry density in order to prevent spontaneous combustion and to provide the strength required for stability of the coal processing waste bank. Dry densities shall be determined in accordance with the American Association of State Highway and Transportation Officials (AASHTO) Specification T99-74 (Twelfth Edition) (July 1978) or an equivalent method. AASHTO T99-74 is hereby incorporated by reference as it exists on the date of adoption of this Part. Notices of changes made to this publication will be periodically published by OSM in the FEDERAL REGISTER. AASHTO T99-74 is on file and available for inspection at the OSM Central Office, U.S. Department of the Interior, South Interior Building, Washington, D.C. 20240, at each OSM Regional Office, District Office, and Field Office, and at the central office of the Division. Copies may also be obtained by writing to the above locations. A copy of this publication will also be on file for public inspection at the FEDERAL REGISTER Library, 1100 'L' Street, N.W., Washington, D.C. Incorporation by reference provisions approved by the Director of the FEDERAL REGISTER February 7, 1979. The Director's approval of this incorporation by reference expires on February 7, 1980.

(3) Variations may be allowed in these requirements for the disposal of dewatered fine coal waste (minus 28 sieve size) with approval of the Division.

(d) Following grading of the coal processing waste bank, the site shall be covered with a minimum of 4 feet of the best available non-toxic and non-combustible material, in accordance with UMC 817.22(e), and in a manner that does not impede flow from subdrainage systems. The coal processing waste bank shall be revegetated in accordance with UMC 817.111-817.117. The Division may allow less than 4 feet of cover material based on physical and chemical analyses which show that the requirements of Section UMC 817.111-817.117 will be met.

UMC 817.86 Coal Processing Waste: Burning

Coal processing waste fire shall be extinguished by the person who conducts the underground coal mining activities, in accordance with a plan approved by the Division and the Mine Safety and Health Administration. The plan shall contain, as a minimum, provisions to ensure that only those persons authorized by the operator, and who have an understanding of the procedure to be used, shall be involved in the extinguishing operations.

UMC 817.87 Coal Processing Waste: Burned Waste Utilization

Before any burned coal processing waste or other materials or refuse is removed from a disposal area, approval shall be obtained from the Division. A plan for the method of removal, with maps and appropriate drawings to illustrate the proposed sequence of the operation and methods of compliance with this Part, shall be submitted to the Division. Consideration shall be given in the plan to potential hazards which may be created by removal to persons working or living in the vicinity of the structure. The plan shall be certified by a qualified engineer.

UMC 817.88 Coal Processing Waste: Return To Underground Workings

Coal processing waste may be returned to underground mine workings only in accordance with the waste disposal program approved by the Division and MSHA under UMC 784.19 and 784.25.

UMC 817.89 Disposal Of Non-Coal Wastes

(a) Non-coal wastes including, but not limited to, grease, lubricants, paints, flammable liquids, garbage, abandoned mining machinery, timber and other combustibles generated during underground coal mining activities shall be placed and stored in a controlled manner in a designated portion of the permit area. Placement and storage shall ensure that leachate and surface runoff do not degrade surface or ground water, fires are prevented, and that the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings.

(b) Final disposal of non-coal wastes shall be in a designated disposal site in the permit area except where such wastes are disposed of in an approved sanitary land fill. Disposal sites within the permit area shall be designed and constructed with appropriate water barriers on the bottom and sides of the designated site. Wastes shall be routinely compacted and covered to prevent combustion and wind-borne waste. When disposal is completed, a minimum of 2 feet of soil cover shall be placed over the site, slopes stabilized, and revegetation accomplished in accordance with UMC 817.111-817.117. Operation of the disposal site shall be conducted in accordance with all local, State, and Federal requirements.

** (h) Road surfaces from which topsoil has been removed shall be covered with topsoil in accordance with UMC 817.24(b), and the surface shall be revegetated in accordance with UMC 817.111-817.116.

UMC 817.180 Other Transportation Facilities

Railroad loops, spurs, sidings, surface conveyor systems, chutes, aerial tramways, or other transportation facilities shall be designed, constructed or reconstructed, and maintained, and the area restored, to-

(a) Prevent, to the extent possible using the best technology currently available-

(1) Damage to fish, wildlife, and related environmental values; and

(2) Additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of State or Federal law;

(b) Control and minimize diminution or degradation of water quality and quantity;

(c) Control and minimize erosion and siltation;

(d) Control and minimize pollution; and

(e) Prevent damage to public or private property.

UMC 817.181 Support Facilities And Utility Installations

(a) Support facilities required for, or used incidentally to, the operation of the underground mine, including, but not limited to, mine buildings, coal loading facilities at or near the minesite, coal storage facilities, equipment-storage facilities, fan buildings, hoist buildings, preparation plants, sheds, shops, and other buildings, shall be designed, constructed or reconstructed, and located to prevent or control erosion and siltation, water pollution, and damage to public or private property. Support facilities shall be designed, constructed or reconstructed, maintained, and used in a manner which prevents, to the extent possible using the best technology currently available-

(1) Damage to fish, wildlife, and related environmental values; and

(2) Additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of State or Federal law.



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

September 18, 1984

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

Dear Ms. Bransom:

RE: Notice of Public Hearing, U. S. Fuel Company, Hiawatha Mine
Complex, ACT/007/011, Folder No. 2 & 6, Carbon County, Utah

Enclosed is a copy of the Notice of Public Hearing regarding the relocation of a public road at U. S. Fuel Company's Hiawatha Mine Complex. This was published in the Price Sun Advocate. As the notice states the hearing which is scheduled during the September meeting of the Board of Oil, Gas and Mining, will not be held unless a written request is received. To date such a request has not been received.

Please contact me if I can provide further information.

Sincerely,

A handwritten signature in cursive script that reads "Susan C. Linner".

Susan C. Linner
Reclamation Biologist/
Permit Supervisor

jvb
Enclosure
90350-16



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

Betty

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

September 12, 1984

Mr. William H. Geer, Acting Director
Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

Dear Mr. Geer:

RE: Supplemental Material for Hiawatha Complex, U. S. Fuel,
ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information 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:

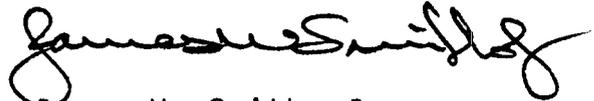
B. Mine Plan Review

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.

Page Two
Mr. William H. Geer, Acting Director
September 12, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

SCL:jvb
Enclosure
00450



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

September 12, 1984

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

Dear Mr. Hansen:

RE: Supplemental Material for Hiawatha Complex, U. S. Fuel,
ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information is forwarded for review by the 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:

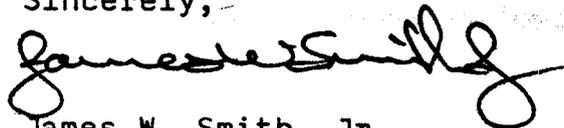
1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will forward a copy of the mining and reclamation plan to Dam Safety. If information additional to that contained in the operator's submission is required, Dam Safety is responsible for contacting the operator to obtain such information. 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.

Page Two
Mr. Dee C. Hansen, State Engineer
September 12, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

SCL:jvb
Enclosure
00460



September 12, 1984

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

Dear Mr. Alkema:

RE: Supplemental Material for Hiawatha Complex, U. S. Fuel,
ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information is 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 response 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

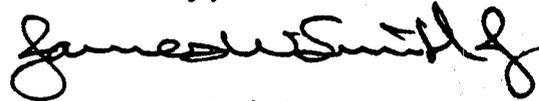
Page Two
Mr. Kenneth Alkema
September 12, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

SCL:jvb
Enclosure
00470



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

September 12, 1984

Mr. Melvin T. Smith
State Historic Preservation Officer
Utah State Historical Society
300 Rio Grande
Salt Lake City, Utah 84101

Dear Mr. Smith:

RE: Supplemental Material for Hiawatha Complex, U. S. Fuel,
ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information 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:

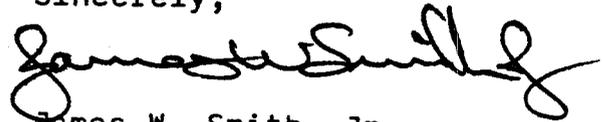
1. Upon submission of a coal mining and reclamation plan to the Division of Oil, Gas & Mining, the Division of Oil, Gas & Mining will notify the SHPO in writing of the need for consultation and evaluation of the plan with respect to historic and cultural resources. The Division of Oil, Gas & Mining will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

Page Two
Mr. Melvin T. Smith
September 12, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

SCL:jvb
Enclosure
00480

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

File
ACT/007/011
Folder 2,

RECEIVED

September 12, 1984

SEP 14 1984

DIVISION OF OIL
GAS & MINING

Mr. Allen D. Klein
Administrator, Western Technical Center
Office of Surface Mining
Brooks Towers
1020 15th Street
Denver, Colorado 80202

JIM

SEP 17 1984

Dear Mr. Klein;

This letter is in response to your letter of June 25, 1984 relating to the retention of roads and underground water supply system for the town of Hiawatha. In your letter you state that it is necessary to develop a bond amount which assumes that the roads and water system will be reclaimed. You give the reason for this decision to be that the requirements of UMC 817.133 Postmining Land Use, relating to alternative postmining land use, have not been met by U.S. Fuel. Please note that U.S. Fuel is not proposing an alternative postmining land use. The existing roads and water supply system have been used by the town for many years and we are not proposing an alternative use.

We would also like to respond at this time to OSM's write up The Outlook For The Town of Hiawatha Through The Year 2014 And Beyond. Specifically,

Hiawatha is an incorporated town and as such derives its power to govern from the State of Utah, not from U.S. Fuel.

U.S. Fuel has given every indication to OSM and UDOGM that it plans to continue mining beyond 2014. The exigencies of re-permitting caused U.S. Fuel to sever King VII and VIII to avoid potential regulatory induced closure. U.S. Fuel intends to permit King VII and King VIII to insure the continued operations at the Hiawatha complex. We contend that OSM's selections of 2014 does not represent reality.

To force reclamation of roads and the water supply creates a self-fulfilling prophecy. Few, if any, towns in the semi-arid West will survive once deprived of water and means of entrance/egress.

OSM's analysis misplaces responsibility for a non-diversified economic base. The communities in Carbon and Emery



counties are heavily dependent on coal mining. Many communities exist as homes to coal miners and support industries. If a company had to reclaim communities where a majority of their workers resided, then Carbon and Emery counties could well be desolate in an economic downturn. The state and taxpayers have invested greatly in their communities, and OSM's bonding policy would be most misguided.

The State of Utah through its entities does grant monies to Hiawatha. The community receives road funds, sales taxes, liquor funds, etc. For fiscal year 1985, the State has Hiawatha as the 29th priority to receive EPA Wastewater Treatment Grant Funds. In sum, the State is assuming that Hiawatha will be with us.

We believe that the agreement between U.S. Fuel and Hiawatha town of February 8, 1984 should suffice to ensure continued maintenance of the infrastructure when and if U.S. Fuel ceases mining operations.

Sincerely,



Robert Eccli
Senior Mining Engineer

RE:lj

cc: James W. Smith, DOGM

DIRECT RESPONSE TO OSM LETTER OF JUNE 25, 1984

SEP 17 1984

Forecasting tomorrow is fraught with a variety of difficulties, not the least of which is deciding which set of alternative futures to use. In response to the "Outlook for the Town of Hiawatha Through the Year 2014 and Beyond," several alternate assumptions can be made. Two general points will be made followed by a specific response to the analysis.

A. Hiawatha is not legally a company town

The town of Hiawatha is an incorporated governmental entity. Under the Utah Code Annotated an incorporated town becomes a public-held entity and has certain rules that pertain. Thus, while Hiawatha may have begun as a company town, its current status is as a publicly recognized and sanctioned entity. To change Hiawatha's status would require that a petition of dissolution be filed with the Lt. Governor of the State of Utah, and be voted on by the residents. In summary, Hiawatha derives its power to govern from the State, not from U.S. Fuel. Neither the company nor OSM can force a legally recognized town out of existence by either mining or reclamation practices.

B. 2014 is not only an artificial date, but also a capricious one.

The lack of diversity in the economic base does generate a sense that "as goes coal, so goes Hiawatha;" however, that statement is typically true for the counties of Emery and Carbon. The continued healthy existence of Hiawatha is in large measure tied to U.S. Fuel's operations. It should be noted that OSM's analysis misuses the statement (Paragraph 3, Page 1) that "U.S. Fuel Company has indicated that there are no plans to undertake any new or additional residential construction in Hiawatha (ACR response, July 1983), "at that time the U.S. Fuel permit application included the addition of two grassroots mine - King VII and VIII. Due to the artificial exigencies of re-permitting, the new mines were severed (Nov. 7, 1983) from the permit application. We contend that OSM and DOGM have prima facie evidence that U.S. Fuel intends to mine coal beyond 2014 - presumably the year that the existing mines are depleted. However, all parties are aware of U.S. Fuel's intent to permit two mines that would last beyond 2014. The "coordinated effort... to improve the economic viability of the town" is going on between the affected parties. Only OSM appears to be making the effort to close the town by denying it a water supply and the means of entrance and egress to it.

PAGE AND LINE COMMENTS

Page 1, Paragraph 3, Last Sentence

The assumption that U.S. Fuel would not allow a third-party to develop may prove false. Under the powers of incorporation, anyone may develop if land can be acquired. A better analysis would result if the pricing policies of U.S. Fuel were examined, i.e., has anyone attempted to procure land? If one employs the norm of economic rationality, why would U.S. Fuel walk away from an investment if selling homes and property would generate revenue?

Page 2, Paragraph 1

U.S. Fuel intends to permit King VII and VIII, thus assuring the economic viability of Hiawatha. Permitting realities in October, 1983 convinced U.S. Fuel to sever the new mines from the existing permit in order to assure continued operation, versus regulatory induced closure.

Page 2, Paragraph 2

While the meaning of "significant population growth" may seem ambiguous, the Utah Code Annotated specifically defines this term as an increase of five percent (SB 170). Thus, the intent of OSM's analysis must demonstrate that 13 additional people ($250 \times .05$) will not arrive in Hiawatha in any year from 1984 to 2014.

Page 2, Paragraph 4

As an incorporated town, the future of Hiawatha is not legally dependent on what U.S. Fuel does. The town is a quasi-sovereign entity.

Page 2, Paragraph 5

We agree that housing development is a function of demand. Typically, as the coal market improves in Carbon and Emery, the housing demand increases.

Page 2, Paragraph 6

Whether homes deteriorate is dependent upon U.S. Fuel's maintenance agreements. Also, mobile homes may be owned by the occupant.

Page 2, Paragraphs 7, 8, and 9

The tax base does not necessarily have to decline. If King VII and VIII can be permitted in an expeditious fashion, the tax base may well remain the same.

Page 2, Paragraph 9

The dilemma seems apparent: if OSM forces U.S. Fuel to reclaim the roads and water supply, Hiawatha will definitely be strained to replace the infrastructure. We seem to have a "chicken and egg" situation - if the roads and water supply are removed, Hiawatha's demise may be more probable. Another scenario would have the town officials applying for financial assistance from the Community Impact Board for low-interest loans.

Page 3, Paragraph 1

It is clear that incorporation and the power that is conferred has been ignored in this analysis.

Page 3, Paragraph 5

The published reports that are referred to (Attitude Survey and the Housing Report) demonstrate that Hiawatha is in the mainstream of Carbon County conditions. The results for Hiawatha are no different than other communities and residents. Carbon County's economy is closely tied to the demand for coal. The Department of Energy's (DOE) forecast for coal production, and the National Coal Association both forecast a rise in demand prior to 2014. Should these forecasts prevail, then Hiawatha may experience a boom period. At worst, the production capacity of King VII and VIII will ensure the continued existence of Hiawatha, assuming no major infrastructure expenses such as rebuilding roads and a water system.

2. POWERS OF INCORPORATION

Incorporated towns in Utah - towns are defined as having a population of less than 800 people - have some powers that should reflect on the roads and water supply issue.

- a) According to the Utah Code Annotated, towns have jurisdiction ten (10) miles above the point from the natural stream (10-13-14, UCA) where the water supply originates. Thus, depending on when the water for the town originates, U.S. Fuel should be able to show that the area in question falls under Hiawatha's jurisdiction.
- b) The Utah law also provides the power to towns to construct, operate and maintain public transportation systems, gas, and telephone services (10-8-14, UCA). The town of Hiawatha has full power to accept the deeded roads from U.S. Fuel per the existing legal document.

It should be noted to OSM that Hiawatha has very broad powers to govern and that it may take litigation to determine if OSM's ruling can overrule those of a sovereign entity. The Utah Supreme Court in 1980 ruled that cities, towns and counties have been delegated broad powers to accomplish their general purposes. In State V. Hutchinson the Court held:

These cases state the rule which we adopt in this case. When the State has granted general welfare power to local governments, those governments have independent authority apart from, and in addition to, specific grants of authority to pass ordinances which are reasonably and appropriately related to the objectives of that power, i.e., providing for the public safety, health, morals and welfare.

In summary, what OSM proposes to do to the roads seemingly infringes on Hiawatha's powers granted through incorporation.

3. HIAWATHA BUDGET

The town of Hiawatha is in the process of finalizing budgets with the State Auditors office. The more recent audited budgets should be available to the public within the next week.

The major source of revenue for Hiawatha is the property tax which accounted in 1980 for 58 percent of the revenue. Almost 10 percent of the revenue is derived from the "B" and "C" and the collector road fund.

The major expenditure is in the area of public safety for the town marshall's salary. Public works accounts for 23 percent of the expenditures.

Perhaps when final audited statements for the last two years are available, a trend of public finance will become evident. At this date, there is no evidence that U.S. Fuel contributes substantially to the budget of the incorporated city. Rather, the town looks rather typical in its reliance on property taxes as the major source of revenue. Since land owners pay property tax regardless of their location, there is no reason to believe that property taxes would cease by the year 2014.

If one were to compare Hiawatha to another historic coal mining town, that of Scofield, the differences are rather instructive. Scofield relies heavily on intergovernmental revenues, unlike Hiawatha, to balance its recreational based budget. Another town heavily influenced by coal, Sunnyside, is different from both Hiawatha and Scofield, in that Sunnyside relies heavily on user fees to generate revenue.

In sum, it would appear that the experience of one town in Carbon County is not a good indication of how other towns may proceed. Thus, there is no evidence that Hiawatha need become a financial liability to the County or the State beyond the year 2014.

RECEIVED

SEP 14 1984

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SL-025431
(U-921)

DIVISION OF OIL
GAS & MINING

September 7, 1984

*ACI/007/011
#2*

Memorandum

To: Walter Swain, OSM Senior Project Manager for the State of Utah,
Denver

Attn: Ms. Sarah Bransom

From: Chief, Mining Law and Solid Minerals, BLM, SO,
Salt Lake City, Utah

Subject: United States Fuel Company, Hiawatha Complex, Carbon and
Emery Counties, Permit Application Package (PAP)

The subject maps and pages forwarded with your letter dated August 9, 1984, and identified as "07/20/84 receipt of revisions for mining and reclamation plan - no cover letter" have been reviewed for conformance with the requirements of 43 CFR 3482.1(c) rules and regulations.

We do not have any necessary conditions for final action on the underground mining part of the subject PAP. Our subject letter dated July 20, 1984, is still considered to be our final concurrence letter for the Resource Recovery and Protection Plan part of the PAP.

cc: U.S. Fuel Co.
Moab District Office
✓ DOGM

Orig. Sgd: J.W. Moffitt

1984 SEP 12 AM 9:59
ESTERN TECHNICAL CENTER
084-1110

*Orig mine file
cc file
J. Smith*

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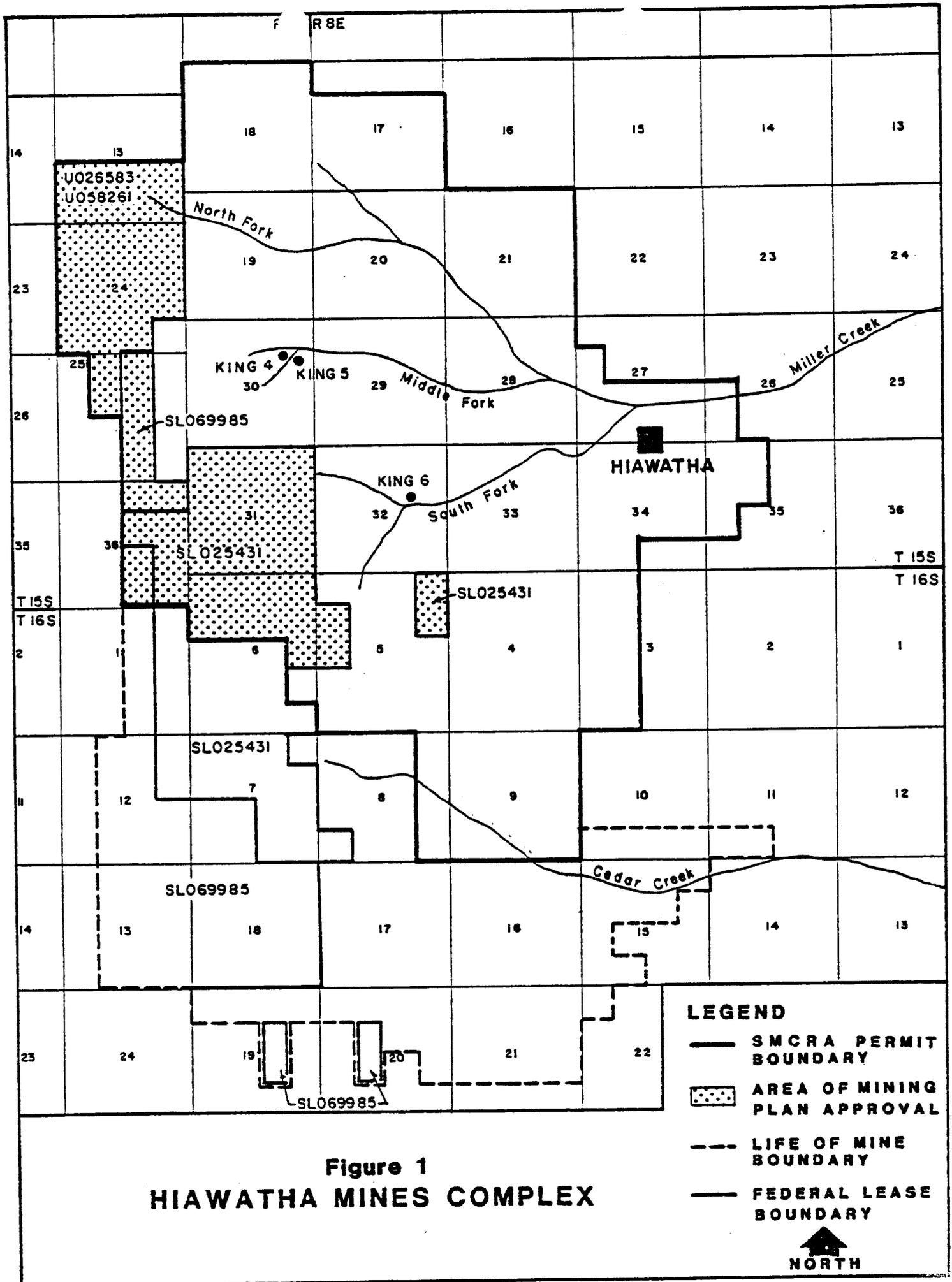
TECHNICAL ANALYSIS

I - INTRODUCTION

United States Fuel Company (U.S. Fuel) , a wholly owned subsidiary of Sharon Steel Corporation, submitted a permit application to Utah Division of Oil, Gas, and Mining (UDOGM) and the Office of Surface Mining (OSM) on 23 March 1981 in order to bring its Hiawatha Mines Complex into compliance with the permanent Utah State Coal Program for the next 5 years of mining. This original submittal, in conjunction with the Apparent Completeness Review (ACR) response (14 June 1983) and applicant responses to Determinations of Adequacy (DOAs) (7 November 1982, 9 January 1983, 13 February 1984, 16 March 1984) comprise the permit application package (PAP) for the Hiawatha Mines Complex. The Hiawatha Mines Complex consists of the King 4, 5, and 6 Mines and coal handling and processing facilities adjacent to the town of Hiawatha. The following technical analysis (TA) evaluates this permit application (UT0006-24).

In addition to providing the application requirements for a Utah coal mining permit, the PAP includes the information required for the Secretary of the Interior to make a decision on U.S. Fuel's mining plan for its Hiawatha Mines Complex. The proposed Surface Mining Control and Reclamation Act (SMCRA) Permit Area and the proposed area of mining plan approval (which is identical to the resource recovery and protection plan boundary) are shown in Figure 1. The 5-year progressions of mining for the King 4, 5, and 6 Mines within the proposed SMCRA Permit Area are shown in Figures 2 through 7. The proposed life of mine boundaries for the Hiawatha Mines Complex (see Exhibits II-1 and II-2 of the PAP) are shown in Figure 1. This permitting action does not include redevelopment of the Mohrland area (King 7 and 8) to the south of the SMCRA Permit Area or construction of a new unit train loadout facility. Unless otherwise indicated, all references in this TA are to the Utah Regulations Pertaining to the Surface Effects of Underground Coal-Mining Activities (UMC 700 et seq. and UMC 800 et seq.).

The Hiawatha complex is located on the east side of the Wasatch

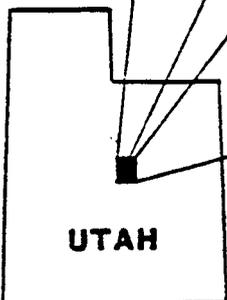
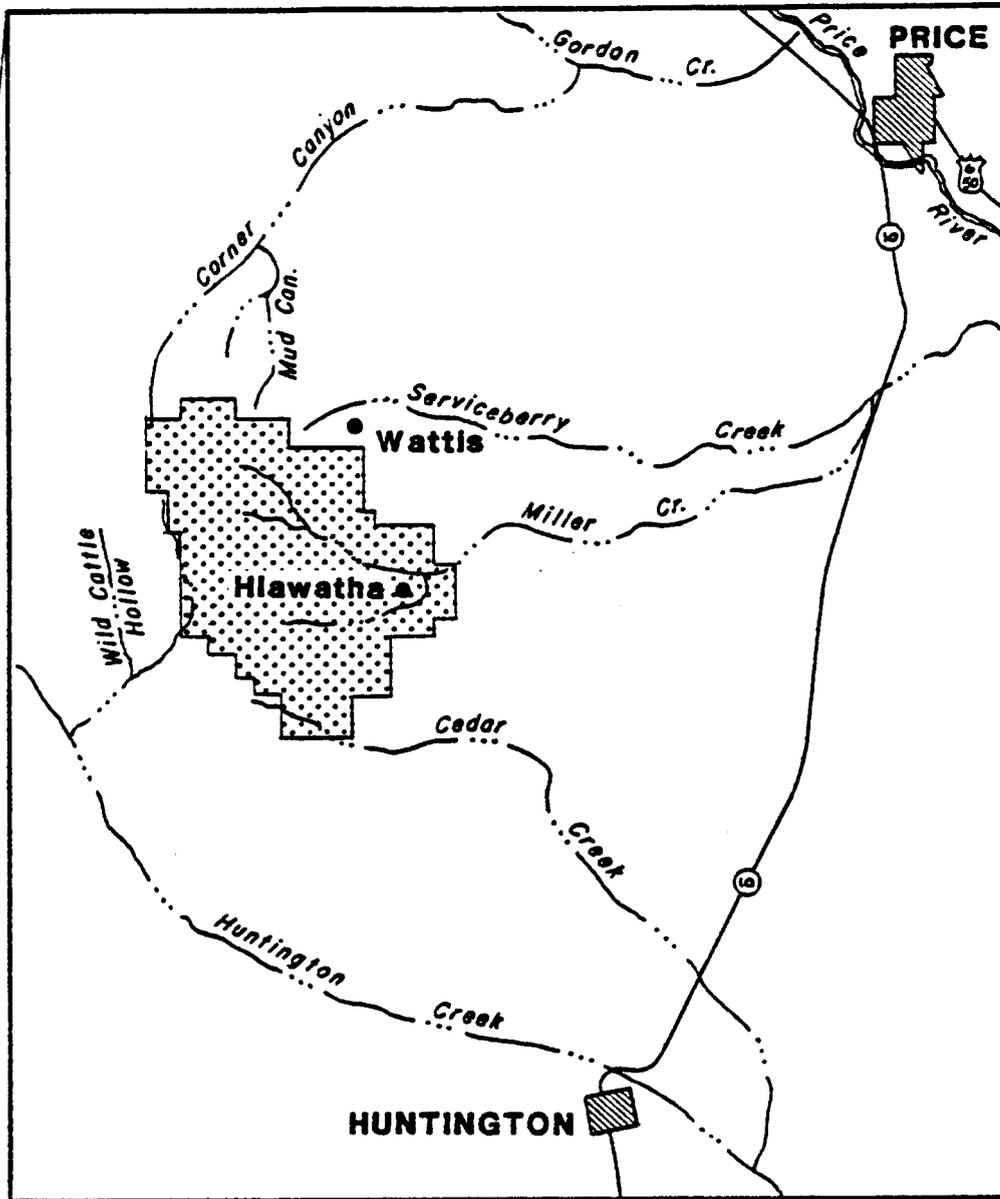


Plateau in central Utah, about 15 miles southwest of Price, in Carbon and Emery counties (Figure 8). The life of mine area encompasses 19,211 acres and is located within: T.15S., R.7E., SLM, sections 12, 24, 25, 36; T.15S., R.8E., SLM, sections 17-21, 26-35; T.16S., R.7E., SLM, sections 1, 12, 13; and T.16S., R.8E., SLM, sections 3-11, 15-22. Of this area, approximately 5,726 acres (approximately 30 percent) of coal are held by U.S. Fuel in the form of leases with the Federal government. The leases involved are: SL-025431 (2,370.26 acres), SL-069985 (2,356.09 acres), and the combined leases U-058261 and U-026583 (1,000 acres). Most of the remainder of the coal in the life of mine area (9,833 acres) is owned by U.S. Fuel. The applicant does not have rights to approximately 3,650 acres of coal within the life of mine area.

The SMCRA permit area includes 12,660 acres in T.15S., R.7E., SLM, sections 12, 24, 25, 36; T.15S., R.8E., SLM, sections 17-21, 26-35; T.16S., R.8E., SLM, sections 3-6, 8, 9,. Of these, 2,543 acres involve Federal coal and comprise the mining plan area. All of the Federal leases are involved in the mining plan area, although they also include areas outside of the current SMCRA permit area. In addition to the lands for which it already has a right to mine, the applicant has expressed an interest in three Federal coal lease tracts adjacent to the permit area and has applied for a short-term by-pass coal lease on another parcel. These areas, and the Mohrland area, however, are not included in this application.

The Hiawatha Mines Complex is a consolidation of the original King, Hiawatha, Blackhawk, and Mohrland mines, which began mining coal in the late 1890's. U.S. Fuel was organized in 1915 and began operation in 1916 when it took over the properties of the Consolidated Fuel Company, Castle Valley Coal Company, and Black Hawk Coal Company, all of which are located within the current mine plan area boundary. The current five-year permit application applies to three underground mines (King 4, 5, and 6) which are existing operations. Mining will remove coal from the A (King 4, 5, and 6) B (King 4 and 5), and Hiawatha (King 6) seams of the Blackhawk formation.

Approval of both the SMCRA permit by the State of Utah and the



UTAH



NORTH

0 1 2 4

SCALE IN MILES

Figure 8
AREA MAP
HIAWATHA MINES COMPLEX

mining plan by OSM would provide for mining at the Hiawatha Mines Complex through the year 1989 at a maximum rate of 1.759 million tons per year. U.S. Fuel currently ships all coal from the Hiawatha complex by rail to an electric generation plant in Nevada and military facilities in the northwestern United States. U.S. Fuel currently employs approximately 281 people at the Hiawatha Mines Complex. Employment would increase to 500 during the period of maximum production.

The environmental assessment (EA) on the mining plan which accompanies this TA was prepared pursuant to the National Environmental Policy Act (NEPA). The EA and TA frequently reference one another.

II - DESCRIPTION OF THE EXISTING ENVIRONMENT

Topography and Geology

The Hiawatha complex is located on the east side of the Wasatch Plateau, at elevations ranging from 6750 to 9600 feet, in an area characterized by steep canyons and high plateaus. Miller and Cedar Creeks drain the mine plan area.

The geologic formations of the mining plan area are Cretaceous, Tertiary, and younger in age. The generally lenticular coal seams of interest are contained within the Cretaceous Blackhawk formation. The beds are relatively flat with a slight dip to the southwest. The strata are generally undisturbed in the vicinity of Mohrland but become disturbed in the western portion of the mining plan area where the Pleasant Valley fault zone is present. This fault zone trends north-south through the head of Bear Canyon, with displacements of up to 250 feet, and marks the western limit of past U.S. Fuel mining.

Climate and Air Quality

The climate of the Hiawatha Mines Complex area is typical of canyon areas of central Utah. Summer temperatures range from 40° to 95° F while winter temperatures average around 25° F. The average annual precipitation is 12 inches. Winds in the mine plan area are affected by the area's topography, although general wind directions over a broader region are from the north-northeast in the winter and

the south-southwest in the summer.

Central Utah is primarily rural with some light or dispersed industrial activity. Existing air quality is generally excellent, although high total suspended particular values result from travel on unpaved roads. Carbon monoxide, ozone, lead, and hydrocarbons are not monitored in the region, but it is expected that they are within the National Ambient Air Quality Standards (NAAQS) (BLM 1983).

Hydrology

The area is divided into hydrologic units by structural elements such as the Book Cliffs, San Rafael Swell and Wasatch Plateau which, in turn, are modified by subsidiary folds, faults, intrusions and, in upper formations, deeply cut drainage systems. The deep drainage system in some areas drains the exposed bedrock. The upper water-bearing beds are discontinuous and partially void of water near cliff faces. The upper formations of the Wasatch Plateau have been reported as the water bearing formations. Field surveys show that most of the springs and seeps outcrop in the Price River, Star Point, and Castlegate Sandstone formations. The Flagstaff Limestone and North Horn Formation yield water to wells for municipal use in Price, Utah. The Ferron Sandstone Formation has yielded drinking water to Emery and water to underground mine workings.

Ground water in the region around the Hiawatha Mines Complex is recharged principally by direct infiltration of precipitation in the higher plateau, infiltration from perennial streams that flow into Mancos Shale lowlands, and, to a limited extent, by infiltration in outcrops.

Contact with the Bear Canyon Fault at several points in old mine workings has resulted in large flows of water and accounts for most of the mine water presently discharged from the Old Mohrland portal. One water-producing contact with the fault which is accessible in the King 4 Mine is presently used for fire protection and dust suppression in that mine. Generally, mine water flows southerly, away from active mining, and is discharged by gravity flow at the old Mohrland portal. Some of this water is diverted for culinary and industrial use at

Hiawatha, and the remainder flows into Cedar Creek. No other mine discharge or dewatering activities are anticipated by U.S. Fuel.

Water Supply

Water in the mine is of fairly high quality. Mine water is used by U.S. Fuel for fire prevention and dust suppression in King 4 and by the town of Hiawatha for culinary purposes. These uses are covered by water rights claimed by U.S. Fuel for 4758 gallons per minute (gpm) (3746 gpm in surface water rights and 1012 in ground water rights). Mine water discharge from the old Mohrland portal is regulated under National Pollutant Discharge Elimination System (NPDES) permit no. UT-0023094. Water supply information on the area surrounding the Hiawatha Mines Complex is not currently available.

Water Quality

Water in the vicinity of the Hiawatha complex is felt to be of high quality. However, the water quality data provided in Table VII-6 (original submittal) infrequently slightly exceed drinking water standards for TDS and oil and grease.

Soils

Within the proposed permit area the dominant soils at elevations of 7000 to 8500 feet have cool temperature regimes and are moist except for significant periods during the growing season. Slopes generally range from 30 to 60 percent and at times exceed 70 percent. Soils within the proposed permit area generally are cobbly loam in texture and are derived from a variety of sedimentary rock. Some have dark colored, organically rich surface horizons. The lighter colored soils have significant accumulations of carbonates in the subsoil.

Below 7000 feet, the soils have moderate temperature regimes and are usually dry during the growing season. Slopes are generally less than 30 percent. Most of these soils are loam to cobbly loam in texture and have developed from alluvium and mass wasting derived from a variety of sedimentary rocks. Many of these soils have accumulations of carbonates in the subsoil. Vegetative production in and adjacent to the Hiawatha Mines Complex is limited by the lack of available moisture during the growing season. Natural sediment production is high.

Because of the age of the Hiawatha Mines Complex, very little topsoil has been salvaged for reclamation purposes. Instead, soil will be borrowed from areas below 7000 feet in elevation for reclamation at the portal areas above 8000 feet. The borrow areas will yield sufficient material to reclaim previously disturbed areas as well as the borrow areas.

Vegetation

The U.S. Fuel SMCRA Permit Area includes about 12,660 acres and incorporates a large diversity of elevation, topography, aspect, temperature, and moisture conditions. As a result, a large number of plant community types have developed. Ten vegetation types have been identified and mapped within the permit area. The ten types, ranked in order of approximate decreasing abundance by percent composition are: (1) mixed conifer forest (41.1 percent); (2) pinyon-juniper woodland (15.4 percent); (3) mixed conifer-aspen forest (13.9 percent); (4) mountain brush (11.8 percent); (5) high elevation sagebrush-grassland (7.2 percent); (6) grassland (5.5 percent); (7) sagebrush (1.8 percent); (8) aspen (1.8 percent); (9) riparian woodlands (1.4 percent); and (10) barren land (0.1 percent). As these characteristics indicate, the basic vegetation nature of the permit area is one of forests and shrublands. Conifer, mixed conifer-aspen, and aspen stands occur at high and intermediate elevations on northern exposures, while pinyon-juniper, sagebrush, and mountain brush stands generally occur at lower mountain and foothill elevations with southern or western exposures. Riparian woodlands are confined to narrow corridors flanking major permit area streams, such as Miller and Cedar Creek and their tributaries.

Of the 12,660 acres in the total permit area, approximately 332 acres of vegetation has been lost or disturbed by past, as well as current, mining activities. Past mining activities were concentrated in the stream valleys and lower mountain slopes. Consequently, only five vegetation types were affected: mixed conifer, mountain brush; sage brush; pinyon-juniper woodlands, and riparian woodlands. Future reclamation activities will disturb an additional 24 acres of pinyon-juniper woodlands. There are no known occurrences of threatened

or endangered plant species or designated critical habitats for such species in the permit area.

Wildlife and Fisheries

The mine permit area occurs in the Transition and Canadian life zones and provides habitat for approximately 234 species of wildlife, including 6 amphibian species, 18 reptilian species, 139 bird species, and 71 mammal species.

Miller Creek and Cedar Creek drainages are the two major perennial stream systems present. However, neither drainage supports fish populations. Cedar Creek supports an aquatic invertebrate community and it is assumed that Miller Creek does also although there was no data included in the PAP to confirm this.

The permit area contains approximately 8,360 acres of critical deer and elk winter range, 3,335 acres of high-priority deer and elk summer range, and 1,017 acres of high-priority elk winter range. Past and current mining activities have affected the critical and high-priority deer and elk winter ranges.

Springs and seeps are scattered throughout the area and provide an important habitat feature for many wildlife species. Riparian habitats are restricted to the narrow floodplains of major streams like Miller and Cedar Creeks. Riparian woodlands constitute about 1.4 percent of the permit area.

The golden eagle, great horned owl, and sparrow hawk are probably the most common raptors in the permit area. No known active nest or roost sites are present. The bald eagle and American peregrine falcon may occasionally wander through the area. There are no known occurrences of threatened or endangered species or designated critical habitats present in the permit area.

Land Use

Land uses in the permit area include mining, logging, livestock grazing, wildlife habitat, watershed, oil and gas exploration, and recreation. Most of these uses have existed since early in the 20th century and are expected to be maintained without disruption by

continued mining at the Hiawatha complex.

Cultural Resources

The cultural resources of the Hiawatha Mines Complex impact areas have been partially inventoried. To date, no historic or archaeological sites have been recorded within the permit area. Prior to 31 December 1984, the applicant has agreed to provide an historical background study of the town of Hiawatha and to complete a pedestrian inventory of proposed direct impact areas associated with the processing plant, waste disposal sites, and substitute topsoil locations. The applicant, in consultation with OSM and the Utah State Historic Preservation Office (SHPO), has proposed measures to ensure that no adverse effects to any significant cultural sites which may be located within the permit area will occur as a result of mining operations.

Transportation

The permit area is accessible from Utah Highway 122 and existing paved, all weather haul roads up the Middle Fork and the Left Fork of Miller Creek. The town of Hiawatha is the terminal point of Utah Highway 122 and the lower portions of the haul roads also receive use by the public. The haul roads also provide access to water diversion, storage and service facilities for potable water for the town of Hiawatha. Coal which is mined is hauled by truck or transported by conveyor to the processing plant site at the town of Hiawatha. There the coal is loaded on rail cars for shipment over the Utah railroad system.

Socioeconomics

The Hiawatha Mines Complex straddles the Carbon-Emery County line in central Utah in the midst of an area commonly referred to as "Coal Country" or "Castle Country". Coal mining has occurred in the vicinity of the Hiawatha complex since the late 1890's. Today, the entire region is linked to mining and energy resource development. The 1980 population of the two counties was about 33,650, a 62 percent increase over 1970. Most of this growth was a result of the renewed energy development. In 1983, nearly one-third of the total employment in the

two counties was involved in the mining, transportation and utilities sectors.

The nearby town of Hiawatha, owned by U.S. Fuel, developed during World War I. At one time, the town's population reached nearly 1,500, but in the mid-1950's and 1960's the population declined to about 150, in response to the diminished national importance of coal as an energy source.

Residency information for the current workforce reveals that 24 percent reside in Hiawatha while 46 percent live in the Price area. Of the remaining 30 percent, 18 percent live in other communities in Carbon and Emery Counties, with the place of residence not known for 12 percent of the workforce.

Numerous community problems could be intensified with the mining expansion:

- North Sanpete, Carbon, and Emery Counties' school districts are all at or exceeding the capacity of permanent school facilities;
- Housing is almost unavoidable in much of the region;
- The water supply, treatment, and storage systems, and/or the sewage treatment systems are at, or exceeding, capacity in several communities;
- Insufficient medical facilities currently exist in northern Sanpete County.

At the present time, several local plans are being considered to address these problems.

III - SUMMARY OF THE OPERATIONS AND RECLAMATION PLAN

Because of poor market conditions, only the King 4 Mine is currently producing coal. U.S. Fuel has utilized the room and pillar method with both full and partial extraction, depending on roof characteristics. Longwall mining is proposed for part of King 5.

King 4 and 5 Mines share the same surface facilities in the Middle Fork of Miller Creek and were opened in 1974 and 1978, respectively.

From the loading facility, coal is hauled 3 miles to the processing plant in Hiawatha. The access corridor from the town of Hiawatha to the Middle Fork facilities contains the haul road, a powerline and a proposed overland conveyor system. The proposed conveyor will be constructed alongside the haulroad from the truckloading facility to the processing plant and is not part of this permitting action.

Facilities for the King 6 Mine are located in the South Fork of Miller Creek mine yard. Coal is conveyed approximately 2400 feet from the mine mouth down South Fork canyon to a coal stockpile where it is loaded onto trucks and hauled 3 miles to the processing plant.

The processing plant, built in 1938, is located immediately north of the town of Hiawatha. It has the capacity to wash, size, and thermal dry 400 tons of coal per hour. Slurry discharged from the plant is channeled through a froth flotation resin recovery process. The slurry is then discharged into impoundments constructed of coal washing refuse material where it is stored, allowed to dry, and eventually reclaimed for shipment to coal markets.

With the exception of mine roads, all areas affected by surface operations will be backfilled, stabilized and graded within two years following the cessation of mining. Diversion ditches, berms, and sediment ponds will be maintained until that time. Some disturbed areas will be returned to the approximate original contour while others (particularly yard areas in steep narrow canyons) will be left as currently graded to prevent erosion, assist plant growth, and provide better access for wildlife and livestock. Cut and fill terraces will be used where flatter slopes are not possible. Water lines from the King 3 and old Mohrland portals will be left in place to supply the town of Hiawatha, although both of these portals will be sealed. The Hiawatha No. 2 portal will not be sealed in order to allow access to valves, gauges, and a chlorination unit within the portal. Revegetation will follow backfilling, grading, and replacement of topsoil using seed mixes recommended by Utah Division of Wildlife Resources. Seeding will be accomplished by hydroseeding, drilling, and broadcast/raking and mulch will be used where necessary. Wildlife habitat will be the primary postmining landuse with some cattle grazing

near the town of Hiawatha.

The applicant wishes to leave most roads following mining. This will require the dedication of these roads to the town of Hiawatha and a commitment for continued maintenance after mining.

IV - LEGAL, FINANCIAL, AND COMPLIANCE INFORMATION UMC 782.13, 782.14, 782.15, 782.16, 782.17, 782.18, 782.19, AND 782.21.

UMC 782.13 IDENTIFICATION OF INTERESTS

Most information required by this rule is provided in the original submittal (Volume I, Chapter II, pages II-2 to II-5) and the DOA response (Volume I, Chapter II). The applicant is in compliance with UMC 782.13.

UMC 782.14 COMPLIANCE INFORMATION

Information required by this rule is provided in the original submittal (Volume I, Chapter II, pages II-6 to II-7). The applicant is in compliance with UMC 782.14.

UMC 782.15 RIGHT OF ENTRY AND OPERATION INFORMATION

Information required by this rule is provided in the original submittal (Volume Exhibits I, Chapter II, page II-8) and the DOA response (Volume I, Chapter II). The applicant is in compliance with UMC 782.15.

UMC 782.16 RELATIONSHIP TO AREAS DESIGNATED UNSUITABLE FOR MINING

Information required by this rule is provided in the original submittal (Volume I, Chapter II, page II-9) and the DOA response (Volume I, Chapter II). The applicant is in compliance with UMC 782.16.

UMC 782.17 PERMIT TERM INFORMATION

Information on permit term is provided in the original submittal (Volume I, Chapter II, page II-10) and the DOA response (Volume I, Chapter II). The applicant is in compliance with UMC 782.17.

UMC 782.18 PERSONAL INJURY AND PROPERTY DAMAGE INSURANCE INFORMATION

The applicant has provided evidence of insurance coverage which

complies with the requirements of UMC 806.14 in its DOA response (Volume I, Chapter II, page 3 and 4).

UMC 782.19 IDENTIFICATION OF OTHER LICENSES AND PERMITS

The applicant has provided information on its other licenses and permits in the original submittal (Volume I, Chapter II, page II-13) and the DOA response (Volume I, Chapter II). The applicant is in compliance with UMC 782.19.

UMC 782.20 IDENTIFICATION OF LOCATION OF PUBLIC OFFICE FOR FILING OF APPLICATION

The public offices where the application has been filed are listed in the original submittal (Volume I, Chapter II, page II-14). The applicant is in compliance with UMC 782.20.

UMC 782.21 NEWSPAPER ADVERTISEMENT AND PROOF OF PUBLICATION

Information on the required newspaper advertisement and proof of publication are provided in the original submittal (Volume I, Chapter II, page II-15) and the DOA response. The applicant is in compliance with UMC 782.21.

V - LAND USE - UMC 783.22, 784.15, AND 817.133

Information on land use in the proposed permit area is located in the original submittal (Volume I, Chapter IV), the July 1983 ACR response (Chapter IV), and the DOA response (Volume I, page 85). The applicant is in compliance with UMC 783.22.

The applicant has not, however, provided the information required under UMC 784.15 and 817.133(c) for alternative land uses or for the reclamation of roads as required by UMC 87.156, 817.166, and 817.176. The applicant must comply with Condition No. 1.

Condition No. 1

If the applicant wishes to leave the roads in the permit area following the cessation of mining, it must provide the alternative land use information required by UMC 784.15 and 817.133(c) within 90 days of permit issuance.

If a change in land use is not requested and the applicant will reclaim the roads, the information required by UMC 817.156, 817.166, and 817.176 must be provided within 90 days of permit issuance. Such information must include a plan and agreement for the maintenance of all diversions, bulkheads, and pipe works located within the North, Middle, and South Fork of Miller Creek. In addition, if a change in land use is not requested, U.S. Fuel must also provide the following to the regulatory authority within 60 days of permit issuance:

- . A revegetation plan for all haul roads in accordance with the requirements of UMC 817.111 to 817.117;
- . A plan for reclaiming and revegetating all haul roads so that restoration of wildlife habitats will be achieved;
- . Complete data on proposed backfilling, grading and compaction for the reclamation and restoration of existing haul and access roads as required by UMC 784.13(b)(3), 817.12, 817.73, 817.74, and 817.101. U.S. Fuel shall provide a commitment to reclaim and restore to a condition resembling the original terrain, all areas now occupied by haul and access roads immediately following the cessation of mining operations. The commitment shall contain complete data on the proposed final configuration of the areas to be restored and those which are disturbed during the restoration procedure. Data shall include final topographic contour maps, cross sections of restored areas, topsoiling requirements, drainage modifications, and details of revegetation procedures as required by UMC 817.156, 817.166, and 817.176.

VI - CULTURAL AND HISTORIC RESOURCES - UMC 761.11(a)(3), 783.12(b) and 784.17

Cultural and historical resources information is presented in Volume I, Chapter V, of the original submittal, in the ACR response and the January and February 1984 DOA responses. In addition, OSM archaeologist Foster Kirby has had several telephone communications with the applicant concerning cultural resources compliance.

At present, no archaeological or historic sites are known to exist

within proposed direct impact (ground surface disturbance) areas included under this permit. However, the applicant has yet to complete the following studies which are necessary to assess the effect of the proposed mining on the cultural environment:

- . Historical background survey of the town of Hiawatha and archaeological assessment of the processing plant and waste disposal sites;
- . Cultural resources inventory of substitute topsoil locations (Exhibit VII - 4A);
- . Additional cultural resources studies as may be determined necessary in the future by OSM, UDOGM, and/or the Utah SHPO to assess the effects of subsidence on cultural sites in the areas over the underground workings.

The applicant has agreed to complete the first two studies by 31 December 1984. The subsidence studies will be conducted as the need arises. On the basis of the information submitted by the applicant, and the stipulations suggested, OSM will request SHPO concurrence with a Finding of No Adverse Effect (See Section 6.3 of the FSD). When this concurrence is received, the proposed operation will be in compliance with the requirements of UMC 761.11(a)(3), 783.12(b) and 784.17. The following conditions are included as requirements of this permitting action.

Condition No. 2

Prior to initiating any ground surface disturbance within 100 feet of an archaeological site, the operator shall ensure, in consultation with OSM and the Utah SHPO, that the site is properly evaluated in terms of National Register of Historic Places (NRHP) eligibility criteria. Where a significant site will be affected by mining, the applicant will consult with OSM and the SHPO to develop and implement appropriate impact mitigation measures according to a mutually agreed upon schedule.

Condition No. 3

If any previously unidentified historic or archaeological site is discovered during mining operations, the operator shall cease disturbance in the vicinity of the site and shall notify the regulatory authority. The operator shall further ensure that the site is properly evaluated in terms of NRHP eligibility criteria. If a resource is determined to be eligible for listing on the NRHP, the operator shall consult with and obtain the approval of the regulatory authority concerning the development and implementation of appropriate impact mitigation measures.

VII - GEOLOGY - UMC 783.13 AND 783.14

The description of geology can be found in the PAP in Volume II, Chapter VI, and in the volume containing the 1983 ACR Response, Chapter VI. The description of geology provided in the previously mentioned volumes of the PAP defines the geologic strata down to the lowest aquifer that may be affected by mining (i.e. the Star Point Sandstone). In addition, the primary geologic structure in the area, the Bear Canyon Fault, is also thoroughly discussed. The description of geology is sufficient to support the description of ground water resources in UMC 783.15 (see Chapter IX). Therefore, the PAP is in compliance with UMC 783.13 and 783.14 concerning the geology in the vicinity of the Hiawatha Mines Complex.

VIII - HYDROLOGIC BALANCE: SURFACE WATER - UMC 783.16, 784.16, AND 784.22

783.16 Surface Water Information

Baseline surface water information is provided in the original submittal (Volume II, Chapter VII pages VII-9 through VII-16) and the ACR and DOA responses. This information has been determined to be complete.

Completeness was evaluated with regard to sections UMC 783.16 and 783.24(g) (Maps: Cross-sections, Maps, and Plans). Compliance was determined as it relates to the technical adequacy of surface water sections UMC 817.52 (Hydrologic Balance: Surface and Ground Water Monitoring) and 817.54 (Hydrologic Balance: Water Rights and

Replacement).

Surface water monitoring data have been collected since June 1978 for seven stations. The applicant expanded the surface water monitoring network to include an additional six stations. The applicant committed to making these six additional stations become a permanent part of the surface water monitoring program in the November 1983 DOA response.

According to their existing surface water monitoring program, water quantity and quality are monitored once a month when accessible. Water quality is sampled under two analytical schedules: a comprehensive analytical schedule for the month of August (see Table VII-7 Volume II) and an abbreviated analytical schedule for all other months (see Table VII-3 Volume II).

In addition to the surface water monitoring program, the Hiawatha Mines Complex has eight sedimentation ponds, three mine water discharge points, and a discharge for the town's excess water all under the NPDES monitoring system.

OSM has standardized the surface water monitoring program for Utah mines and U.S. Fuel was required to accept this program in a letter from OSM dated 13 February 1984 (see permit Condition No. 4). The surface water monitoring program includes monthly monitoring during the period from April through August according to an abbreviated analytical schedule (i.e. sodium, calcium, magnesium, potassium, sulfate, bicarbonate, carbonate, chloride, total dissolved solids, total suspended solids, pH, field specific electrical conductance, field temperature, and stream flow). Twice a year (snowmelt and low flow) the full scale of water quality parameters (according to UDOGM guidelines) will be analyzed.

U.S. Fuel rejected OSM's program and proposed a modification to their surface water monitoring program (DOA response of 16 March 1984). In that proposal, U.S. Fuel requested reduction of the current monthly monitoring to quarterly monitoring. U.S. Fuel argues that these changes are justified because there have been no significant changes or variations in the monitoring results and that the major water quality

problem in the basin is salt production rather than heavy metals.

OSM agrees that dissolved salts and suspended sediment are major water quality concerns. In the Cumulative Hydrologic Impact Assessment (CHIA) for Miller Creek, OSM has documented an increase in dissolved salts and suspended sediment due to coal mining activities. The increases are not to the level of material damage, and U.S. Fuel has designed their mining and reclamation plan to minimize impacts on the hydrologic balance. However, there is strong doubt whether quarterly monitoring will be sufficient to provide the necessary data to analyze these changes in water quality. Therefore, Condition No. 4 is necessary.

U.S. Fuel has accepted OSM's required analytical schedule which deletes total and dissolved iron, alkalinity, and oil and grease. Analyses in the Miller Creek CHIA documented that dissolved iron is naturally high throughout the study area, and the dissolved iron concentration is sometimes higher below the mine disturbance than above it. The CHIA concluded that more long-term data are needed for dissolved iron. Therefore, dissolved iron must be kept in the routine sampling analytical schedule (see Condition No. 4).

In previous correspondence (letter dated 23 July 1981), the Manti LaSal National Forest requested that U.S. Fuel include alkalinity in the Hiawatha Mines Complex water monitoring program. Therefore, alkalinity should be included in the surface water monitoring program (see Condition No. 4).

U.S. Fuel also proposes to delete radioactivity (gross alpha and gross beta). This is acceptable because radioactivity has not been found to be a problem either at the Hiawatha Mines Complex or for the Wasatch Plateau Coal Field.

U.S. Fuel will include a suite of heavy metal and other parameters in the comprehensive analytical schedule. These parameters are aluminum, cadmium, boron, chromium, copper, lead, mercury, molybdenum, nickel, ammonia, phosphate, and sulfide. It is assumed that the dissolved constituent of all of these parameters will be measured. U.S. Fuel needs to commit to monitoring using the comprehensive

analytical schedule twice a year (see Condition No. 4).

All of the records from the surface water monitoring program indicate that surface water monitoring is being conducted according to the existing plan and that the plan is adequate to measure and record changes in surface water quantity and quality as caused by coal mining activities. Modification of the surface water monitoring program as proposed by U.S. Fuel should not reduce the quality of the monitoring data if Condition No. 4 is followed. Therefore, U.S. Fuel will be in compliance with UMC 817.52(b) for the Hiawatha Mines Complex with the following Conditions. In addition, U.S. Fuel is in compliance with UMC 783.16, 784.16, 784.22, 783.24(g), 817.52, and 817.54.

Condition No. 4

U.S. Fuel conduct monthly sampling at all surface water monitoring stations during the period of April through August in accordance with the routine sampling analytical schedule listed below:

- Flow rate
- Temperature (air and water)
- pH
- Specific conductance
- Total suspended solids
- Total dissolved solids
- Sodium
- Calcium
- Magnesium
- Potassium
- Sulfate
- Bicarbonate/carbonate
- Chloride
- Alkalinity
- Dissolved iron
- Oil and grease

Twice per year, once during snowmelt flow and once during low flow, the samples will be analyzed using the comprehensive analytical schedule listed in UDOGM guidelines. Data will be submitted quarterly

to UDOGM. An analyses and summary of the data will be submitted annually.

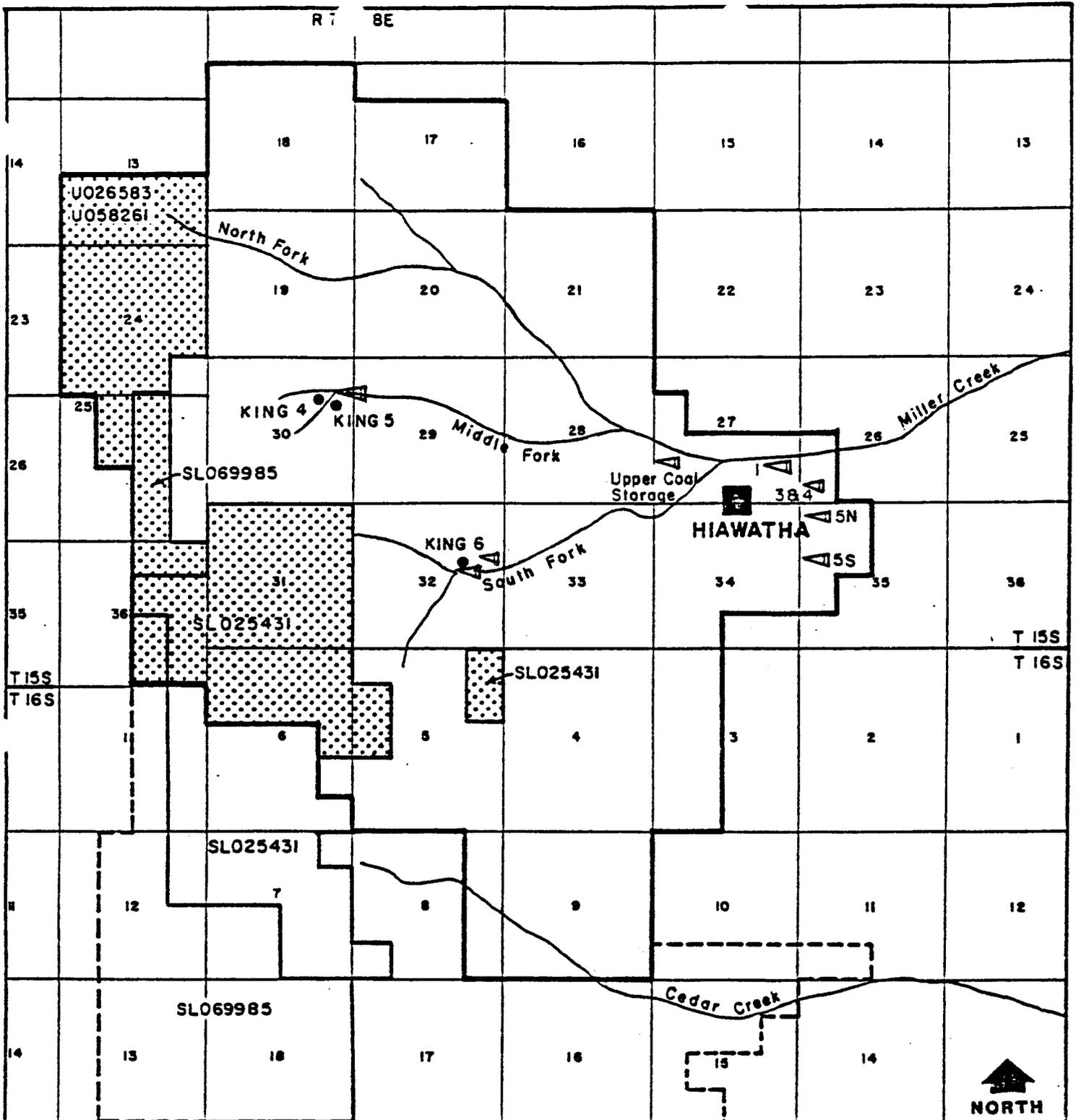
UMC 784.16 RECLAMATION PLAN: PONDS, IMPOUNDMENTS, BANKS, DAMS, AND EMBANKMENTS

(b)(1) Sedimentation Ponds

The Hiawatha Mines Complex currently contains eight sedimentation ponds (see Figure 9). Most of these ponds were constructed in 1978 or 1979 to achieve on-the-ground compliance with the drainage and sediment control rules and regulations of OSM's interim regulatory program. Approval of the sedimentation ponds for the Middle Fork portal yard, South Fork portal yard, and upper coal storage yard was given by OSM and UDOGM on 30 May 1980. Approval of the ponds was given by Utah Water Pollution Control in August 1979. The sediment control structures for the coal pile/truck loadout area on the South Fork were reviewed by OSM and UDOGM during the analysis in conjunction with the reopening of King No. 6 Mine (approved 15 July 1981). Review and approval of the other sedimentation ponds were deferred for later review.

All sedimentation ponds were analyzed during this review for compliance with UMC 817.45 (Hydrologic Balance: Sediment Control Measures), 817.46 (Hydrologic Balance: Sedimentation Ponds), 817.47 (Hydrologic Balance: Discharge Structures), 817.49 (Hydrologic Balance: Postmining Rehabilitation of Sedimentation Ponds, Diversions, Impoundments, and Treatment Facilities), and 817.57 (Hydrologic Balance: Stream Buffer Zones).

Information used in the review was obtained primarily from four studies: "Surface Hydrology and Culvert Adequacy of the Hiawatha and Mohrland, Utah Areas" (Vaughn Hansen Associates, August 1978), "Supplemental Hydrologic Information for Sedimentation Ponds at Hiawatha and Mohrland, Utah" (Rollins, Brown and Gunnell, Inc. May, 1979), "Hydrologic Information King VI Mine Area, U.S. Fuel Company" (Sharon Steel Corp, December 1980), and a series of correspondence from U.S. Fuel dated February 1979 through July 1979 for a sedimentation pond associated with reconstruction of Slurry Pond No. 1. A fifth



LEGEND

- SMCRA PERMIT BOUNDARY
- ▨ AREA OF MINING PLAN APPROVAL
- - - LIFE OF MINE BOUNDARY
- FEDERAL LEASE BOUNDARY
- ▲ SEDIMENTATION PONDS

**Figure 9
 HIAWATHA MINES COMPLEX
 EXISTING SEDIMENTATION PONDS**

study was provided by the applicant in their DOA letter response of November 1983 for sedimentation ponds associated with topsoil areas A and D. Sediment removal, pond maintenance, and pond inspection procedures are presented in the ACR response (Volume 1, Chapter III, pages III-14A and III-29A).

Runoff and sediment volume estimates were made by the applicant using acceptable methods and were checked by OSM for accuracy using the SEDIMOT program. There was good agreement between the results cited by the applicant and those of the SEDIMOT program. Therefore, the runoff and sediment volume estimates are acceptable.

Top width, embankment slopes, relative elevations of the principal and emergency spillways, sizing of the principal and emergency spillways, sediment removal, bank stabilization, erosion control, inspection procedures, and pond removal schedules were evaluated as they relate to 817.46 and 47 and were found to be in compliance for all existing and proposed sedimentation ponds. Three special cases were identified that need to be discussed in more detail.

The runoff and sediment volumes estimated in the Vaughn Hansen Associates study (1978) were different from the corresponding estimates in the Rollins, Brown and Gunnel study (1979). The Vaughn Hansen study consistently required a larger pond size because of higher runoff and sediment volume estimates. This discrepancy was pointed out in a letter from Sharon Steel to UDOGM dated 28 October 1981. It appears that the Vaughn Hansen study designed the sedimentation ponds for a larger disturbed area and a higher sediment contribution per disturbed area. The higher sediment volume per disturbed area was required under the interim program regulations but was revised to a lower sediment volume per disturbed area in the permanent program regulations. The Rollins, Brown and Gunnel report simply used the more current regulations to design the sedimentation ponds.

The second special case deals with a recent notice of violation that U.S. Fuel received for excess discharge into Sedimentation Pond 5 North. The applicant has provided an abatement plan (dated 29 February 1984). During the review of this abatement plan, the sizing of Slurry Pond 5A as related to runoff and sediment control was reviewed and

found to be inadequate. Slurry Pond 5A is used as an auxiliary pond when Slurry Pond 5 is full. Slurry Pond 5 is used to contain runoff from two undisturbed areas (through culvert 12 and culvert 2), waste water from the preparation plant (2.36 acre-feet per day), and runoff from the disturbed area around the town. In their ACR response (page III-14A), U.S. Fuel argues that Slurry Pond 5A has an active storage volume of 18.6 acre-feet and a storage area in the voids of the Slurry of 71.3 acre-feet, for an available total storage volume of 89.9 acre-feet.

U.S. Fuel was in error in sizing the pond. Their submittal stated that the pond was 900 feet by 300 feet by 35 feet using 1 foot of freeboard. Performance standards for coal processing waste dams and embankments (UMC 817.93) require that these ponds have at least 3 feet of freeboard. Therefore, the active storage volume is 6.2 acre-feet.

The seepage rate of the slurry pond is sufficient to allow for the daily wastewater from the preparation plant without any cumulative storage (letter of 29 February 1984). Therefore, the only concern is whether the volume of voids in the waste rock can be used as storage for surface runoff.

When in use, the slurry ponds have standing water in them, which indicates that the voids in the waste rock are filled with water. Therefore, the only available storage is the 6.2 acre-feet of active storage. This storage volume is sufficient for runoff from the disturbed area and wastewater from the processing plant, but not enough to contain the design event from the undisturbed areas. Therefore, Condition No. 5 is necessary for future long-term use of Slurry Pond 5A. U.S. Fuel is not currently using Slurry Pond 5N.

Condition No. 5

Slurry Pond 5N is not to be used to contain runoff from the undisturbed areas flowing through culverts Nos. 2 and 12.

U.S. Fuel received an inspector's violation (NOV 82-2-5-1) for failure to construct a sedimentation pond according to the approved plan for the coal loadout area of King Mine No. 6. U.S. Fuel did

respond to this NOV with a series of plans which were approved by UDOGM on 20 September 1982.

Sedimentation ponds for King Mine Nos. 4, 5, and 6 will be removed when the portal areas are reclaimed. Removal of the ponds will be in the summer when stream flow is low and chances of increasing the suspended sediment load are minimal. Prior to removal of the ponds, a series of three sediment traps measuring approximately 15 feet square and five feet deep, will be constructed below the existing sedimentation pond. The traps will be left in place after mining to minimize disturbance.

According to statements made on page 60 of the January 1984 DOA response, the applicant proposes to leave the existing sedimentation ponds for the preparation plant, slurry ponds, and coal refuse embankments in place until the end of regrading operations. This is not in compliance with UMC 817.46(u) which requires that sedimentation ponds not be removed until the revegetation requirements are met. Therefore, Condition No. 6 is required.

Condition No. 6

U.S. Fuel must commit to leaving the sedimentation ponds for the upper coal storage area and Slurry Ponds No. 1, 3, 4, and 5 in place and active through the regrading and revegetation period.

Exhibit III-3 shows an equipment storage yard about 500 feet east of Slurry Pond 5 North. No runoff or sediment control facilities are in place for this yard. Therefore, Condition No. 7 is necessary.

Condition No. 7

Within 60 days of permit issuance, U.S. Fuels must submit plans and specifications for a drainage and runoff control plan for the equipment storage yard east of Slurry Pond 5. The plans must demonstrate that runoff leaving the disturbed area will meet effluent limitations and that all sediment control structures comply with UMC 817.45, 817.46, 817.47, and 817.49.

No permanent impoundments are proposed. Therefore, the applicant

is in compliance with UMC 817.49 and 817.56.

The applicant has constructed a small (about 1 acre) ventilation pad on the Right Fork of the North Fork of Miller Creek (see Figure 9). Because of the small area of disturbance, a small area exemption was allowed (UMC 817.42 (a)(3)), and the applicant is using strawbales to control sediment from the area. This is in compliance with UMC 817.42 and 817.45.

Two of the existing sedimentation ponds, the upper coal storage yard pond and the sedimentation pond associated with Slurry Pond No. 1, are within 100 feet of Miller Creek. Miller Creek is a perennial stream with a biological community (assumed), but data from the surface water monitoring reports do not indicate that any adverse effects on water quantity or quality are associated with these two ponds. Therefore, the applicant is in compliance with UMC 817.57.

In summary, with the following conditions, the applicant will be in compliance with UMC 817.45, 817.46, 817.47, 817.49, and 817.57.

UMC 784.22 DIVERSIONS

Each of the portal pads, the upper coal storage yard, the preparation plant area, and the slurry pond areas have small, overland flow, temporary diversions associated with them. Information on these diversions is presented in the original submittal, Chapter VII, and in "Surface Hydrology and Culvert Adequacy of the Hiawatha and Mohrland, Utah, Areas" (Vaughn Hansen Associates, 1978). Information on the design of these diversions is presented in Chapter XII, Exhibit III-1A, and Exhibit III-4A, respectively. Additional information on the permanent stream diversion adjacent to Slurry Pond No. 1 is presented in a letter from U.S. Fuel to UDOGM dated 20 February 1979. Information on the reclamation of the Middle Fork and South Fork is presented on Exhibit III-11, III-12A, and III-12A1.

Miller Creek and its tributaries are diverted from a point adjacent to Slurry Pond No. 1, from under the portal pad for the King No. 4 and 5 Mines (Middle Fork), and from under the sedimentation pond for the King No. 6 Mine (South Fork). Only the diversion adjacent to

Slurry Pond No. 1 is a permanent diversion. The other stream diversions will be reclaimed when the portal pad area(s) are reclaimed.

Some of the surface water flows of the Left Fork of the North Fork of Miller Creek have been diverted into the underground mine workings. This subject will be discussed under UMC 817.55.

The PAP is complete and technically adequate in regard to UMC 784.22. Compliance has been evaluated as it applies to UMC 817.43 (Hydrologic Balance: Diversions and conveyance of Overland Flow, Shallow Ground Water Flow, and Ephemeral Streams), 817.44 (Hydrologic Balance: Stream Channel Diversions), 817.47 (Hydrologic Balance: Discharge Structures), and 817.56 (Hydrologic Balance: Postmining Rehabilitation of Sedimentation Ponds, Diversions, Impoundments, and Treatment Facilities).

All temporary overland flow diversions were checked to ensure adequate flow capacity, freeboard, and erosion control. All diversions were checked by the applicant to determine if the temporary diversions would be able to safely pass the runoff from the 50 year 6-hour precipitation event (see letter from Vaughn Hansen Associates dated 21 February 1980. A mitigation plan was recommended by Vaughn Hansen for all diversions not capable of passing the design event.

Since the approval of the ditches (letter from UDOGM dated 30 May 1980), the Hiawatha Mines Complex has received three inspection violations for breached diversion ditches (NOV Nos. 82-2-10-1, 83-4-2, and 83-4-9-2). All of these violations were terminated and no proceedings were initiated.

Miller Creek was diverted adjacent to Slurry Pond No. 1 in 1979. The original slurry pond embankment was too steep and, to make room for the flatter embankment slopes, the creek was moved approximately 50 to 150 feet to the north. The diversion length is approximately 600 feet, about 10 feet short of the natural channel length. The diversion channel was designed to safely carry the runoff resulting from the 100-year, 24-hour storm (letter from U.S. Fuel dated 19 March 1979), and stipulated that the channel be riprapped for the entire length of the diversion to protect against erosion (letter from UDOGM dated 29

March 1979). The diversion will be permanent, and it is in compliance with UMC 817.44

Temporary diversions have been constructed for the Middle and South Forks of Miller Creek. The Middle Fork diversion conveys the undisturbed drainage under the portal yard and sedimentation pond for the King No. 4 and 5 mines and the South Fork diversion conveys the undisturbed drainage under the upper sedimentation pond at the King No. 6 mine. Both culverts are adequately sized for the 50-year, 6-hour event. Reclamation of these channels will occur at the time of reclamation of the portals. Both reclaimed channels are adequately sized to safely convey the runoff resulting from the 100-year, 24-hour precipitation event. The applicant's calculations were checked by OSM using the SEDIMOT model. Both reclaimed channels were checked for erosion control, longitudinal stream profiles, and channel cross-sections. Designs for both reclaimed channels are in compliance with UMC 817.44

In summary, all diversion ditches, temporary or permanent, are currently in compliance with UMC 784.22, 817.43, 817.44, 817.47, and 817.56.

IX - HYDROLOGIC BALANCE - GROUND WATER - UMC 783.13 AND 783.15

The ground water resources in the permit and adjacent area of the Hiawatha Mines Complex are described in the following parts of the PAP:

1. Original submittal, Volume II Chapter VII;
2. DOA response, Volume I, Part 783-15 and 784.14; and
3. DOA response, 16 March 1984.

The description of ground water resources in the sources mentioned above has been reviewed and has been found to be complete and technically adequate. The information from these sources has been used to define the ground water flow system as part of the CHIA.

The most significant ground water resources that may be affected by the Hiawatha Mines Complex include:

1. springs in hydraulic connection with the Bear Canyon Fault where the fault has been intercepted by the mine; and

2. springs overlying the Hiawatha Mines Complex in areas where mine subsidence may reach the surface.

The PAP is in compliance with UMC 783.13 and 783.15.

X - ALLUVIAL VALLEY FLOORS - UMC 785.19 AND 822

The applicant has delineated the extent of areas meeting the alluvial valley floor (AVF) geomorphic criteria in the permit and adjacent area of the Hiawatha Mines Complex (Exhibit VI-7). The valleys of Cedar Creek and Miller Creek are the only valleys meeting the geomorphic criteria. There is no history of flood irrigation activities in the Cedar Creek or Miller Creek Valleys in the vicinity of the Hiawatha Mines Complex, although irrigation is practiced approximately two miles downstream from the Hiawatha Mines. The PAP discusses the difference between the valley floor characteristics of the lower irrigated area and the upper valley. The upper valley is narrow, has steep slopes (10 to 15 percent), cobbly soils and is of limited areal extent (50 to 100 feet wide and up to 10 acres in size) (DOA letter response, Volume I, page 93). The PAP concludes that there is no precedent for developing irrigation agricultural activities in areas similar to the upper valleys of Cedar and Miller Creeks for a 30 mile radius around the Hiawatha Mines Complex. Therefore, it is concluded the valleys of Cedar Creek and Miller Creek are AVFs in their lower reaches (i.e., approximately 2 miles downstream from the Hiawatha Mines Complex). However, in close proximity to the mines, the valley bottoms are not suitable for developing flood irrigation.

Regarding subirrigation agricultural activities, test pits installed on representative terrace areas in the valleys of Cedar Creek and Miller Creek (that meet the AVF geomorphic criteria), revealed that onsite vegetation is subirrigated. However, the vegetation present on these terraces is not agriculturally useful (permit application, Volume I, page 94 and Table IX-7). It is, therefore, concluded that subirrigated agricultural activities are not occurring on the valleys of Cedar and Miller Creeks.

Based on the preceding discussion, it is concluded that the valleys of Cedar Creek and Miller Creek in the vicinity of the Hiawatha

Mines Complex are not AVFs. The PAP has provided adequate information to make the AVF determinations mandated by UMC 785.19 and the PAP is, therefore, in compliance with this section.

The PAP also provides a surface water and ground water monitoring program that will document the preservation of the essential hydrologic function of flood irrigation both during and after mining for the AVFs downstream from the Hiawatha Mines Complex (see chapter XII of this TA, Part UMC 817.52).

XI - WATER RIGHTS AND REPLACEMENT - UMC 783.17 AND 817.53

Chapter XII (Part UMC 784.14) discusses the applicant's assessment of probable hydrologic consequences of the proposed mining. The following commitment by the applicant is broad enough to deal with all potentially affected water sources identified as part of the probable hydrologic consequences.

In Volume I of the DOA response (pages 23 and 23A) the applicant has identified the following alternate means to replace existing water sources that may be interrupted:

1. Transfer water rights using U.S. Fuel's available water rights (see Volume I, Appendix VII-5);
2. Collect spring flow at a remote location and pipe the water to the vicinity of the lost water source;
3. Install a guzzler (and possibly truck the water to the site);
or
4. Develop a surface water retention pond.

The applicant's commitment to replace affected sources of water using the procedures described above is considered adequate to find compliance with UMC 783.17.

The applicant does not propose to transfer any wells to any other surface owner. Therefore, UMC 817.53 is not applicable.

XII - PROBABLE HYDROLOGIC CONSEQUENCES OF MINING - UMC 784.14, 817.50, 817.55, AND 817.52

UMC 784.14 RECLAMATION PLAN: PROTECTION OF THE HYDROLOGIC BALANCE

Surface Water

Information to describe water rights and measures to minimize the disturbance to the hydrologic balance are presented in Chapter VII of the original submittal and the ACR and DOA responses. This information is determined to be complete in regard to surface water.

Compliance was evaluated with respect to UMC 817.41 (Hydrologic Balance: General Requirements), 817.42 (Hydrologic Balance: Water Quality Standards and Effluent Limitations), 817.48 (Hydrologic Balance: Acid-Forming or Toxic-forming Materials), and 817.54 (Hydrologic Balance: Water Rights and Replacement).

Bath houses and associated sewage drain fields are used at both the King No. 4, 5, and 6 Mines. No problems, either related to water quality or to use, have been identified with either septic drain field. Location and size of the septic drain fields are shown on Exhibits III-1A and III-4A.

Surface water rights are discussed in the November 1983 DOA response (pages 23 through 32) U.S. Fuel has sufficient water rights to satisfy their demands for mine water on both Miller Creek and Cedar Creek. There will be interbasin diversions of water both into and out of Miller Creek and Cedar Creek, but neither the probable hydrologic consequences (PHC) done by the operator nor the CHIA by OSM have identified any adverse impacts to surface water quantity. Therefore, the applicant is in compliance with UMC 817.54.

Water quality analyses of standing water in the slurry ponds indicate that the slurry pond water quality is similar to the surface water quality. In addition, the data indicated that neither the surface water nor the slurry pond water is acidic or in violation of pertinent water quality standards for Miller Creek. Therefore, the Hiawatha Mines Complex is in compliance with UMC 817.48.

All of the sedimentation ponds have gated valves on the principal spillways. The NPDES self monitoring reports show that none of the sedimentation ponds have ever discharged. Most of the sedimentation ponds will not be removed until the area is reclaimed and the drainage

meets the applicable state and Federal water quality standards. Ponds for the King No. 4, 5 and 6 Mines will be removed and replaced by sediment traps. Therefore, sediment contribution outside of the permit area will be minimized.

Mine water discharges from three points: Mohrland portal, Hiawatha overflow tank, and King No 4 Mine. The NPDES self-monitoring reports show that, with an occasional exception of total dissolved solids and oil and grease, the mine discharge water is in compliance with the effluent limitations. EPA has determined that this is not a significant noncompliance (personal communication, 23 March 1984).

In summary, runoff and sediment control facilities at the Hiawatha Mines Complex are designed to minimize impacts on the hydrologic balance both during and after mining. The applicant is currently in compliance with UMC 817.41, 817.42, 817.48, and 817.54.

Ground Water

The probable hydrologic consequences with respect to ground water resources in the area adjacent to the Hiawatha Mines Complex is presented in the following parts of the PAP:

- Volume II, Chapter VII, part 7.1.7;
- ACR response, Chapter VII;
- DOA response Volume 1, part UMC 784.14; and
- DOA response, 15 March 1984, Attachment No. 2.

Mining at the Hiawatha Mines Complex has had unknown previous impacts to the ground water resources in the area. In 1972, the most significant ground water inflow to the Hiawatha Mines occurred when mining tapped into ground water moving along the Bear Canyon Fault. At the present time flow from the fault continuously yields 100 gpm. This water is discharged at the Mohrland portal and is conveyed in part to the town of Hiawatha for their domestic water supply. The remaining water is discharged to Cedar Creek. It is apparent that the Bear Canyon Fault is acting as a conduit for ground water flow in the vicinity of the Hiawatha Mines Complex. Numerous springs issue from the Bear Canyon Fault where the stratigraphically lower Star Point Sandstone has been fractured. It is unknown what the hydraulic

connection is between the ground water that currently discharges from the faulted Blackhawk Formation and the lower, fractured Star Point Sandstone. No effects of mining have been observed at down gradient springs when they were studied several years after the interception of Bear Canyon Fault water in the Hiawatha Mines. This is interpreted to mean that the discharge of ground water from the Bear Canyon fault (at a constant 100 GPM) is at steady state discharge with respect to the surrounding ground water systems. Therefore, because the Hiawatha Mines Complex will not be mining near the Bear Canyon Fault within the SMCRA Permit Area, there will be no additional impacts to surrounding hydrologic resources associated with the fault.

By comparison, only 25 gpm of ground water inflow occurs in the remainder of the extensive Hiawatha King No. 6 Mine for four isolated points in the mine. The range of ground water inflow varies from 3 gpm to 7 gpm: This is considered to be a relatively dry mine (with the exception of the Bear Canyon Fault) that has encountered isolated, more permeable zones in the Blackhawk Formation. With the discontinuous nature of the more permeable zones in the Blackhawk Formation, it is doubtful if the ground water inflow in the mine is in strong hydraulic connection with other hydrologic resources in the area.

The subsidence effects of the Hiawatha Mines Complex are predicted to be the primary mechanism that will cause additional impact to ground water resources in the permit and adjacent areas. The applicant has developed several assumptions in order to support the projection of springs that may experience declines in flow as a result of mine subsidence:

- . Only those areas where pillars will be removed are expected to subside;
- . Subsidence fractures may reach the surface within an angle of draw of 70 degrees of the mine;
- . Surface subsidence effects will be limited to fully extracted areas beneath the Blackhawk Formation, Castlegate Sandstone, and Price River Formation;
- . No diversion of spring flow is expected as a result of

subsidence effects to the North Horn Formation; and

- Subsidence effects will be limited by the Bear Canyon Fault to the west of the Hiawatha Mines Complex.

Based on these assumptions, the applicant provided a map showing the extent of projected surface subsidence and springs with water rights (see Exhibit VII-1C in the DOA respons, updated 9 January 1984). In addition, seeps and springs within the subsidence zone can be determined from Exhibit VII-1D in the DOA response, updated 9 January 1984. Therefore, subsidence effects are projected for the area in which coal will be fully extracted and the area within the 70 degree angle of draw that occurs stratigraphically below the contact of the North Horn-Price River Formation contact. Within this zone, three springs with water rights may be impacted (Water rights 91-103, 91-104, and 91-1633). Two of these springs (91-103 and 91-104) have water rights belonging to U.S. Fuel for domestic use. It is not possible to determine the amount of flow of these springs because the water right for each of the potentially affected springs is accumulated with several other nearby springs. It should be noted that this water is not essential to any domestic water supplies in the area. Other waters are available from the Mohrland Mine discharge or the diversion from the North Fork of Miller Creek.

Several other small springs (less than 5 gpm) also occur within the zone that may be affected by subsidence (see Exhibit VII-1D in the DOA response, updated 9 January 1984). These springs do not have water rights associated with them, although the water sources are used for stock and wildlife watering.

Please, refer to Part UMC 817.54 in this chapter for the discussion of alternate sources of water available to replace the USFS water right that may be affected.

The PAP also discusses the potential impacts of mine subsidence in relation to overlying streams. Subsidence in the North Horn formation is predicted to be very gradual, with no abrupt changes in slope. For this reason, erosional instability in the North Horn Formation is not expected to change noticeably. For the Price River and Castlegate

Sandstone Formations, subsidence effects are predicted to be abrupt with changes in elevation of approximately 3 feet. The slopes and stream channels representative of these potential subsidence areas are, however, quite rocky with abundant competent rock ledges. Therefore, conditions of erosional instability are not expected in relation to mine subsidence in the Price River or Castlegate Sandstone Formations.

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

UMC 817.50 HYDROLOGIC BALANCE: UNDERGROUND MINE ENTRY AND ACCESS DISCHARGES AND UMC 817.55 HYDROLOGIC BALANCE: DISCHARGE OF WATER INTO AN UNDERGROUND MINE

At the present time water from the North Fork of Miller Creek is diverted into the Hiawatha No. 2 Mine (DOA response updated 9 January 1984, Exhibit III-17). This water is conveyed via underground workings into a mine regulating reservoir in the Hiawatha No. 2 Mine, with a storage capacity of 100,000,000 gallons. Discharge from the mine is regulated by pressure valves in bulkheads located in the Middle Fork of Miller Creek. In addition, water is piped across the Middle Fork drainage into the Hiawatha No. 1 Mine. This water is conveyed through underground workings to the South Fork portals. At this location, water is piped from the mine to the town of Hiawatha. This water is considered a secondary source of culinary water for the town.

The primary source of culinary water for the town of Hiawatha is ground water discharge from the Bear Canyon Fault that is discharged from the Mohrland portal in Cedar Canyon. This water is piped from the mine outlet to the town. Excess water is discharged to Cedar Creek.

The operator has not complied with the road abandonment requirements required pursuant to UMC 817.156 (see Chapter XXIII, Part UMC 817.156). If it is assumed that the roads in the North Fork, Middle Fork, and South Fork Miller Creek will be reclaimed upon the cessation of mining, it follows that reclamation of these roads will preclude the town of Hiawatha from using or maintaining the diversion of water from the North Fork of Miller Creek into the Hiawatha No. 2 Mine, the bulkheads and pipes in the Middle Fork of Miller Creek and

the water delivery system that exists at the South Fork of Miller Creek portals. U.S. Fuel must, therefore, remove and reclaim the water diversion and delivery structures according to the standards of 817.56. This requirement was made a part of Condition No. 1 (see chapter, post-mining land use, UMC 784.15).

Conversely, if U.S. Fuel proposes an alternative land use (UMC 817.133) the following discussion is appropriate. In the event that U.S. Fuel provides the commitments required, both water supplies previously described would be turned over to the town of Hiawatha at the time of mine abandonment. The town would maintain all water facilities in perpetuity from the time of mine abandonment. The water quality from these sources meets the effluent limitations at all times and meets the water quality standards for domestic water most of the time (extremely infrequently, concentrations of total dissolved solids and oil and grease have been observed to be slightly above the domestic water quality standards). The discharge of water from the mines has caused no deterioration in the hydrologic balance of the area and the discharges complement the postmining land use of grazing and wildlife habitat. For the reasons described above, the diversion of water into the Hiawatha Mines Complex and discharge to the South Fork of Miller Creek and to Cedar Creek is in compliance with UMC 917.49, 817.50 and 817.55. However, concurrence from the Mine Safety and Health Administration is required with respect to 817.55 before final approval from OSM can be given.

UMC 817.52 HYDROLOGIC BALANCE: GROUND WATER MONITORING

The ground water monitoring program associated with the Hiawatha Mines Complex can be found in the original submittal, (Volume II, Chapter VII, page VII-7 and VII-8); the DOA response updated 9 January 1984, (Volume I, pages 131 and 132 and Attachment No. 4).

The applicant has committed to conduct an adequate in-mine ground water monitoring program.

No wells are available to monitor changes in ground water resources. Springs are monitored instead to indicate if mining impacts are occurring. At the present time 10 springs (Springs Sp-1 to Sp-10,

See Map M02 in the DOA response updated 9 January 1984) are monitored twice annually at low flow and high flow. Spring water quality samples are proposed to be analyzed for a list of parameters including temperature, specific conductance, total dissolved solids, and the major cations and anions. The applicant also proposes to delete monitoring springs SP-3, SP-7, and SP-10. Springs SP-11, SP-12, and SP-13 (i.e. springs 15-8-19-2, 15-8-30-4, and 15-8-31-4, respectively, on Exhibit VII-1D in the DOA response updated 9 January 1984) are proposed as replacement monitoring springs because the applicant feels they are more representative of springs that may be affected by mining.

The spring monitoring program is not considered to be adequate to meet the requirements of UMC 817.52. The CHIA concludes that previous mining adjacent to the water bearing Bear Canyon Fault has already had a maximum impact on water resources associated with the fault zone. These impacts occurred years ago and remain undocumented. However, there is no point in monitoring springs associated with the fault when maximum impacts have already occurred.

Subsidence is considered the mechanism most likely to affect flow to springs. The assumption has been made in the PAP (DOA response updated 9 January 1984, Volume I, page 74) that subsidence will only occur in areas within the angle of draw of workings that will be fully extracted. The maximum extent of potential subsidence is delineated on Exhibit VII-1C (DOA response updated 9 January 1984). Within this zone it is possible that some spring flow may be diminished or dry up as a result of mine subsidence. While the 10 springs proposed to be monitored by the applicant (i.e., SP-1, SP-2, SP-4, SP-5, SP-6, SP-8, SP-9, SP-11, SP-12, and SP-13) represent the variability of springs issuing from the potentially affected geologic sources, it is also likely that very localized ground water flow paths may be responsible for individual springs. In other words, local ground water flow systems that are not related to areally extensive flow systems may be disrupted by subsidence fractures.

Because the effects of mining cannot be documented totally by monitoring the 10 springs, and because it is not practical to monitor all springs (see Exhibit VII-1D, in the PAP), it is reasonable to

require that the most important springs in the subsidence zone should be monitored. To meet this requirement, U.S. Fuel must also monitor the sole spring with water rights belonging to other users in the area and located within the subsidence zone as depicted on Exhibit VII-1C. The water right (91-1633) belongs to the USFS and is used for stock watering. U.S. Fuel was required to adopt this monitoring plan in January and March 1984.

OSM and UDOGM have recently reached agreement concerning the ground water monitoring program that will be implemented at Utah coal mines. U.S. Fuel must also change their spring monitoring program to agree with the new ground water monitoring policy. It should be noted that this request was previously made to U.S. Fuel in the 13 February 1984 letter.

With acceptance of Condition No. 8, the application will be in compliance with UMC 817.52.

Condition No. 8

- . U.S. Fuel must include in its monitoring program the USFS spring that is within the maximum area of potential subsidence as depicted on Exhibit VII-1C.
- . U.S. Fuel must also change their spring monitoring schedule according to the following OSM/UDOGM policy:

Each spring that is included in the monitoring network will be monitored during the period of June through August. During the monthly monitoring period, measurements of flow, pH, specific electrical conductance (EC), calculated total dissolved solids and temperature must be made. A quarterly flow measurement will be taken together with a water quality sample. The water quality sample will be analyzed for sodium, calcium, magnesium, potassium, sulfate, bicarbonate, carbonate, chloride, total dissolved solids, pH, field EC, and field temperature. Twice a year (spring and fall) a flow measurement will be made and a water

quality sample taken. The sample will be analyzed according to the complete suite of parameters listed in UDOGM guidelines. Data will be submitted quarterly to UDOGM with an annual analysis and summary of the data.

U.S. Fuel must notify UDOGM by phone when a monitoring measurement is missed and provide a reason for not collecting the data.

XIII CLIMATOLOGICAL INFORMATION AND AIR RESOURCES - UMC 783.19 AND 784.26

UMC 783.18 CLIMATOLOGICAL INFORMATION AND AIR RESOURCES

The applicant was not requested by UDOGM to provide information on the climate or air resources of the permit area. Therefore, the applicant is in compliance with UMC 783.18.

UMC 784.26 AIR POLLUTION CONTROL PLAN

The applicant was not required by UDOGM or Utah Department of Health to develop an air pollution control plan. The applicant is, therefore, in compliance with UMC 784.26.

XIV - TOPSOIL - UMC 783.21, 784.13(b)(3 and 4), AND 817.21 THROUGH .25 UMC 784.13(b)(4) and UMC 817.21 - TOPSOIL: GENERAL REQUIREMENTS

The applicant has provided results of chemical and physical analyses for topsoil, subsoil, and substitute topsoil (topsoil/subsoil/overburden mixtures). The document and page number where information on sampling methodologies and analytical results are listed by area of disturbance in the table below. Chemical and physical data for soils prior to disturbance exist only for the new portal breakout area in the Middle Fork of Miller Creek and Borrow Areas A and D. The remaining disturbance proposed in the PAP is confined to previously disturbed areas.

<u>Disturbance Area</u>	<u>Sampling Methodologies</u>	<u>Analytical Results</u>
North Fork Area	DOA response, Vol. I, pp. 125A-129	DOA response, Vol. I, Table VIII-1
Middle Fork Area		

Portals	DOA response, Vol. I, pp. 47-48	DOA response, Vol. I, Table VIII-9
Breakout	DOA response, Vol. I, pp. 47, 140	DOA response, Vol. I, Table VIII-14
South Fork Area Portal	DOA response, Vol. I, pp. 47-47A, 54-55	DOA response, Vol. I, Table VIII-9
Conveyor/Load- out	ACR response, Chapt. VIII, Table VIII-1 and Bio/West report	ACR response, Chapt. VII, Bio/West report
Preparation Plant*	DOA response, Vol. I, pp. 125A-129	DOA response, Vol. I, Table VIII-1
Slurry Ponds Topsoil* Subsoil/sub- strate	DOA response, Vol. I, pp 125A-129	DOA response, Vol. I, Table VIII-1
Pond #1 Sampling 1	DOA response, Vol. I, p. 134	DOA response, Vol. I, Tables VIII-11&12
Sampling 2	15 March 1984 DOA response, Attachment 1	-
Pond #4	DOA response, Vol. I, p. 134	DOA response Vol. I, Tables VIII-12&12
Pond #5	DOA response, Vol. I, p. 134	DOA response, Vol. I, Tables VIII-11&12
Borrow Areas Area A	DOA response, Vol. I, pp. 125A-129	DOA response, Vol. I, Table VIII-1
Area D	DOA response, Vol. I, pp. 125A-129	DOA response, Vol. I, Table VIII-1
Equipment Storage Yard	-	-

*Sources of substitute topsoil are soil materials of Borrow Areas A and D.

Required information is not presented for disturbed areas occupied by Slurry Pond No. 1 and the Equipment Storage Yard. Therefore, the PAP is not in compliance with UMC 784.13(b)(4) and UMC 817.21. Applicant acceptance of Condition No. 9 will be necessary to achieve compliance with these regulations.

Condition No. 9

The applicant must provide the following information within 90

days of permit issuance:

- . Analytical results and suitability evaluations for Slurry Pond No. 1 refuse materials and a specific location for the slurry pond field trial study;
- . Chemical and physical data consistent with the set of analyses performed for soil samples in disturbed areas for representative soil samples collected from the equipment storage yard.

UMC 784.13(b)(4) and UMC 817.22 TOPSOIL: REMOVAL

The applicant has provided adequate information detailing the timing of topsoil salvage, the materials to be removed, and the area of topsoil salvage for the new breakout portals in the Middle Fork of Miller Creek. This area of disturbance is the only new area of disturbance for which topsoil/subsoil is to be removed for storage and redistribution. This information is presented in the ACR response, Chapter VIII, p. VIII-1 and DOA response, Volume I, page 140. No information on topsoil removal has been provided for the equipment storage yard.

The applicant has also provided information detailing the sources and characteristics of substitute topsoil material. The document and page number where information on the composition, areal extent, and available volume of material are listed by disturbed area using substitute topsoil in the table below. Refer to UMC 784.13(b)(4) and UMC 817.21 Topsoil: General Requirements for location of chemical and physical analytical results.

<u>Area</u>	<u>Composition</u>	<u>Areal Extent and Available Volume</u>
North Fork Area	DOA response, Vol. I, pp. 54 and 125A-129	DOA response, Vol. I, p. 42 and Vol. III, Exhibit VIII-4A
Middle Fork Area Portal*	DOA response, Vol. I, pp. 47-47A	DOA response, Vol. I, p. 47A and Vol. III, Exhibit IX-3B
South Fork Area Portal	DOA response, Vol. I,	DOA response, Vol. I,

	pp. 54-55A	pp. 55-55A and Volume III, Exhibit IX-4A
Conveyor/Load-out	ACR response, Chapt. VIII, Bio/West report	DOA response, Vol. I, p. 55A and Vol. III, Exhibit VIII-4
Preparation Plant	DOA response, Vol. I, pp. 55A-56 and 125A-129	DOA response, Vol. I, pp. 40A-42 and Vol. III, Exhibit VIII-4A
Slurry Ponds		
Substitute Topsoil*	DOA response, Vol. I, pp. 55A-56, 125-129, 133-136	DOA response, Vol. I, pp. 40A-42 and Vol. III, Exhibit VIII-4A
Substitute Subsoil	DOA response, Vol. I, pp. 133-136	DOA response, Vol. I, p. 136 and Vol. II, Exhibit III-3
Borrow Areas		
Area A	DOA response, Vol. I, pp. 125A-129	DOA response, Vol. I, p. 41 and Vol. III, Exhibit VIII-4a
Area D	DOA response, Vol. I, pp. 125A-129	DOA response, Vol. I, p. 42 and Vol. III, Exhibit VIII-4A
Equipment Storage Area	-	-

*Lack sufficient information for evaluation.

There is apparently sufficient suitable topsoil material to allow only four inches of topsoil redistribution in the Middle Fork portals area. Redistribution thickness is unacceptable in terms of reclamation feasibility and contradicts the 6-inch thickness of topsoil redistribution proposed by the applicant.

Site-specific plans for reclamation of the conveyor and loadout in the South Fork of Miller Creek have not been presented. Potential sources of substitute topsoil (soil and/or overburden mixtures) are evaluated in terms of representative soil samples; however, areal extents of substitute topsoil sources are not identified by acreage figures or in exhibits. Therefore, proposed thicknesses of topsoil material are not supported by calculations based on acreages to be retopsoiled and available topsoil material volumes.

A complete evaluation of the slurry pond area refuse materials cannot be made until analytical results for samples collected in the refuse materials of Slurry Pond No. 1 are provided. The suitability of the refuse materials for use as a subsoil growth medium cannot be determined and, therefore, a recommendation concerning an adequate topsoil redistribution thickness cannot be made. The inability to estimate an adequate topsoil thickness for this slurry pond area affects the proposed design and location of the field trial study. The applicant has stated in the March 1984 updated DOA response that the field trial associated with the slurry pond area will be located in the refuse materials with the most extensive adverse characteristics. This commitment for field trial site selection in the worst case refuse materials is acceptable; however, the location of the worse case material must be provided. Applicant acceptance of Condition 10 will be necessary to achieve compliance with UMC 784.13(b)(4) and UMC 817.21.

Condition No. 10

The applicant must provide the following information within 90 days of permit issuance:

- . The volume of the topsoil stockpile at the junction of the Middle Fork and North Fork roads is insufficient to cover the disturbed area associated with the Middle Fork portals with 6 inches of topsoil. An additional source and/or volume of substitute topsoil material, sufficient to permit distribution to a minimum thickness of 6, inches must be identified.
- . A set of calculations, supported by exhibits, which identifies the sources of topsoil (areal extent), the volume of available topsoil material, and the area to be reclaimed (topsoiled) must be provided for the conveyor/loadout facilities in the South Fork area.
- . Analytical results and suitability evaluations for the Slurry Pond No. 1 refuse materials and a specific location for the slurry pond area field trial study must be provided.

- A complete, detailed set of plans for topsoil or substitute topsoil material removal must be provided for the Equipment Storage Yard.

UMC 784.13(b)(4) and UMC 817.23 TOPSOIL: STORAGE

The applicant has provided adequate information detailing the need for topsoil storage, the selection of stockpile locations, and the protection of proposed and current topsoil stockpiles for all disturbed areas except the Equipment Storage Yard. The document and page number where pertinent information is presented are listed by stockpile location (area of disturbance) in the table below.

<u>Disturbance Area</u>	<u>Stockpile Locations</u>	<u>Protective Measures</u>
Middle Fork Area		
Current stockpile	DOA response, Vol. III, Exhibit VIII-4	DOA response, Vol. I, p. 131A
Propose stockpile	DOA response, Vol. III, Exhibit VIII-4	DOA response, Vol. I, pp. 47 and 140
South Fork Area		
Lambs Trailer	DOA response, Vol. III, Exhibit VIII-4	ACR response, Chapt. VIII, p. VIII-2 and Bio/West report
Equipment Storage Yard	-	-

The PAP does not demonstrate compliance with UMC 784.13(b)(4) and UMC 817.23 because of the lack of information specific to the equipment storage yard and roads. Therefore, Condition No. 11 is necessary.

Condition No. 11

Within 60 days of permit issuance the applicant must provide plans for topsoil stockpile site selection and protection for the Equipment Storage Yard

UMC 784.13(b)(4) and UMC 817.24 TOPSOIL: REDISTRIBUTION

The applicant has provided information on regraded surface preparation and topsoil redistribution constraints including

achievements of stable, uniform thickness, prevention of excess compaction, and protection from erosion. The document and page number where this information appears is listed by area of disturbance in the table below. The absence of document and page listings indicates that the information has not been provided.

<u>Disturbance Area</u>	<u>Surface Preparation</u>	<u>Redistribution Constraints</u>
North Fork Area	-	DOA, response, Vol. I, p. 54
Middle Fork Area		
Portals	-	DOA response, Vol. I, p. 47A
Breakout	-	DOA response, Vol. I, pp. 47A and 141
South Fork area		
Portal	-	DOA response, Vol. I, pp. 55-55A
Conveyor/Load-out	ACR response, Chapt. VIII, Bio/West report	ACR response, Chapt. VIII, Bio/West report
Preparation		
Plant	DOA response, Vol. I, p. 56	DOA response, Vol. I, p. 56
Slurry Ponds	DOA response, Vol. I, p. 134	DOA response, Vol. I, p. 56
Borrow Areas		
Area A	DOA response, Vol. I, pp. 41-42	DOA response, Vol. I pp. 41-42
Area D	DOA response, Vol. I, pp. 42-43	DOA response, Vol. I, pp. 42-43
Equipment Storage Yard	-	-

The PAP provides no specific information or plans for the preparation of the regraded surfaces prior to topsoil redistribution in the North Fork area, Middle Fork area, South Fork area (portal), and Equipment Storage Yard. No information pertinent to redistribution constraints is provided in the PAP for the Equipment Storage Yard and this information is either lacking or inadequate for the Middle Fork area (portals and breakout) and South Fork area (conveyor/loadout). The limitations of the redistribution constraints information provided

in the PAP are listed by disturbance area below.

<u>Disturbance Area</u>	<u>Limitations</u>
Middle Fork Area Portal	Insufficient toposil cover (4 inches), no means to prevent excessive compaction
Breakout	No means to prevent excessive compaction
South Fork Area Conveyor/Loadout	No means to prevent excessive compaction

Since required information is not presented for all disturbed areas, the PAP does not demonstrate applicant compliance with UMC 784.13(b)(4) and UMC 817.24 and Condition No. 12 is required.

Condition No. 12

The applicant must provide the following information within 60 days of permit issuance:

- Methods of surface preparation for graded materials for the North Fork area, Middle Fork area, and South Fork area (portal);
- A commitment to redistribute topsoil to a minimum thickness of 6 inches in the Middle Fork area;
- Methods to prevent excessive compaction of topsoil material for the Middle Fork area and South Fork area (conveyor/loadout);
- Complete detailed plans for topsoil redistribution for the Equipment Storage Yard.

UMC 784.13(b)(4) and UMC 817.25 TOPSOIL: NUTRIENTS AND SOIL AMENDMENTS

The applicant has provided either rates of fertilizer application or a commitment to sample and test for rates of fertilizer application for all areas of disturbance except the Equipment Storage Yard. The document and page number where information on fertilization requirements is listed are presented by area of disturbance in the table below. The absence of document and page listings indicates the information has not been provided.

<u>Disturbance Area</u>	<u>Nutrients and Soil Amendments Information</u>
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North Fork Area	DOA response, Volume I, page 43
Middle Fork Area	DOA response, Volume I, pages 47-47A
South Fork Area Portal Conveyor/load- out	DOA response, Volume I, page 55 ACR response, Chapter VIII, Bio/West report
Preparation Plant	DOA reponse, Volume I, page 56
Slurry Ponds	DOA response, Volume I, pages 136 and 56
Borrow Areas	
Area A	DOA response, Volume I, page 41
Area D	DOA response, Volume I, pages 43-44
Equipment and Storage Yard	-

Required information is not presented for the Equipment Storage Yard and, therefore, the applicant is not in compliance with UMC 784.13(b)(4) and UMC 817.25. Applicant acceptance of Condition 13 will be necessary to achieve compliance with these regulations.

Condition No. 13

Within 60 days of permit issuance, the applicant must provide a commitment to test for nutrient deficiencies and recommended rates of fertilizer/amendment application, or provide test results with recommended rates of fertilizer/amendment application for the Equipment Storage Yard.

XI - VEGETATION RESOURCES - UMC 783.19, 784.13(b)(5), and 817.111-817.117

Information regarding existing vegetation resources and the applicant's proposed revegetation plan are found in the following sections of the PAP.

<u>Section</u>	<u>Date of Submission</u>	<u>Pages</u>
Vegetation Resources:		
Vol. III, Chapter IX	March 1981	1-80
Vol. III, Exhibits	March 1981	IX-1 to IX-4
ACR response, Chapter IX		

Section 783.19	July 1983	
Vol. I, Chapter III	March 1981	III-31
Vol. III, Exhibits,		
Response to DOA	November 1983	IX-1 and
		IX-1A
	February 1984	IX-2A
		IX-3A and
		IX-3B
		IX-4A to
		IX-4C
Revegetation Plan:		
Vol. I, Chapter III	March 1981	III-35 to
		III-47
Vol. III, Exhibits,		
Response to DOA	November 1983	IX-5
Response to ACR,		
Section 783.13(5)	July 1983	III-31A to
		III-46
Response to ACR,		
Attachment 1	July 1983	
Response to ACR,		
Attachment 2	July 1983	
Response to ACR,		
Revegetation Plan	July 1983	
Vol. III, Chapter X,		
Appendix 10.4B	March 1981	

No threatened or endangered plant species occur in the proposed permit area and no Federally-designated critical habitats are present (ACR response, Chapter IX, Section UMC 783.19). However, formal confirmation of this point has not been received from the U.S. Fish and Wildlife Service (USFWS).

Ten vegetation types have been mapped within the permit area as described in Chapter II of this TA. The species composition of these vegetation types are presented in Chapter IX of the ACR response. Exhibits, submitted as Volume III, DOA responses dated 7 November 1983, 13 February 1984, and 16 March 1984, provide a suitable vegetation map of the permit area and the locations of all sampling and reference areas. The appropriate exhibits are IX-1; IX-1A, IX-2A, and IX-3A; IX-3B; and IX-4A to IX-4C. Table X-2, page 89A, presents the disturbed acreage by community type.

The mining complex has disturbed a total of 332 acres of vegetation within the present permit area. Proposed reclamation

activities within the permit area will affect an additional 24 acres of vegetation. The types of plant communities and the quantities that have been and will be affected are presented in the table below.

Summary of Vegetation Losses at the Hiawatha
Mines Complex by Vegetation Type

<u>Vegetation Type</u>	<u>Total Acres Disturbed</u>	<u>Percent of Total Disturbance</u>
Pinyon-juniper	266	74.7
Mountain brush	35	9.8
Sagebrush	25	7.1
Mixed conifer	15	4.2
Riparian woodland	<u>15</u>	<u>4.2</u>
 Total	 356	 100.0

Twelve reference areas of 1.03 acres each have been established (ACR response, Chapter IX, p.3). Nine of these reference areas were established in the present permit area and three were located in the future mine permit area along Cedar Creek (DOA response, 13 February 1984, Exhibit IX-1). At least one reference area has been established for each vegetation type that has been or will be disturbed. Sampling adequacy was achieved for cover, productivity, and woody plant density (ACR response, Chapter IX, Appendix B) at the required confidence and precision levels.

The PAP contains adequate plans for revegetating approximately 235 acres of the total 356 acres that will be disturbed by mining and reclamation. Revegetation mixtures are adequately designed to accommodate wildlife and livestock uses. The PAP proposes no revegetation of the haul roads (40 acres) up the Left, Middle, and Right Forks of Miller Creek, the railroad facilities (15 acres) and the town of Hiawatha (66 acres). For haul roads, however, the PAP has not complied with the provisions of UMC 817.133 (Postmining Land Use), specifically subsections (c)(8), and UMC 817.111(a) and (b)(1) (General Revegetation Requirements). With the provision of acceptable haul road reclamation or alternative post mining land use plans as expressed in Condition No. 1, the PAP will be in compliance with UMC 817.111.

The revegetation plan contains technically adequate plans for mulching (proposed rate of one ton per acre, DOA response, p. 119), fertilizer applications (DOA response, pp. 41-44, Section UMC 784.13(a)), seed mixtures and rates for broadcast methods (DOA response, Tables IX-1 to IX-4), tree and shrub planting densities and spatial arrangements (DOA response, pp. 62, updated 9 January 1984), criteria for demonstrating successful revegetation (DOA response, pp. 63, updated 9 January 1984), and a contemporaneous schedule for revegetation (DOA response, pp. 48-53, dated 7 November 1984). A technically sound field trial design is presented for testing seed mixtures, soil depths, fertilizer types and application rates, and mulching rates (DOA response, pp. 103-125, updated 9 January 1984). The results of these field trials will be used to modify, if necessary, the approaches now described in the PAP.

During the PAP review process, concerns were raised about the suitability of the refuse pile substrates to support future plant growth. Some of the laboratory data indicated a marginal suitability of some chemical and physical properties (e.g., water holding capacity and fertility) of the substrates for sustaining plant growth equivalent to the reference areas. Such concerns were recognized by the applicant and formed the basis for designing the field trial experiments. It has been demonstrated that the substrate materials have the potential capability of supporting plant growth. Whether the substrates will actually support the proposed revegetation mixtures at suitable production levels remains to be demonstrated by the field trials. Modifications in the proposed substitute topsoil depths, fertilizer rates and types, seed mixtures, and mulching rates may be required as a result of the field trial results. The applicant has recognized that these potential effects may result and has committed to incorporating the findings into a modified revegetation plan, as necessary, to achieve revegetation success equivalent to the reference areas.

XVI - FISH AND WILDLIFE RESOURCES - UMC 784.21 AND UMC 817.97

Information regarding fish and wildlife resources and the applicant's fish and wildlife protection plan are found in the

following sections of the PAP.

<u>Section</u>	<u>Date of Submission</u>	<u>Pages</u>
Fish and Wildlife Resource Data		
Vol. III, Chapter X	March 1981	1-46
Vol. III, Chapter X, Appendix A	March 1981	1-68
Response to ACR Comments Section 784.21	July 1983	6A-6C
Response to ACR Comments Chapter X, Appendix D	July 1983	1-17
Fish and Wildlife Plan		
Vol. I, Chapter III	March 1981	32
Vol. III, Chapter X, Appendix B	March 1981	1-22
Vol. III, Response to DOA	November 1983	Exhibits X-1, X-2, and X-3A
Vol. I, Response to DOA Section 784.21	January 1984	85-90
Vol. I, Response to DOA Section 817.97	January 1984	132-133
Vol. III, Response to DOA	November 1983	Exhibit X-4

No threatened or endangered fish or wildlife species occur on the proposed permit area and no Federally-designated critical habitats are present (original submittal, Volume III, Chapter X). The bald eagle, American peregrine falcon, and arctic peregrine falcon occur sporadically in the local area but do not nest in the permit area. The permit area has been designated as having substantial value for the bald eagle and American peregrine falcon by the Utah Division of Wildlife Resources (UDWR) (original submittal Volume III, Chapter X) and of limited value for the arctic peregrine falcon. The golden eagle is commonly observed in the permit area. A nest site survey (ACR response, Appendix D) conducted within a 0.5 km radius of the disturbance areas revealed no golden eagle nesting activity. It is likely, however, that nesting does occur elsewhere in the permit area (original submittal, Volume III, Chapter X). It is not anticipated that mining activities will affect the remote nest sites. Documentation regarding the status of threatened and endangered species from the USFWS has not been received.

The design and construction of power transmission and distribution lines have been reviewed by the USFWS and have been found acceptable to protect raptors (letter dated 5 March 1984 from UDOGM). However, the applicant has not committed to designing future power transmission and distribution lines in a manner that protects raptors. Therefore, the applicant should commit to implementing such design and construction measures that will insure raptor protection as expressed in Condition No. 14. With such a commitment, compliance with regulations protecting raptors will be achieved.

Condition No. 14

Within 60 days of permit issuance, U.S. Fuel must provide to the regulatory authority for approval a commitment to follow and incorporate the guidelines set forth in Environmental Criteria for Electric Transmission Systems (USDI, USDA 1970) and REA Bulletin 61-10, Powerline Contacts by Eagles and Other Large Birds, in all future design and construction activities involving electric power transmission and distribution lines.

Fish and wildlife issues that developed during the numerous reviews of the PAP included the need for: (1) inventory of raptors and species of high Federal interest; (2) riparian habitat protection and restoration plan; (3) mitigation plan for wildlife habitat, especially big game; (4) survey of electric transmission lines to meet raptor protection standards; (5) survey of springs and seeps and their wildlife use; (6) adequate design of King No. 6 conveyor to allow big game passage; (7) the post-mining reclamation of haul roads; and (8) consultation with the USFWS on the presence of threatened and endangered species in the mine permit area.

The PAP has provided technically adequate information and/or plans for all of the issues above, except for the reclamation of the haul roads and the formal acknowledgement on the status of threatened and endangered species from the USFWS. A summary of each issue is provided.

In response to concerns raised about the status of raptors, a raptor survey was conducted in 1983. The results were reported as

Appendix D of Chapter X in the ACR response dated July 1983. It was reasonably concluded that mining did not represent a significant hazard to raptors.

The USFWS conducted a survey of electric transmission and distribution lines at the Hiawatha Mines Complex during August 1981 and recommended no structural modifications because existing lines did not represent a hazard to raptors (letter dated 9 October 1981).

Concern was expressed about the protection and restoration of disturbed riparian habitat and/or the riparian zones (OSM ACR dated 8 November 1982; UDOGM ACR dated 8 November 1982). The applicant subsequently committed to: (1) restoring disturbed riparian habitat (about 1 acre); (2) establishing a riparian habitat buffer zone 100 feet wide; and (3) contacting the appropriate regulatory agency prior to any future disturbance of riparian habitat. The proposed species mixture, buffer zone width and approach for restoring riparian habitat are appropriate for creating a diverse, self-sustaining, and native community type. However, approximately 15 acres of riparian habitat have been disturbed by mining facilities (roads, railroad facilities, and the town of Hiawatha). Restoration is proposed for only one acre of riparian habitat (DOA response, Volume I, page 87, dated 16 March 1984), which means that about 14 acres of this high value wildlife habitat will be permanently lost. The PAP does not contain mitigation plans to compensate for this loss. The facilities responsible for these losses, especially haul roads, are still used in the current mining activities and are, therefore, covered by the reclamation and restoration regulations. The PAP is currently not in compliance with UMC 817.97(d)(4) and (d)(5). With the provision of acceptable commitments and plans, as expressed in Condition No. 15, the PAP will be in compliance with UMC 817.97

Condition No. 15

Within 60 days of permit issuance, U.S. Fuel must provide to the regulatory agency for approval a plan for restoring the 14 acres of riparian habitat lost because of mining activities.

A survey of springs and seeps was conducted and use by wildlife

species, principally deer, was noted (ACR response, UMC 783.15). Using the worst-case assumptions that subsidence would induce reduction in spring and seep flows, U.S. Fuel estimated that a maximum of 11 springs and seeps would be affected. The cumulative flow of these springs and seeps is approximately 24 gpm (DOA response, page 80, January 1984). U.S. Fuel has committed to providing replacement water sources for wildlife for springs and seeps that are affected by subsidence (DOA response, pp. 63). This commitment is considered adequate for compliance with UMC 817.97.

Blockage of mule deer movements by the proposed King No. 6 conveyor system became an important concern of UDOGM (letter dated 15 July 1981) and (letter dated 30 July 1981). The applicant provided the required engineering plans and modifications of the conveyor system to accommodate deer passage. The modified conveyor system was approved by the UDWR as representing no barrier to deer movement (letter dated 19 April 1983).

The vagueness of the proposed wildlife mitigation measures and the quantity of wildlife habitat that would be affected by mining operations were issues constantly raised by OSM, USFWS, UDWR, and UDOGM during PAP reviews. Big game habitat restoration was an especially frequent concern. The mining permit area includes critical deer and elk winter range (8,360 acres), high-priority elk winter range (1,017 acres), and high-priority deer and elk summer range (3,335 acres). Mining activities in the Miller Creek and Cedar Creek drainages have affected critical deer and elk winter range, while development of the town of Hiawatha, the processing plant, and waste disposal sites have affected high-priority deer and elk winter ranges. The total area of wildlife habitat disturbance is 357 acres (DOA response, 16 March 1984, page 85). The PAP stated that 236 acres will be restored to wildlife habitat. The remaining acreage (211 acres) will not be reclaimed as it will support the town of Hiawatha, railroad facilities, and paved roads following the completion of mining (DOA response, 16 March 1984, Table X-1). Haul roads, however, must be reclaimed unless a change in postmining land use is proposed and approved. Consequently, these acreages are considered preliminary and subject to

change. Most of the unreclaimed wildlife habitat will involve high-priority deer and elk winter range. Wildlife habitat mitigation will be accomplished by restoring the plant community that was present before mining began. Successful revegetation will be determined by comparisons with reference areas.

Regarding the development and commitment to specific wildlife mitigation measures, the PAP contains 14 measures that are considered to constitute adequate wildlife mitigation. These include commitments to (1) revegetate disturbed areas to approximate pre-mining conditions; (2) establish riparian habitat buffer zones; (3) replace lost springs/seeps with a nearby alternate water source; (4) conduct a wildlife education program; (5) enforce poaching regulations; (6) reduce highway speed limits; (7) design conveyor systems to allow deer passage; (8) restore big game habitats to original or better conditions; (9) notify UDWR of raptor nests and to conduct surveys in areas of future disturbance; (10) avoid disturbance to aspen, conifer, and mixed aspen-conifer stands; (11) supply water to BLM habitat improvement projects; (12) report discovery of snake and bear dens to UDWR; (13) clear all pesticide use with UDWR; and (14) reclaim all temporary exploration roads and prevent public access. These commitments are considered appropriate and satisfactory wildlife mitigation that comply with the intent of UMC 784.21 and UMC 817.97.

Concerns have recently been raised by OSM (letter dated 2 March 1984), UDWR (letter dated 14 February 1984), and the USFWS in a memo to OSM dated 16 February 1984, regarding the postmining retention of haul roads and the potential effects on the postmining land use for wildlife habitat. The applicant proposes retaining the roads to provide access to the domestic water supply for the town of Hiawatha. The UDWR and the USFWS are concerned that unrestricted public access along the roads will degrade or impair the suitability of the abandoned lands for wildlife because unrestricted human activity in critical deer and elk winter ranges can cause these species to avoid this important type of habitat. In order to comply with UMC 817.97, the adverse effects of mining operations on important wildlife habitats have to be avoided or minimized. Unrestricted public use of the haul roads do not comply

with this regulation. The haul road retention issue is currently unresolved (see discussion of postmining land use, UMC 784.15 and Condition No. 1). OSM believes that, unless a change in postmining land use is approved, the haul roads must be reclaimed to support the proposed postmining land use of wildlife habitat and rangeland. U.S. Fuel disagrees and has requested an opinion from OSM's solicitor. The PAP must contain either alternative land use provisions or provisions for reclaiming haul roads such that wildlife habitat and rangeland uses can be accommodated. With the submission of either the road reclamation or alternative use information required by Condition No. 1, the applicant will be in compliance with UMC 784.21 and UMC 817.97.

Formal documentation from the USFWS regarding the status of threatened and endangered species in the mine permit area has not been received yet.

XVII - PRIME FARMLAND - UMC 783.27, 784.17 and 823

The PAP (DOA response, Volume I, pp. 93-103) states that the permit area of the Hiawatha Mines Complex contains no lands suitable for flood irrigation because of steep slopes (10 to 15 percent), cobbly soils, and limited size of stream terrace deposits. In addition, the U.S. Soil Conservation Service has provided a letter (17 January 1983, in ACR response, Appendix VIII-1) documenting that there are no prime farmlands in the vicinity of the Hiawatha Mines Complex. The PAP is in compliance with UMC 783.27. UMC 785.17 and UMC 823 do not apply since no prime farmlands will be affected.

XVIII - EXPLOSIVES - UMC 784.23(b)(9) AND 817.61 THROUGH .68

The applicant has identified the location of the existing explosives storage structure on Exhibit III-14 and has stated that no surface use of explosives has been made for the past two years, nor is there any anticipated use of explosives. The applicant is in compliance with these regulations.

XIX - OPERATION DESCRIPTION - UMC 784.11 AND 784.12

The applicant has provided in the original submittal, Volume I,

Chapter III, a description of the mining procedures, techniques, equipment and facilities as well as annual planned production of coal. Also involved are detailed descriptions of the construction, use, and reclamation of slurry and sedimentation ponds; disposal of spoil, mine, and noncoal wastes; and disposal of waste water generated by the mining operations. The application is in compliance with the provisions of UMC 784.11 and 784.12.

XX - BACKFILLING AND GRADING - UMC 784.13(b)((93), 817.101, 817.72, 817.73 AND 817.74

A plan for the backfilling, compaction, and grading of existing mine portals, work yards, and sedimentation ponds has been presented in the original submittal, Volume I, Chapter III. Contour maps and cross sections showing the anticipated final surface configuration have been included for these areas. No plan, however, has been included for the restoration of the existing haul and mine access roads in the North Fork, Middle Fork, or South Fork canyons. The absence of specific data on postmining restoration of roadways, relating to backfilling and grading, is a deficiency in the application and this information is required as a part of permit Condition No. 1. With the satisfaction of permit Condition No. 1, the applicant will be in compliance with regulations UMC 784.13(b)(3), 817.12, 817.73, 817.74, and 817.101.

XXI - COAL PROCESSING WASTE AND NON-COAL PROCESSING WASTE - UMC 784.13(b)(6), (b)(7), 784.16(c) AND (d), 784.19, 784.25, 817.71, 817.93, AND 817.103

The applicant has provided information which addresses the issues of handling and disposal of debris (noncoal), acid-forming and toxic-forming materials, and materials constituting a fire hazard, including contingency plans to preclude sustained combustion. A plan for noncoal waste storage and disposal is presented in the ACR response, Chapter III, and 13 August and 3 November 1981 letters from the applicant to UDOGM. The applicant has committed to the burial of acid-forming and toxic-forming materials beneath four feet of the best available nonacid-forming and nontoxic-forming materials (ACR response,

Chapter III, page III-52). The applicant has also indicated that no acid-forming or toxic-forming materials occur in any of the disturbed areas, based on data provided in the DOA response, Volume I, pages 133-137. The disposal of combustible materials (coal refuse) is also discussed in the DOA response, Volume I, pages 133-137. Contingency plans for precluding sustained combustion of these materials are presented in the original submittal, Chapter XII, and 24 May 1976 letter from applicant to MSHA.

The plan for noncoal waste disposal has been approved by UDOGM (ACR response, Chapter III, 10 February 1982 letter). Data provide no evidence of acid-forming or toxic-forming materials occurring in the disturbed areas. The handling and disposal of potentially combustible materials (slurry pond embankment refuse materials) will be in compliance once Condition No. 9 is met (Topsoil Reclamation, see UMC 784.13(b)(4) and 817.21). The plan for precluding sustained combustion of combustible materials has been approved by MSHA (30 June 1976 letter). Therefore, the PAP is in compliance with UMC 817.13(b)(7), UMC 817.89, and 817.103.

UMC 784.16(d) and (e) RECLAMATION PLAN: PONDS, IMPOUNDMENTS, BANKS, DAMS, AND EMBANKMENTS

The applicant has provided information addressing coal processing waste banks, dams, and embankments in the original submittal, Volume IV, Chapter XII, and page 133 of the DOA response. MSHA has approved the plans for all currently active impoundments (Numbers 1, 4, 5 North, and 5 South). Revisions to Slurry Pond No. 1 was approved by OSM in March 1979.

Compliance was determined in regard to UMC 817.81 through 817.85 (Coal Processing Waste Banks), UMC 817.86 and 817.87 (Coal Processing Waste: Burning) and UMC 817.91 through 817.93 (Coal Processing Waste). UDOGM approved the design of the slurry ponds without a subdrainage system because the ponds are already built and have been shown to have a static safety factor of greater than 1.5.

UDOGM also approves the covering of the coal processing waste as discussed in Chapter XIV of this TA. The applicant is in compliance

with the above sections.

UMC 784.19 UNDERGROUND DEVELOPMENT WASTE

Information concerning the description and disposal of underground development waste is provided in the ACR response (page III-34A) and in plans submitted to UDOGM dated 13 August 1981 and November 1981. The application is in compliance with UMC 817.71 through UMC 817.74.

UMC 784.19 and 817.71 UNDERGROUND DEVELOPMENT WASTE

U.S. Fuel has a demonstrated history of producing minimal amounts of underground development waste. The waste that has been produced has been associated with portal entries or vent shafts and in each case the waste has been used in the construction of mine pads. U.S. Fuel's past history of not producing coal process waste and the reclamation plan for mine pads discussed under UMC 784.13 are considered to be an adequate demonstration of compliance with 784.19.

UMC 784.25 RETURN OF COAL PROCESSING WASTE TO ABANDONED UNDERGROUND WORKINGS

U.S. Fuel does not propose to backfill any coal processing waste to abandoned underground workings. Therefore, UMC 784.25 is not applicable.

XXII - MINE FACILITIES, COAL HANDLING STRUCTURES, AND SUPPORT FACILITIES - UMC 784.11, 784.12, 784.16(a)(2) AND (a)(3), 817.181

Chapter III of the original submittal, paragraphs 3.5.1 through 3.5.4, Tables III-2, III-3, III-6 through III-9, Plate III-1, and Exhibits III-1A through 4B describe the existing and proposed mine facilities and surface support facilities. All facilities conform to the requirements of the regulations. The applicant is, therefore, in compliance with the regulations.

XXIII - ROADS - UMC 784.18, 784.24, AND 817.150 THROUGH 817.180

Descriptions of the existing roads in the North, Middle, and South Forks of Miller Creek canyons are contained in the original submittal,

Chapter III, and designs of proposed improvements to the South Fork road are contained in Chapter XIII, paragraph 13.2. The applicant has made no provision for reclamation of the existing roads as required in UMC 817.150(c), 817.160(c), and 817.150(g). The applicant has also not satisfied the requirements of UMC 784.15 regarding alternative postmining land use (see Condition No. 1, Attachment A). The existing roads in the Middle and South Fork canyons qualify as Class I or Class II roads and the North Fork road as a Class III. The Class I and Class II roads have not been approved as part of the postmining land use and there is no provision in the regulations for retention of a Class III road for postmining use. The application is not in compliance with regulations UMC 784.18, 784.24, and 817.150 through 817.180. To be in compliance with these regulations, U.S. Fuel would have to satisfy Condition No. 1 (Attachment A).

XXIV -BONDING - UMC 805 AND 806

Bonding to cover the reclamation of the Hiawatha Mines Complex was determined to be \$3,219,390. These costs are shown below:

Middle Fork Mining Operations	\$ 70,100
North Fork Ventilation Portal	17,700
South Fork Mining Operations	40,300
Hiawatha Processing Plant and Loadout	1,473,900
	<u>\$1,602,000</u>

Engineering-Science estimates the reclamation of 270.4 acres will require the distribution of 198,811 cubic yards of topsoil substitute at \$2.00 per cubic yard	397,622
Total for 270 acres	<u>\$1,999,622</u>

Proportional estimate to reclaim 40 acres of roads	299,943
Subtotal	<u>\$2,299,565</u>
Contingency Cost (10 Percent)	229,956
Contractor Fees (30 percent)	689,869
Bond Amount	<u>\$3,219,390</u>

OSM has found these bonding estimates to be adequate and comply with UMC 805 and 806.

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

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

XXVI - SUBSIDENCE - UMC 817.126 AND 784.20

The applicant has presented data on the monitoring and effects of subsidence and the control of any resulting subsidence in the original submittal (Volume I, Chapter III, pages 33, and 65 through 83). The probability of subsidence under a variety of mining conditions has been assessed and provisions for mitigating the effects of subsidence to the environment have been developed. For a discussion of subsidence effects to streams refer to Chapter XII, Part 784.14 of this TA. No perennial streams will be affected by subsidence. The applicant has complied with the requirements of UMC 817.126 and 784.20.

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

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

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

XXVIII - MISCELLANEOUS COMPLIANCE

UMC 817.100 CONTEMPORANEOUS RECLAMATION

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

applicant is in compliance with UMC 817.100.

UMC 817.106 REGRADING OR STABILIZING RILLS AND GULLIES

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

UMC 817.11 SIGNS AND MARKERS

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

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

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

The Utah Department of Health has not required an air quality control plan for the Hiawatha Mines Complex but does maintain a systematic inspection program for the mines. The applicant is, therefore, considered to be in compliance with the Clean Air Act (personal communication Lynn Menlove, Utah Department of Health, 20 March 1984).

UMC 786.11 PUBLIC NOTICES OF FILING OF PERMIT APPLICATIONS

Information on the required newspaper advertisement and proof of publication are provided in the original submittal (Volume I, Chapter II, page II-15) and the DOA response (Volume I, Chapter II, UMC 782.21). The applicant is in compliance with UMC 786.111.

APPENDIX A

CUMULATIVE HYDROLOGIC IMPACT SUMMARY

Under the Surface Mining Control and Reclamation Act of 1977 (PL 94-87), the regulatory authority is required to perform a cumulative hydrologic impact assessment (CHIA) before approving any application to mine. This report includes an assessment of the cumulative hydrologic impacts of all anticipated mining associated with the Hiawatha Mines Complex.

The Hiawatha Mines Complex is located about 14 miles southwest of Price, Utah. The hydrologic impacts associated with the Hiawatha Mines Complex could interact with the Star Point Mines Complex. Therefore, both mine complexes are in the cumulative impact area for the Hiawatha Mines Complex.

Surface disturbances associated with the current mining at the Hiawatha Mines Complex and the Star Point Mines Complex occur in the Miller Creek watershed. Future mining at the Hiawatha Mines Complex will disturb additional lands in the Cedar Creek watershed.

Because of different flow patterns, the surface and ground water cumulative impact area have different but overlapping boundaries. The surface water cumulative impact area includes Miller Creek to the confluence of Serviceberry Creek and Cedar Creek to the Mohrland loadout. The ground water cumulative impact area includes the area over the underground mine workings for the Hiawatha Mines Complex and the Star Point Mines Complex.

Previous studies documented that the major hydrologic impacts associated with underground coal mining in the area are related to changes in ground water quantity and surface water quality. The levels

of impacts on ground water quantity are low, usually associated with consumptive use of ground water for dust control and losses from evaporation caused by ventilation. Consumptive uses of ground water are regulated by the Utah State Engineer since they are associated with water rights.

Changes in surface water quality are usually associated with increases in dissolved salt and suspended sediment. Increases in dissolved salt content in the surface water system occur through three mechanisms:

1. Ground water that recharges the surface streams has a naturally higher total dissolved solids (TDS) content than the receiving waters. The major sources of TDS increases in the impact area are associated with ground water discharges from Mancos Shale.

2. Ground water that discharges from underground coal mines often has a higher TDS content than the receiving waters. Increases in TDS load will vary depending on the length of time the water contacts the coal seam and dust control measures implemented at the mine.

3. Leaching of available salts from freshly disturbed surface mining operations and coal stockpiles results in increases in TDS content to local ground water, which usually recharges the surface stream system.

Data for the impact assessment were obtained from the mining and reclamation plans of those mines in the cumulative impact area and from research studies in the area. There was sufficient information from mine discharge data and descriptions of the mine geology to define the probable impacts on the ground water quantity with a moderate level of confidence.

There were sufficient data to analyze the impacts on surface water quality of Cedar Creek and Miller Creek above the town of Hiawatha with the same moderate level of confidence. However, there was not enough

information on Serviceberry Creek and Miller Creek below the town of Hiawatha for more than a cursory analysis of the potential impacts. For this reach, the lack of data and the heavy influences of Mancos Shale made prediction of impacts very difficult and the level of confidence in the results is low to moderate.

The level of confidence in the results can be raised by providing more long-term hydrologic data. The water monitoring programs for the mines in the cumulative impact area will provide this necessary data over time, but no other data were available to supplement this analysis.

Results of the analyses indicate that underground coal mining will not cause a transbasin diversion of water from the historic discharge point of the Huntington Creek basin to the Miller Creek basin. This will continue as long as the Mohrland portal continues to be used as the discharge point for the Hiawatha Mines Complex.

Mining in the cumulative impact area (CIA) consumptively uses approximately 125 acre-feet per year (18 gallons per minute (gpm)). All of the water consumptively used is owned by the coal operators through a mixture of surface and underground water rights.

Historic mining through the Bear Canyon Fault has produced a significant amount of long-term discharge (100 to 200 gpm) to the mine. Maximum ground water discharge from the cumulative impact area is projected at 2,100 gpm (3,360 acre-feet per year). All of the discharge will be from the Hiawatha Mines Complex.

Historic mining may have diverted some ground water from the Bear Canyon Fault into the underground mine workings at the Hiawatha Mines Complex. Ground water inflow into the Hiawatha Mines Complex was as high as 1,000 gpm in 1972, and this diversion of ground water may have altered the flow patterns of several springs associated with the Bear Canyon Fault. However, it is impossible to define the level of impacts because there are no historic flow data for these springs. The rate of

ground water flow into the Hiawatha Mines Complex from the Bear Canyon Fault has been steady for the past several years at 100 gpm. With the exception of the Star Point Mines, all future mining will leave a barrier of unmined coal along the fault. In the vicinity of the Star Point Mines the fault has been dry. No additional impacts are associated with diverting ground water flows from the Bear Canyon Fault.

Surface water below the coal mining activities has a higher TDS and total suspended solids (TSS) content. TDS increases are associated with increases in sulfate and chloride concentrations. Current TDS levels do not exceed any set of recommended water quality criteria for the current water uses. Future mining will cause an increase in TDS concentration, but this level will also be below the set and recommended water quality criteria. TDS loads (i.e., concentration times flow rate) increase approximately 900 tons per year from non-point sources associated with existing mining operations on Miller Creek and a projected 180 tons per year from future mining operations on Cedar Creek.

Sulfate levels are presently below established water quality standards and if projected estimates of sulfate increases are accurate, then surface disturbances that will be associated with the King 7 and 8 Mines will cause about a two-fold increase in sulfate concentrations. Projected sulfate concentrations will remain below levels established by water quality standards.

Water chemistry of surface waters in the CIA naturally change from a calcium carbonate type to a magnesium sulfate type as streams traverse the Blackhawk Formation and Mancos Shale. Mancos Shales have significant impacts on the water quality of streams traversing them. TDS concentrations are as much as 100 times the TDS levels of water on top of the Wasatch Plateau. Most of these increases are natural and are probably caused by ground water flowing through the formation, leaching available salts from the marine shales, and discharging into the surface waters.

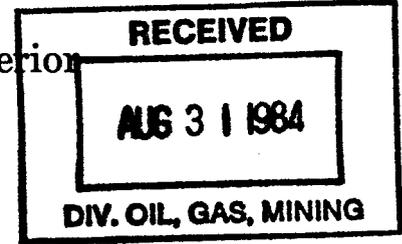
Impacts from the surface facilities associated with mining that are located on the Star Point and Mancos Shales are masked by the degradation of water quality resulting from the streams traversing the Mancos Shales.

TSS concentrations are also higher below the surface disturbed areas. Most of the increased suspended sediment naturally settles out before Miller or Cedar Creek leave the permit area because of decreased stream gradients.

The OSM Surface Water Model was used to route the known water quantity and quality of the Miller Creek waters (at the town of Hiawatha) and the Serviceberry Creek waters (near the town of Wattis) to the confluence of the two creeks. According to the model, the TDS concentration below the confluence of Serviceberry Creek and Miller Creek will exceed the water quality standard for irrigation waters during the middle and late summer months. Most of the TDS concentration is caused by Serviceberry Creek traversing Mancos Shale.



United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202



AUG 20 1984

SEP 04 1984

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

Dear Dr. Nielson:

Enclosed please find the preliminary bond analysis for the U.S. Fuel Company's Hiawatha Mines Complex. The analysis was prepared for the Office of Surface Mining (OSM) by Richardson Associates. The contractor was instructed to follow, to the extent possible, the Division's methodology in estimating the bond; therefore, it is requested that your staff review the enclosed analysis for consistency and completeness.

In order to maintain the current permit review schedule, it is requested that the Division's comments be received by OSM on or before September 14, 1984. If you have any questions, please contact me or Sarah Bransom at (303) 844-3806.

Sincerely,

Walter Swann
Stephen F. Manger
Utah Task Force Leader

Enclosure

cc: Pam Littig, DOGM
Mike Bishop, ES

orig - mine file
cc DEN
J. Smith
file



September 12, 1984

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

Dear Mr. Eccli:

Re: Review of 2nd Submittal for Abatement of NOV N84-4-8-8, 1 of 8, Hiawatha Complex, ACT/007/011, Folder No. 7, Carbon County, Utah

U. S. Fuels response dated August 31, 1984 for abatement of NOV N84-4-8-8, 1 of 8 has been reviewed by Division hydrologist John Whitehead.

The additional information provided for a filter blanket along with the certified cross-section of the diversion adequately address the remaining deficiencies for this abatement plan.

Please consider this plan approved and, as noted in the Division letter of August 16, 1984;

1. Submit 14 copies of the approved plan in an appropriate format (i.e. typed etc.) which can be inserted into the proper location of the U. S. Fuel MRP. Please send six (6) copies to the Division and eight (8) copies to the Office of Surface Mining in Denver, (Attention: Sarah Bransom).
2. Complete installation of the approval plan by October 12, 1984.

Thank you for your cooperation in this matter. Please call me if you should have any questions.

Sincerely,

D. Wayne Hedberg
Permit Supervisor/
Reclamation Hydrologist

JW:jvb

cc: A. Klein, OSM
R. Hagen, OSM
S. Bransom, OSM
J. Helfrich, DOGM
D. Lof, DOGM
J. Whitehead, DOGM

92940-13

RECEIVED

AUG 15 1984

DIVISION OF OIL
GAS & MINING

August 10, 1984



SCOTT M. MATHESON
GOVERNOR

DC
ED

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

JIM

AUG 15 1984

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

Attn: Susan C. Linner

RE: Supplemental Material for Hiawatha Complex, Technical
Analysis, U.S. Fuel, ACT/007/011 #2, Carbon County, Utah

In Reply Refer to Case No. E409

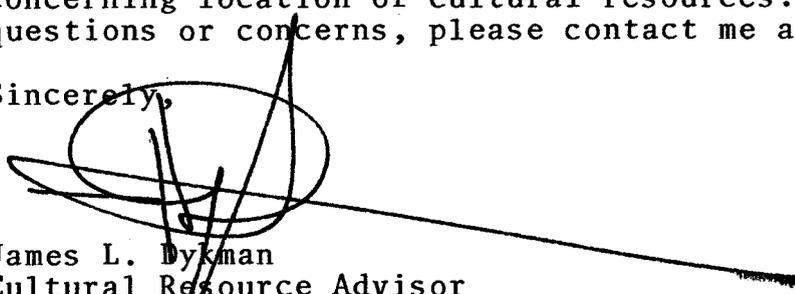
Dear Mr. Smith:

The Utah Preservation Office has received for consideration your letter of July 27, 1984, transmitting a copy of the supplemental material for the Hiawatha Complex, a technical analysis. After review of the material, our office notes no additional changes to the cultural resource plan for the Hiawatha Complex.

Our office, however, would like an update of how the Hiawatha mine plan is proceeding. The area is extremely important historically, and any information provided us would be important to us.

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
Office of State Historic
Preservation Officer

JLD:jrc:E409/0716V



STATE OF UTAH
NATURAL RESOURCES
Water Rights

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

File ACT/007/011
Folder 2, 4

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

August 9, 1984

RECEIVED

AUG 13 1984

DIVISION OF OIL
& GAS & MINING

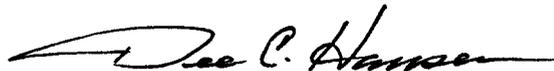
Mr. James W. Smith, Jr., Administrator
Mineral Resource Development and
Reclamation Program
Division of Oil, Gas & Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: U.S. Fuel Company
Hiawatha Complex
ACT/007/011, Carbon County
Sediment Ponds for Borrow
Areas A&D

Dear Mr. Smith:

This office has completed its review of the data in the supplemental submission for the above-mentioned mine. The sedimentation ponds are all small and don't appear to pose a hazard to life or property. This letter will serve as approval, subject to the approval of other involved agencies.

Yours truly,


Dee C. Hansen, P.E.
State Engineer

DCH:rlm

cc: Price Area Office



orig
al
file
file

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

RECEIVED

AUG 3 1984

DIVISION OF OIL
GAS & MINING

ACT/007/601

AUG 1 1984

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

Dear Mr. Eccli:

The Office of Surface Mining (OSM) and the Mine Safety and Health Administration (MSHA) have reviewed the U.S. Fuel Company's "Plan of Action for Evaluation of the Underground Reservoir," submitted to OSM on June 15, 1984. The plan is generally consistent with what was discussed and agreed upon at the June 8, 1984 meeting with OSM, MSHA and U.S. Fuel representatives in Denver; however one comment is noted. In order to confirm the conclusions made by U.S. Fuel regarding bulkhead stability, it is necessary that the report to be submitted to OSM on September 21, 1984 contain all of the laboratory and field data collected through the dewatering and dismantling process (page 3-4 of the June 15 plan). The inclusion of this data will assist OSM in making the necessary findings required under UMC 786.21 Criteria For Permit Approval on Denial: Existing Structures.

Please advise us if you plan to adjust your schedule for submitting the September 21, 1984 analysis. If you have any questions, please call me or Sarah Bransom at (303) 844-3806.

Sincerely,

Steve Manger
Utah Task Force Leader

cc: Dr. Dianne Nielson, UDOGM
Susan Linner, UDOGM
Jack Elder, Ford, Bacon and Davis
Monty Christo, MSHA
Mike Bishop, ES

RECEIVED

AUG 3 1984

DIVISION OF OIL
GAS & MINING



*orig mine file
cc L. Sn Dtk JB
file*

United States Department of the Interior
OFFICE OF SURFACE MINING
Reclamation and Enforcement
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202

AUG 1 1984

Mr. Art Barker
Carbon County Engineering Department
District Four Office
Carbon County Courthouse
Price, Utah 84501

Dear Mr. Barker:

This letter is a follow-up to the enclosed May 15, 1984 letter sent by the U.S. Fuel Company to the Carbon County Engineering Department regarding the proposed re-location of Highway 122 and County Road 338 for a proposed coal unit train loadout facility. Under UMC 761.12(d) Procedures, U.S. Fuel must receive the approval of the appropriate authority having jurisdiction over the road(s).

The Office of Surface Mining (OSM) requests that the County notify U.S Fuel and this office as to your intent to review the proposed road relocation. Specifically, we need to know what, if any, approvals are required by the County and the time frames for rendering a decision on the proposal.

If you have any questions, please contact me or Sarah Bransom at (303) 844-3806.

Sincerely,

Steve Manger
Utah Task Force Leader

cc: Harold Marstrom, County Planner
Robert Eccli, U.S Fuel
Dr. Dianne Nielson, DOGM
Susan Linner, DOGM
Mike Bishop, ES

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

May 15, 1984

Carbon County Engineering Department
District Four Office
Carbon County Courthouse
Price, Utah 84501

Dear Gentlemen:

United States Fuel Company, through this notification, seeks to inform all affected parties of their intent to construct a unit train coal loadout facility at their present operations in Hiawatha, Utah. Due to the fact that unit trains (approximately 80 cars) will be loaded by this new facility, it is necessary to relocate the present railroad crossing of Highway 122 in the town of Hiawatha to avoid road blockage.

The crossing is to be redesigned as an underpass to allow traffic to freely move under the tracks. Construction of the underpass will occur approximately 550 feet south of the present crossing.

Construction of the loadout facility and accompanying underpass is scheduled to begin in July of 1984. Enclosed is a copy of the general layout and design. We are requesting approval from your Department to construct the proposed underpass.

Please contact me at 343-2471 or 637-2252 should further information be desired.

Sincerely,

Robert Eccli'

Robert Eccli
Senior Mining Engineer

Enclosure





STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

July 27, 1984

Mr. William H. Geer, Acting Director
Division of Wildlife Resources
1596 West North Temple
Salt Lake City, Utah 84116

Dear Mr. Geer:

RE: Supplemental Material for Hiawatha Complex, Technical
Analysis, U. S. Fuel, ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information 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:

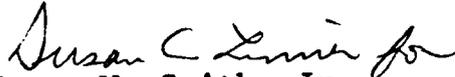
B. Mine Plan Review

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.

Page Two
Mr. William H. Geer, Acting Director
July 27, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

JWS/SCL:jvb
Enclosure
00450



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

July 27, 1984

Mr. Melvin T. Smith
State Historic Preservation Officer
Utah State Historical Society
300 Rio Grande
Salt Lake City, Utah 84101

Dear Mr. Smith:

RE: Supplemental Material for Hiawatha Complex, Technical
Analysis, U. S. Fuel, ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information 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:

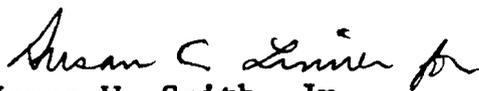
1. Upon submission of a coal mining and reclamation plan to the Division of Oil, Gas & Mining, the Division of Oil, Gas & Mining will notify the SHPO in writing of the need for consultation and evaluation of the plan with respect to historic and cultural resources. The Division of Oil, Gas & Mining will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

Page Two
Mr. Melvin T. Smith
July 27, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

JWS/SCL:jvb
Enclosure
00480



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

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

July 27, 1984

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

Dear Mr. Hansen:

RE: Supplemental Material for Hiawatha Complex, Technical Analysis, U. S. Fuel, ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information is forwarded for review by the 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:

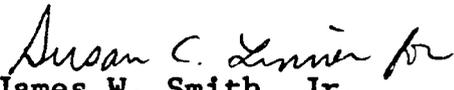
1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will forward a copy of the mining and reclamation plan to Dam Safety. If information additional to that contained in the operator's submission is required, Dam Safety is responsible for contacting the operator to obtain such information. 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.

Page Two
Mr. Dee C. Hansen, State Engineer
July 27, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

JWS/SCL:jvb
Enclosure
00460



July 27, 1984

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

Dear Mr. Alkema:

RE: Supplemental Material for Hiawatha Complex, Technical
Analysis, U. S. Fuel, ACT/007/011 #2, Carbon County, Utah

Enclosed please find one (1) copy of the Supplemental Material referenced above. This information is 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 response 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

Page Two

Mr. Kenneth Alkema

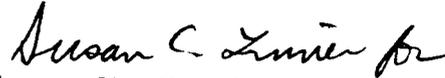
July 27, 1984

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.
Administrator
Mineral Resource Development
and Reclamation Program

JWS/SCL:jvb
Enclosure
00470

RECEIVED

Copy To Sue

JUL 23 1984

DIVISION OF OIL
GAS & MINING

3482
SL-025431
(U-921)

JIM

July 20, 1984

JUL 25 1984

File ACT/007/011
Folder (2) 4

Memorandum

To: Utah Senior Project Manager, OSM, Denver

Attn: Ms. Sarah Bransom

From: Chief, Branch of Mining Law and Solid Minerals
BLM-SO, Salt Lake City, Utah

Subject: United States Fuel Company, Hiawatha Complex, Carbon and Emery
Counties, Utah, Permit Application Package (PAP)

The Resource Recovery and Protection Plan (R.P.) or underground mining part of the subject PAP was considered adequate for BLM administration of the associated Federal coal leases. Our memorandum dated May 8, 1984, stated that the R.P. on file in this office is compatible with 43 CFR 3482.1(c) rules and regulations, and that the proposed coal recovery procedures will safely obtain maximum economic recovery of the coal resource within the plan area by following the planned technology and by using the types of equipment listed in the plan. Since that time we have received the following information and data:

1. Three maps forwarded with your letter dated June 11, 1984, and identified as "05/14/84 submittal of revisions for mining and reclamation plan, Exhibits XIII-2c, 2d, and 3e."
2. Maps and pages forwarded with your letter dated June 11, 1984, and identified as "05/17/84 submittal of revisions for MRP in response to OSM determination of adequacy letter of 05/01/84."
3. Maps and pages forwarded with your letter dated June 11, 1984, and identified as "06/01/84 submittal of additional information on proposed unit train loadout in response to OSM letter of 05/01/84."
4. Pages forwarded with your letter dated June 25, 1984, and identified as "Plan of action for evaluation of underground reservoir, June 15, 1984."
5. A page forwarded with your letter dated July 2, 1984, and identified as "06/07/84 submittal of revisions for mining and reclamation plan regarding road maintenance."

We have reviewed the supplemental information and data listed above and have determined there are no conflicts with the planned coal recovery procedures or with future recovery of coal resources.

Within the limits of our authority we concur with the Hiawatha mine complex R₂P₂ plan on file in this office as amended and recommend that it be included as an integral part of the subject PAP.

B. Gordon Whitney
Acting

cc: US Fuel Co.
✓ UDOGM
DM-MDO

Copy to: JWS
SCL

cc: DR Nelson Done
RW Daniels

Do we need to publish separate notice on this?

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

RECEIVED

July 9, 1984

JIM

JUL 12 1984

JUL 16 1984

DIVISION OF OIL
GAS & MINING

File ACT/007/011
Folder 2, 3, 6

Ms. Marjorie L. Larson
Secretary of the Board
Board of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Ms. Larson:

United States Fuel Company is proposing to construct a unit train
loading facility on company property near Hiawatha, Utah.

Current applications have been submitted to DOGM and OSM and are
under review with our Mining and Reclamation Plan

Facility includes a railroad under-
ground. See Exhibit III-19 enclosed.

Our proposal to relocate the highway
and participation requirements as required
by the Department of Transportation has indicated
in the letter attached.

Sincerely,

Robert Eccli

Robert Eccli,
Sr. Mining Engineer

RE/ds

Attachment:

*I have a copy, please
cc to Joe + Dave
file Original
as indicated
TX - Wayne*

Noticed for Sept.
Board in Price



Copy to: JWS
SCL

~~CC: DR. Dawson Done
RW Daniels~~

Do we need to publish separate notice on this?

UNITED STATES FUEL COMPANY

HIAWATHA, UTAH 84527

RECEIVED

July 9, 1984

JIM

JUL 12 1984

JUL 16 1984

DIVISION OF OIL
GAS & MINING

File ACT/007/011
Folder 2, 3, 6

Ms. Marjorie L. Larson
Secretary of the Board
Board of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Dear Ms. Larson:

United States Fuel Company is proposing to construct a unit train loading facility on company property near Hiawatha, Utah.

Plans for this facility have been submitted to DOGM and OSM and are currently under review in connection with our Mining and Reclamation Plan approval.

Part of the plan for the loading facility includes a railroad underpass and relocation of State Highway 122. See Exhibit III-19 enclosed.

This letter is to notify you of our proposal to relocate the highway so that the Board can initiate public participation requirements as required by UMC 761.12 (d). The Utah Department of Transportation has indicated concurrence with our proposal. See letter attached.

Sincerely,

Robert Eccli

Robert Eccli,
Sr. Mining Engineer

RE/ds

Attachment:

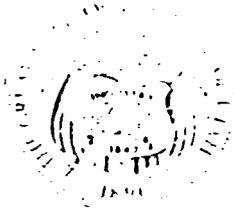
Noticed for Sept.
Board in Price



TRANSPORTATION COMMISSION

R LAVAUN COX
CHAIRMAN
WAYNE S. WINTERS
VICE CHAIRMAN
CLEM H. CHURCH
SAMUEL J. TAYLOR
CHARLES CLAYBAUGH

ELVA ANDERSON
SECRETARY



Director
William D. Hurley, P.E.

Assistant Director
Gene Sturzenegger, P.E.

District Four Director
Sterling C. Davis, P.E.

UTAH DEPARTMENT OF TRANSPORTATION

P.O. Box R
Price, Utah 84501

May 17, 1984

United States Fuel Company
Attn: Mr. Robert Eccli
Hiawatha, Utah 84527

Ref: May 15, 1984 - Relocation, Highway 122

Dear Sirs:

This office has reviewed your plan relocation of Highway 122 in the town of Hiawatha. We find no problems with the relocation. Prior to our final concurrence of this construction, we would want to review your final plans and enter into proper agreements for this relocation of Highway 122.

Respectfully,

A handwritten signature in cursive script, appearing to read "L. Archie Hamilton".

L. Archie Hamilton
District Preconstruction Engineer

LAH: jvz

cc: Sterling C. Davis, PE