



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

January 17, 1986

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

Dear Mr. Geer:

Re: Application for Permit Modification, Utah Fuel Company,  
Skyline Mine, ACT/007/005, Carbon County, Utah

Enclosed please find one (1) copy of the MRP Modification for Utah Fuel Company's Skyline Mine. This submission needs to be included in their permit application to update the mine permit application. This information is being 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 2

Mr. William H. Geer, Acting Director  
January 17, 1986

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. The Division is attempting to complete its review of these plans by February 15, 1986. If your agency has any comments on these plans please forward them by the above date. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,

*D. Wayne Hedberg*  
for Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

SCL:jvb  
Enclosure  
0095R

File ACT/007/005  
1-13-86 Folder #2,3

APPLICATION FOR PERMIT MODIFICATION

SKYLINE MINES

JANUARY, 1986

RECEIVED

JAN 13 1986  
JAN 14 1986

DIVISION OF OIL  
GAS & MINING  
GAS & MINING

## INTRODUCTION

In December, 1985, Coastal States Energy Company and Getty Mining Company, formerly Getty Mineral Resources Company, (collectively "Applicant"), as lessees, filed with the Bureau of Land Management an application seeking to amend existing Federal Lease U-0142235 which is one of the Federal Coal Leases comprising the Skyline mining properties.

This Application for Modification of the Skyline Mining and Reclamation Permit is being filed to request approval of changes in the areas to be mined and in the sequencing of mining in order that portions of the to-be-amended leasehold can be mined. The Application contains additional information besides that in the existing Mining and Reclamation Plan to support the proposed modification and allow the impacts/benefits of such modification to be evaluated.

APPLICANT INFORMATION

Name, Address and Telephone  
Number of Applicant:

Coastal States Energy Company and Getty  
Mining Company

411 West 7200 South  
Suite 200  
Midvale, Utah 84047

801/566-7111

Resident Agent of Applicant:

Vernal J. Mortensen  
Vice President

## PROPOSED MODIFICATION

The lease boundaries of the Skyline property run north-south and east-west with the exception of for a portion of the eastern boundary which runs approximately north-northeast (see Location Map, Attached). The proposed mining of the mine block was originally laid out in a north-south, east-west orientation in order to maximize recovery at the lease boundaries, i.e., make the workings parallel and perpendicular to the boundaries.

Initial underground mining was begun in October 1981. As mining progressed from the outcrop to deeper cover, it became evident that the north-south, east-west orientation was not acceptable since a dominant regional joint system trends N 80° W. This joint system is only ten degrees off the east-west drivages creating a dangerous condition on the north-facing ribs. Large wedges of coal, sometimes 20 feet long and five feet high, would slide off the rib with no warning.

Upon the advice of consultants and following discussions and approval with the BLM, the mine was re-oriented during 1983 in a 20 degrees counter-clockwise direction. This change has resulted in better rib conditions and overall better safety but does not allow panels to approach the lease boundaries in as favorable an orientation.

The first longwall block at Skyline (scheduled to commence development in May, 1986) was originally planned for panels oriented north-south. As more information became available on a low coal (want) area and the faulting in the block, it was decided to re-orient the panels east-west. This allows a panel to approach the boundary of the want in a more perpendicular manner rather than trying to parallel it. Although in

this case the change increases the length of mains and attendant services for the panels, the technique maximizes the amount of coal which can economically be extracted from the block.

Similarly, when panel developments approach a lease boundary in a more perpendicular manner, more coal can be recovered than when they approach at an obtuse angle. In most cases at Skyline, lease boundaries will be approached in the more perpendicular manner; however, this first longwall block is bounded by both a political constraint and a geologic constraint which by its nature cannot be changed. By modifying the northern boundary of the longwall block, two wedges of coal which must otherwise be mined by a poor recovery method can be included in longwall panels of the first block, thus, maximizing economic recovery and benefiting both the United States and the Applicant.

The proposed amendment of Federal Coal Lease Utah-0142235 would add to the leasehold the following area:

T.13.S R 6 E, SL Meridian, Utah

Sec. 11: N 1/2 S 1/2;

Containing 160.0 acres.

The proposed revision of the mining sequence (see 5 year mine plan map, attached) would allow mining of the additional acreage by underground means. No surface activities or disturbance (beside controlled subsidence associated with longwall mining) will affect the to be added acreage. Since the coal to be mined lies at depths of 1000 to 1400 feet, surface

effects from subsidence should be minimized. The mining of the additional area will not increase annual tonnage volumes but will allow overall higher recovery. The 160 acres contain a total of 1,616,900 tons of recoverable coal based on the longwall panel and attendant entries containing 759,900 tons and on the balance of the tract containing 875,000 tons. (See 5 year mine plan map, attached). Since the coal will be mined from the Lower O'Connor "A" seam (as presently being mined at Skyline), the coal will be of similar quality as that of current production.

## SUPPORTING INFORMATION

The Applicant hereby submits additional information, environmental and otherwise, related to the mining of the to-be-added area. This information is intended to supplement information contained in the existing mining and reclamation plan:

### Air Quality

Since no surface disturbance is planned in the expansion area there will be no additional air quality impacts. Information pertaining to air quality contained in the Skyline Mining and Reclamation Plan should suffice.

### Fish and Wildlife Impact

This modification of the property boundary should not cause any additional impacts to avian, aquatic or terrestrial species of wildlife.

The major use of the area by wildlife is as summer range for big game species. Mining activity will not disrupt this use. The only stream in section 11 is small and intermittent and therefore contains no fish. The minor extension of subsidence in the area will not extend to Winter Quarters Creek.

### Hydrology

The existing surface and groundwater hydrologic programs as outlined in Section 2.3 and 2.4 of the M&RP and will be expanded to include the proposed expansion area. A copy of a pre-mining survey of the seeps and spring in the expansion and adjacent areas is attached as are copies of water quality analyses of select sources in the area. A new monitoring station will be added at location 004. This new station, to be identified as S11-1, will be routinely monitored on the same basis as the other stations located throughout the lease area. No new wells are proposed for groundwater monitoring in the expansion area.

### Archeology

The expansion and adjacent areas have been the object of several cultural resource surveys with essentially negative results. Copies of the known reports applicable to this area are attached.

Since no surface impacts, other than subsidence will occur in the expansion area, it is requested that these previous surveys be considered adequate. The issue of random sample survey adequacy was previously resolved for the Skyline Mine in a meeting held at the SHPO on May 30, 1979. (See Item 2, Memorandum of Discussion, copy attached)

### Vegetation

The vegetative types in the north half of the south half of section 11 are contiguous with the vegetative types in the south half of the south half of section 11. The vegetative types and condition classes for this area are shown on the attached Range Environmental Analysis Type Map prepared by the U.S. Forest Service. Since there is no surface disturbance proposed there will be no vegetative disturbance.

### Soil

Since there are no vegetative reference sites in the proposed amended area no soil pits or data are needed. No surface disturbance is proposed; there is no need for re-seeding or top soil protection.

### Geology

Since the Applicant proposes to continue mining in the Lower O'Connor "A" seam as is presently being done, the geological information contained in the Skyline Mining and Reclamation Plan should suffice.





ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325

LABORATORY REPORT

To Hydrometrics (1) Lab No. 85-10596  
 Address 2727 Airport Road Date 10-2-85 tab  
Helena, Montana 59601  
ATTN: Bob Braico

Site 003

SPECIAL WATER ANALYSIS

Utah Fuel Co.  
 Unnamed Tributary - Winter Canyon  
 Sampled 9-17-85 @ 1115 Hrs  
 Submitted 9-19-85

<u>CONSTITUENT</u>	<u>mg/l</u>
Calcium -----	78
Magnesium -----	13
Sodium -----	4
Bicarbonate -----	258
Chloride -----	4
Sulfate -----	16
Specific Conductance @ 25°C -----	418
Turbidity -----	0.28 N.T.U.
Total Dissolved Solids @ 180°C -----	233
Total Iron -----	<0.03
Total Manganese -----	<0.02



ENERGY LABORATORIES, INC.

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LABORATORY REPORT

To Hydrometrics (1) Lab No. 85-10597  
 Address 2727 Airport Road Date 10-2-85 tab  
Helena, Montana 59601  
ATTN: Bob Braico

SPECIAL WATER ANALYSIS

Utah Fuel Co.

Site 005 - Tributary to Winter Canyon

Sampled 9-17-85 @ 1220 Hrs

Submitted 9-19-85

<u>CONSTITUENT</u>	<u>mg/l</u>
Calcium -----	72
Magnesium -----	11
Sodium -----	4
Bicarbonate -----	234
Chloride -----	3
Sulfate -----	13
Specific Conductance @ 25°C -----	373
Turbidity -----	1.8 N.T.U.
Total Dissolved Solids @ 180°C -----	194
Total Iron -----	<0.03
Total Manganese -----	<0.02



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January 15, 1986

Mr. Glen A. Zumwalt  
Vice President/General Manager  
Utah Fuel Company  
P. O. Box 719  
helper, Utah 84526

Dear Mr. Zumwalt:

RE: Review of Operator Response to Conditional Approval for  
Removal and Disposal of Sediments from Sedimentation Pond,  
Skyline Mine, ACT/007/005, 3 & 4, Carbon County, Utah

The Division has completed the review of Utah Fuel Company's November 18, 1985 response to the Division's deficiency letter of October 18, 1985 concerning the plan referenced above. The Division's concerns will be adequately addressed provided the following recommendation(s) are found acceptable by Utah Fuel. Please refer to the attached technical review memo for the specific recommendations and conditions.

Please provide a written response accepting Condition #1 and ten (10) additional copies of the complete set of plans in a format allowing direct insertion into the approved MRP's currently on file with the regulatory agencies by January 28, 1986. Thank you for your continued cooperation and patience in completing this permitting activity. Please contact me or Rick Summers should any questions or concerns remain.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

cc: Allen D. Klein  
Lowell Braxton  
Rick Summers  
8992R-36

David Lof  
Susan Linner

December 23, 1985

TO: Technical File

FROM: Rick P. Summers. Reclamation Hydrologist *RS*

RE: Response to Division 11/18/85 Deficiency Letter Concerning Disposal of Sediment From Sedimentation Pond, Skyline Mine, ACT/007/005.

Summary:

Skyline Mine's response to the above referenced letter dated 11/18/85 was reviewed. The response addresses the design of diversion ditch BC-12 located beneath the conveyor at the Skyline loadout. Designs for a relocated diversion were required due to the disposal of sediment from the pond at the original diversion location. Although the submittal contained a significant number of errors, sufficient information was available to perform a technical analysis. Based upon that analysis, it was shown that the diversion has been oversized relative to the capacity to convey the runoff from a 10 yr-24 hr precipitation event (capacity for a 100 yr-24 hr event exists). Design velocities were calculated to be approximately 5.5 fps for a 50 yr-24 hr design flow. A channel lining of 4 inch riprap would be required to insure stability at this velocity.

Recommendations:

Diversion BC-12 routes disturbed area drainage to an existing sedimentation pond at the loadout. Combined with consideration of the length of the diversion (350 ft.), it is my recommendation that the diversion should be given final approval with the following condition:

Condition #1: The applicant must install a channel lining of four (4) inch material in diversion BC-12 prior to July 15, 1986. The Division may waive this requirement following inspection of the diversion by Division Hydrologists following the snowmelt period. Selective placement of material may be approved in lieu of lining the entire reach following the above inspection. Additionally, smaller material may be used if a demonstration of reduced velocities (increased Manning's n value) is submitted and approved by the Division.

cc: Lowell P. Braxton  
Sue Linner  
Wayne Hedberg  
Tom Wright

0317R-69

Project: Skyline mine, Designs for Diversion BC-12  
DATE: 12-18-85

Reviewer: R.K. Summers, Reclamation Hydrologist

I. PEAK FLOW VALUE ASSUMPTIONS

	<u>Skyline</u>	<u>DOGMI</u>	<u>Comments</u>
Area (Ac)	2.0	2.7	<u>Reference: sheets 2 and 3 (maps)</u>
Hydraulic Length	$TA^2$	1,320'	1) Not applicable: Applicant submitted Rational Method
Slope	$TA$	5.68%	
CN	$TA$	90	
Time Conc	6.3 min	.196 hrs. (11.7 min)	
Ry1-24hr ppt.	Discrepancy in	2.4 <sup>3)</sup>	2) Clear Creek Station Records.
50yr-24hr ppt.	TTRP	3.2	
100yr-24hr ppt.	3.6	3.6	

II. PEAK FLOW RESULTS

	<u>Skyline</u>	<u>DOGMI</u>
$Q_{10-24}$	Not Calc.	3.7 cfs.
$Q_{50-24}$	Not Calc.	5.44 cfs.
$Q_{100-24}$	5.8 cfs	6.32 cfs.

III. Channel Capacity and Velocity Calculations

for  $Q = 5.8 \text{ cfs}$ : (50 yr. 24 hr event)

Minimum slope: Capacity Design

Available Depth 1.2' - 0.3 freeboard = 0.90 ft.

Cross-sectional Area:  $(4.6 \text{ in}^2) (1" / 0.64 \text{ ft}^2)$  (exhibit 2)  
 $= 2.95 \text{ ft}^2$

$n = 0.023$

Slope min = 2.5%

reference: Map, sheet 2.

Wetted Perimeter:  $(7.2 \text{ in}) (1 \text{ in} / 0.8 \text{ ft})$   
 $= 5.76 \text{ ft}$

reference: exhibit 2

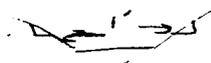
Results

	<u>DDGM</u>	<u>Skyline</u>
Slope	2.5%	2.5%
Depth	0.9'	0.9'
Area	2.95 ft <sup>2</sup>	2.84 ft <sup>2</sup>
WP	5.76'	6.5'
Hydr. Radius	0.512	0.437
n-value	0.023	0.023
Velocity	6.55 fps	2.25 fps ← error. 2)
Q capacity	19.339 cfs.	5.97 ✓

2) It appears applicant left Area out of the computation of discharge.

Solution: Find Depth and Velocity for  $Q = 5.8 \text{ cfs}$

1) Rough check, assume trapezoidal channel



$Q$	$D$	$A'$	$P$	$S$	$V$
5.8 cfs	0.526	1.217	3.831	.025	4.809
3.7	0.424	0.87	3.28	.025	4.236
3.7	0.383	0.75	3.06	.038	4.941

2) check Exhibit 3 (cross-section).

	Depth	Area	Wet P.	Slope	Velocity	Q
	0.6	1.83 ft <sup>2</sup>	4.48	0.025	5.64	10.3
	0.5	1.40	3.68	0.025	5.37	7.5
USE this. →	0.4	1.06	2.80	0.025	5.36	5.62
	0.3	< 0.59 >	2.24	0.038	< 5.19 >	< 3.06 >
↙	0.4	1.06	2.80	0.038	6.61	7.01

so,

@ 0.4' depth, Q = 5.7 to 7.0 cfs depending on slope

Velocity = 5.36 to 6.61 fps

assume 5.5 fps velocity for all sections.

3) Riprap sizing:

@ 5.5 fps, channel lining must be 4" material



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January 17, 1986

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

Dear Mr. Smith:

Re: Application for Permit Modification, Utah Fuel Company,  
Skyline Mine, ACT/007/005, Carbon County, Utah

Enclosed please find one (1) copy of the MRP Modification for Utah Fuel Company's Skyline Mine. This submission needs to be included in their permit application to update the mine permit application. This information is being 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.

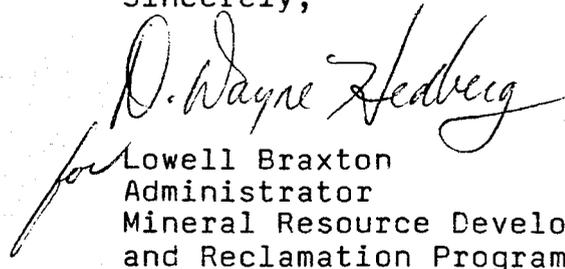
Page 2

Mr. Melvin T. Smith  
January 17, 1986

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. The Division is attempting to complete its review of these plans by February 15, 1986. If your agency has any comments on these plans please forward them by the above date. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,

  
for Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

SCL:jvb  
Enclosure  
0095R



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

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February 4, 1986

Mr. Vernal J. Mortensen  
Vice President Utah Operations  
Coastal States Energy Company  
411 West 7200 South, Suite 200  
Midvale, Utah 84047

Dear Mr. Mortensen:

Re: Determination of Completeness, Lease Modification, Skyline Mine,  
ACT/007/005, Folder No. 2 and 3, Carbon County, Utah

The Division has reviewed the submittal received January 13, 1986, proposing to modify the permit area for the Skyline Mine to accommodate an amendment to Lease U-0142235. The submittal has been found to be incomplete.

Attached is a review document which details the information which Coastal States Energy Company must provide to make the plan complete. Please feel free to contact me or Susan Linner should you have questions.

Sincerely,

*L. P. Braxton*

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

SCL:jvb  
Enclosure  
cc: R. Holbrook  
S. Linner  
R. Summers  
0028R-65

Determination of Completeness Review  
Lease Modification  
Skyline Mine  
ACT/007/005  
Carbon County, Utah

February 4, 1986

UMC 783.13 Description of Hydrology and Geology: General  
Requirements and  
UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance -  
RS, DD

Existing baseline data for seeps, springs, and streams in the new lease and adjacent area (i.e. Winter Quarters Canyon) should be presented (or referenced) and the hydrologic connection between any aquifers and springs in the lease area should be established. A description of the probable hydrologic effects relative to the mining of the new lease based upon that data should be included. Based upon the data and geologic description to be submitted, additional baseline data may be required.

The applicant shall describe the attitude of the formation in the vicinity of lease area U-0142235.

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance -  
RS, DD

- (b)(2) A narrative should be submitted describing any anticipated production of increased mine water and plans for treatment of that water (UMC 817.42).
- (b)(3) Existing water monitoring points in the area should be presented. The monitoring plan should be updated to include all (or representative) springs and streams in the area of projected subsidence, potentially impacted water sources based on the dip and geologic description of the area, and water sources in the area which have baseline data collected. Proposed monitoring point 004 should reference to a specific spring (the map of springs simply shows the point near "numerous seeps & springs from 0.1 to 5 gpm"). All proposed monitoring should be in accordance with the attached guidelines.

- (c) Data submitted in the application indicates that stream flow still occurs on the area in September. This information suggests that the stream might be a perennial stream instead of an intermittent stream as shown in the mine plan. If the stream is perennial the applicant will be required to adhere to regulation UMC 817.126.

UMC 784.20 Subsidence Control Plan - DD

- (b) The applicant shall submit a subsidence monitoring plan that indicates results of pre-subsidence surveys and methods for monitoring the impacts from subsidence.

0028R-66



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February 13, 1986

CERTIFIED RETURN RECEIPT REQUEST  
(P592 431 327)

**FILE COPY**

Mr. Glen A. Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

RE: Operator Response to Conditional Approval for Removal and Disposal of Sediments from Sedimentation Pond, Skyline Mine, ACT/007/005, #3 and #4, Carbon County, Utah

The Division has received Utah Fuel Company's letter dated January 21, 1986 which was provided in response to our January 15, 1986 letter concerning the plans referenced above.

Your letter discusses Notice of Violation (NOV) N85-2-16-2, #2 of 2, which was issued by the Division's Inspection and Enforcement (I. & E.) staff. It is stated that the NOV addresses the same area of concern as outlined in our January 15 letter. The area of contention is the diversion ditch which is located beneath the BC-12 conveyor at the Skyline Mine site. In your January 21 letter, you stated that Utah Fuel Company would not respond to the Division's January 15 letter until the hearing officer had made a ruling on the proceedings of the Assessment Conference for NOV N85-2-16-2, which was held on January 15, 1986.

Apparently there is some confusion regarding this issue. Our January 15, 1986 letter is a continuation of the ongoing technical review of the company's previous proposal which addressed the removal and disposal of sediments from the sedimentation pond. The subject NOV which was issued by

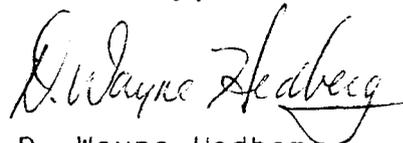
Page 2  
Mr. Glen A. Zumwalt  
ACT/007/005  
February 13, 1986

by I. & E. is an entirely separate matter. It has no bearing on the condition outlined in our January 15 letter. Both issues, the NOV and our January 15 letter, must be addressed individually by the operator.

Regardless of the Assessment Officer's ruling on the validity of the NOV, the operator will still need to provide a response to Condition #1 of our January 15 letter. Adequate erosion control measures will need to be provided for those sections of the diversion ditch where runoff velocities may contribute to excessive erosion.

We encourage Utah Fuel Company to please provide a response to our January 15 letter by February 20, 1986. Should questions or concerns remain, please contact us at your earliest convenience.

Sincerely,



D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
cc: Allen Klein  
Lowell Braxton  
Joe Helfrich  
Rick Summers  
Tom Wright  
8992R-48 & 49



STATE OF UTAH  
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Dianne R. Nielson, Ph.D., Division Director

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March 12, 1986

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

Dear Mr. Smith:

RE: Application for Permit Modification, Lease Amendment, Utah  
Fuel Company, Skyline Mine, ACT/007/005, #2 and #3, Carbon  
County, Utah

Enclosed please find one (1) copy of Utah Fuel Company's application for a permit modification for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by March 28, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
Enclosures  
0341R-41

**FILE COPY**



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March 12, 1986

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

Dear Mr. Geer:

RE: Application for Permit Modification, Lease Amendment, Utah Fuel Company, Skyline Mine, ACT/007/005, #2 and #3, Carbon County, Utah

Enclosed please find one (1) copy of Utah Fuel Company's application for a permit modification for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by March 28, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
Enclosures  
0341R-40

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 12, 1986

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

Dear Mr. Klein:

RE: Application for Permit Modification, Lease Amendment, Utah  
Fuel Company, Skyline Mine, ACT/007/005, #2 and #3, Carbon  
County, Utah

Enclosed please find eight (8) copies of Utah Fuel Company's application for a permit modification for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by March 28, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btt  
Enclosures  
0341R-39

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 26, 1986

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

Dear Mr. Klein:

RE: Response to DOC, Skyline Mine, Lease Modification,  
ACT/007/005-1, Folder No. 2 and 3, Carbon County, Utah

Enclosed are eight (8) copies of the response to the Division's Determination of Completeness review of February 4, 1986 for the Lease Modification to the Skyline Mine.

The Division will review this information to see if the plan can now be determined complete and an appropriate publication notice filed. This review is scheduled to be completed by April 11, 1986. Please provide comments to myself or Susan Linner by that date if possible.

Sincerely,

A handwritten signature in cursive script that reads "L. P. Braxton".

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

SCL:jvb  
cc: S. Linner  
0028R-92

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 5, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
(P402 458 380)

Mr. Glen A. Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

**FILE COPY**

Dear Mr. Zumwalt:

RE: Revision of Condition #1, Removal and Disposal of  
Sediments from Sedimentation Pond, Utah Fuel Company,  
Skyline Mine, ACT/007/005, #3 and #4, Carbon County, Utah

The Division transmitted a conditional approval letter to Utah Fuel Company on January 15, 1986 which approved designs for diversion BC-12 at the Skyline minesite. A series of letters and joint discussions followed which resulted in the Division's commitment to revise Condition #1 of the January 15th approval.

Please refer to the attached technical memorandum prepared by Division hydrologist Rick Summers which outlines the revised Condition #1. The revised condition and the new calculations result in an adjustment to the previous channel lining requirements for diversion BC-12. The new condition and the requirement(s) outlined within, should resolve the main area of contention and reflect the understanding reached in our last joint meeting.

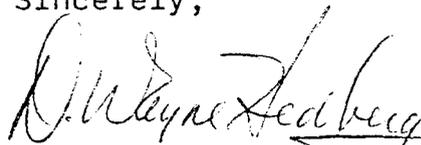
On May 2, 1986 we received your letter dated April 28, 1986 which indicated that Utah Fuel has already implemented the channel lining for diversion ditch BC-12. The condition as outlined in the attached technical memo requires that the ditch provide an adequate flow depth of at least (1) foot for the entire reach of the diversion. It is assumed that this condition now exists. This requirement will be field checked by the Division's inspection staff.

Page 2  
Mr. Glen A. Zumwalt  
ACT/007/005  
May 5, 1986

Please provide ten (10) additional copies of the complete set of plans and as-built drawings in a format which will allow direct insertion into the approved MRP's on file with the regulatory agencies.

Thank you for your cooperation and patience in resolving this permitting activity. Please contact me or Rick Summers should any questions or concerns remain.

Sincerely,



D. Wayne Hedberg  
Permit Supervisor  
Reclamation Hydrologist

dwh  
cc: Allen Klein  
Lowell Braxton  
Dave Lof  
Rick Summers  
Tom Wright  
8992R-48 & 49

April 21, 1986

TO: Technical File

FROM: Rick P. Summers, Reclamation Hydrologist 

RE: Revision of Condition #1, Removal and Disposal of Sediments from Sedimentation Pond, Utah Fuel Co., Skyline Mine, ACT/007/005, Folder 3 and 4, Carbon, Co. Utah.

Summary

The Division approved the designs for diversion BC-12 with one condition in the letter to Glen Zumwalt dated January 15, 1986. This condition essentially requires 4 inch riprap to be placed in the diversion. Following discussions with Keith Zobel and Keith Welch at the Division offices on March 14, 1986, it was agreed that the railroad ballast material available at the site could be used for riprap of the channel. They informed me the material was 2 inch plus and I responded that I would complete the diversion design and revise the condition.

Recommendations

Analysis of the proposed 2 inch riprap indicate that the riprap is adequate for the expected flow velocities (4.01 fps) resulting from a 50 yr - 24 hr event. Since the regulations only require a 10 yr. -24 hr. design, the diversion is over designed and should be approved (see attached technical memo for calculations and rationale). I recommend that we revise the condition referenced above as follows:

Condition #1 (revised). The applicant must commit to installation of a channel lining of two (2) inch material in diversion BC-12 prior to July 15, 1986. The diversion must be riprapped to provide for a depth of flow of 1.0 ft. for the entire reach.

cc: L. Braxton  
S. Linner  
D. Lof

6000R-2

42-381 50 SHEETS 5 SQUARE  
42-382 100 SHEETS 5 SQUARE  
42-383 100 SHEETS 5 SQUARE  
NATIONAL

Project. Skyline Mine, Division BC-12.

Date: April 18, 1984

Reviewer. Rick Summers, Hydrologist

The calculations of memo dated 12-23-85 need revision due to agreement by SM to riprap BC-12 with 2"-3" riprap (railroad ballast) (Robell & Welch agreement, 50 min office, 3-14-86 p.m.).

Assumptions.

Area.	2.7 ac
Hyd. Length	1320'
Slope	5.68%
CN	90
Tc (min)	11.7 min (.1951 hrs)
10yr - 24hr ppt.	2.4"
100yr - 24hr ppt.	3.6"

Results

10yr - 24 hr peak	3.7 cfs
50yr - 24 hr peak	5.44 cfs
100yr - 24 hr peak	6.32 cfs.

Design

Design for 50yr event (agreed by Robell & Welch 3-14-86).

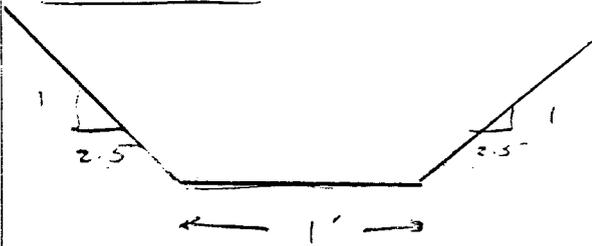
Assume

1) Trapezoidal channel, 1 ft bottom width, 25:1 sideslopes

2) Two sections: 25% and 3.8% slope.

Results - next page.

Results:



Assume:  $n = 0.035$   
 $Q = 5.44 \text{ cfs}$

For 2.5% section:

Depth = 0.62 ft.

Area = 1.58 ft<sup>2</sup>

Wet Perimeter = 4.34 ft.

Velocity = 3.44 fps

For 3.5% section

Depth = 0.56 ft.

Area = 1.36 ft<sup>2</sup>

Wet Perimeter = 4.23 ft.

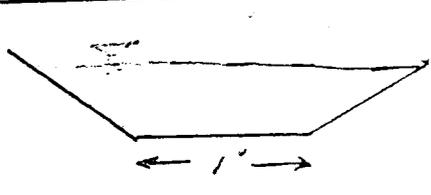
Velocity = 4.01 fps

Riprap sizing:

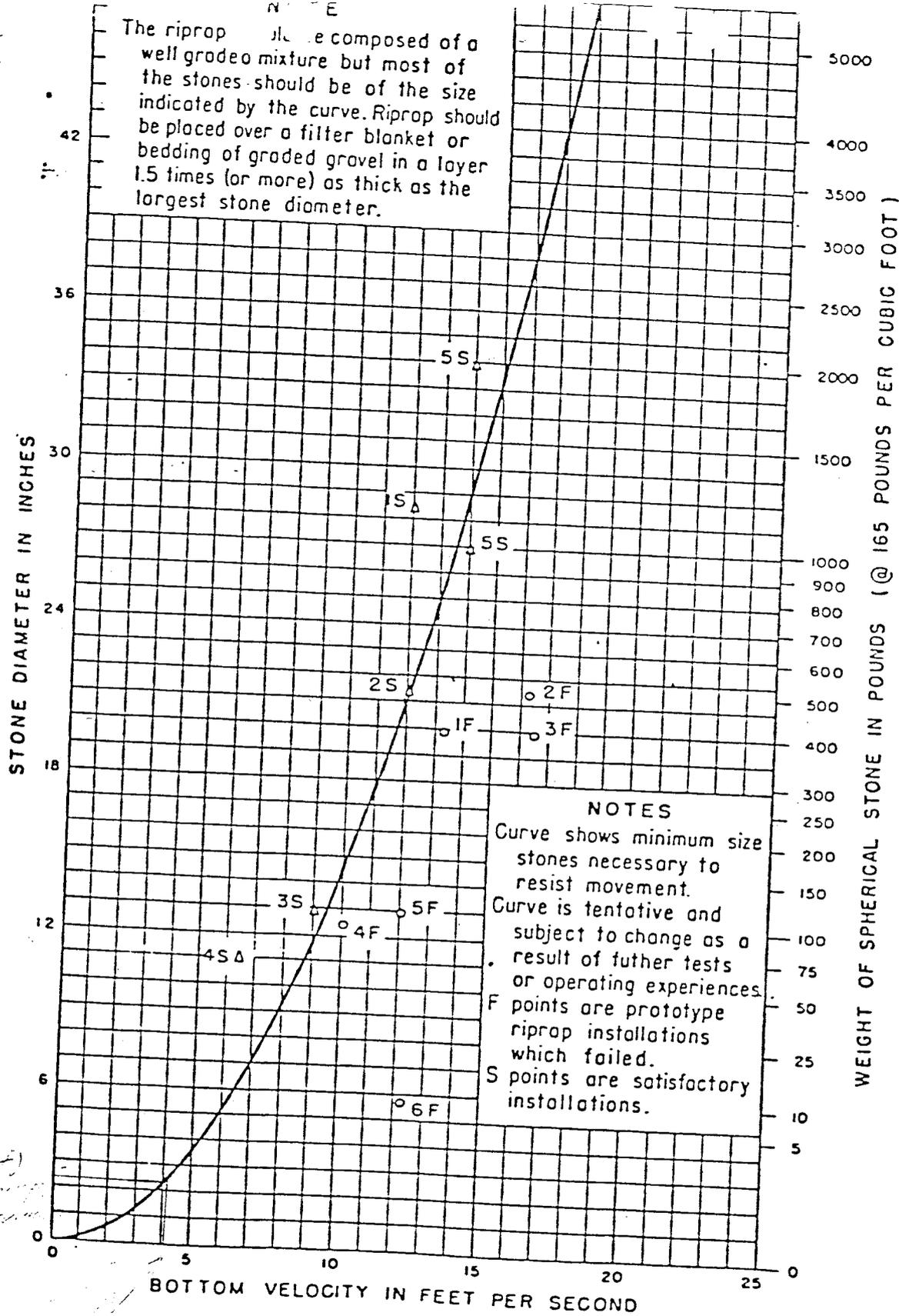
see attached sheet

2" riprap adequate.

Final design



0.92' depth, 1 ft. (w/ free board)



**NOTE**  
 The riprap should be composed of a well graded mixture but most of the stones should be of the size indicated by the curve. Riprap should be placed over a filter blanket or bedding of graded gravel in a layer 1.5 times (or more) as thick as the largest stone diameter.

**NOTES**  
 Curve shows minimum size stones necessary to resist movement.  
 Curve is tentative and subject to change as a result of further tests or operating experiences.  
 F points are prototype riprap installations which failed.  
 S points are satisfactory installations.

Curve to determine maximum stone size in riprap mixture

*Handwritten signature and date:*  
 [Signature]  
 4-20-50



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 5, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
(P402 458 380)

Mr. Glen A. Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

**FILE COPY**

Dear Mr. Zumwalt:

RE: Revision of Condition #1, Removal and Disposal of  
Sediments from Sedimentation Pond, Utah Fuel Company,  
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Please refer to the attached technical memorandum prepared by Division hydrologist Rick Summers which outlines the revised Condition #1. The revised condition and the new calculations result in an adjustment to the previous channel lining requirements for diversion BC-12. The new condition and the requirement(s) outlined within, should resolve the main area of contention and reflect the understanding reached in our last joint meeting.

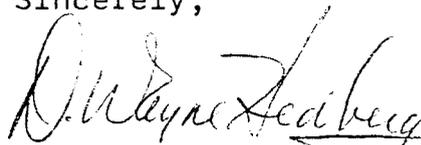
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Page 2  
Mr. Glen A. Zumwalt  
ACT/007/005  
May 5, 1986

Please provide ten (10) additional copies of the complete set of plans and as-built drawings in a format which will allow direct insertion into the approved MRP's on file with the regulatory agencies.

Thank you for your cooperation and patience in resolving this permitting activity. Please contact me or Rick Summers should any questions or concerns remain.

Sincerely,



D. Wayne Hedberg  
Permit Supervisor  
Reclamation Hydrologist

dwh  
cc: Allen Klein  
Lowell Braxton  
Dave Lof  
Rick Summers  
Tom Wright  
8992R-48 & 49

April 21, 1986

TO: Technical File

FROM: Rick P. Summers, Reclamation Hydrologist 

RE: Revision of Condition #1, Removal and Disposal of Sediments from Sedimentation Pond, Utah Fuel Co., Skyline Mine, ACT/007/005, Folder 3 and 4, Carbon, Co. Utah.

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cc: L. Braxton  
S. Linner  
D. Lof

6000R-2

Project. Skyline Mine, Division BC-12.

Date: April 18, 1984

Reviewer. Rick Summers, Hydrologist

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Assumptions

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Hyd. Length	1320'
Slope	5.68%
CN	90
Tc (min)	11.7 min (.1951 hrs)
10yr - 24 hr ppt.	2.4"
100yr - 24 hr ppt.	3.6"

Results

10yr - 24 hr peak	3.7 cfs
50yr - 24 hr peak	5.44 cfs
100yr - 24 hr peak	6.32 cfs.

Design

Design for 50yr event (agreed by Russell & Welch 3-14-86).

Assume

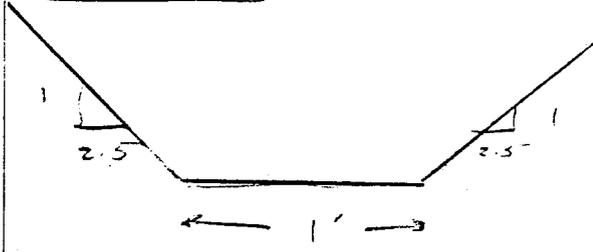
1) Trap - goidal channel, 1 ft. bottom width, 25:1 sideslopes

2) Two sections: 25% and 3.8% slope.

Results. - next page.

42,381 50 SHEETS 5 SQUARE  
42,382 100 SHEETS 5 SQUARE  
42,383 200 SHEETS 5 SQUARE  
NATIONAL

Results:



Assume:  $n = 0.035$   
 $Q = 5.44$  cfs.

For 2.5% section:

Depth = 0.62 ft.

Area = 1.58 ft<sup>2</sup>

Wet Perimeter = 4.34 ft.

Velocity = 3.44 fps

For 3.5% section

Depth = 0.56 ft.

Area = 1.36 ft<sup>2</sup>

Wet Perimeter = 4.03 ft.

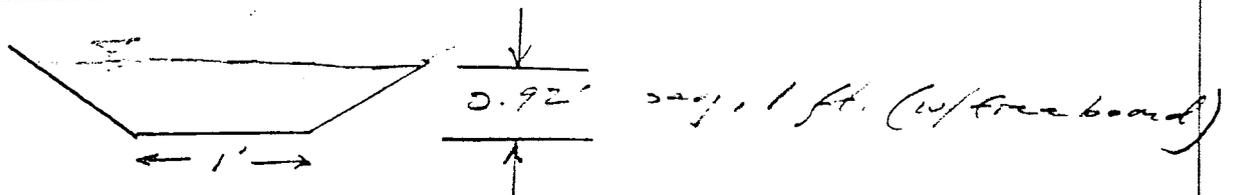
Velocity = 4.01 fps

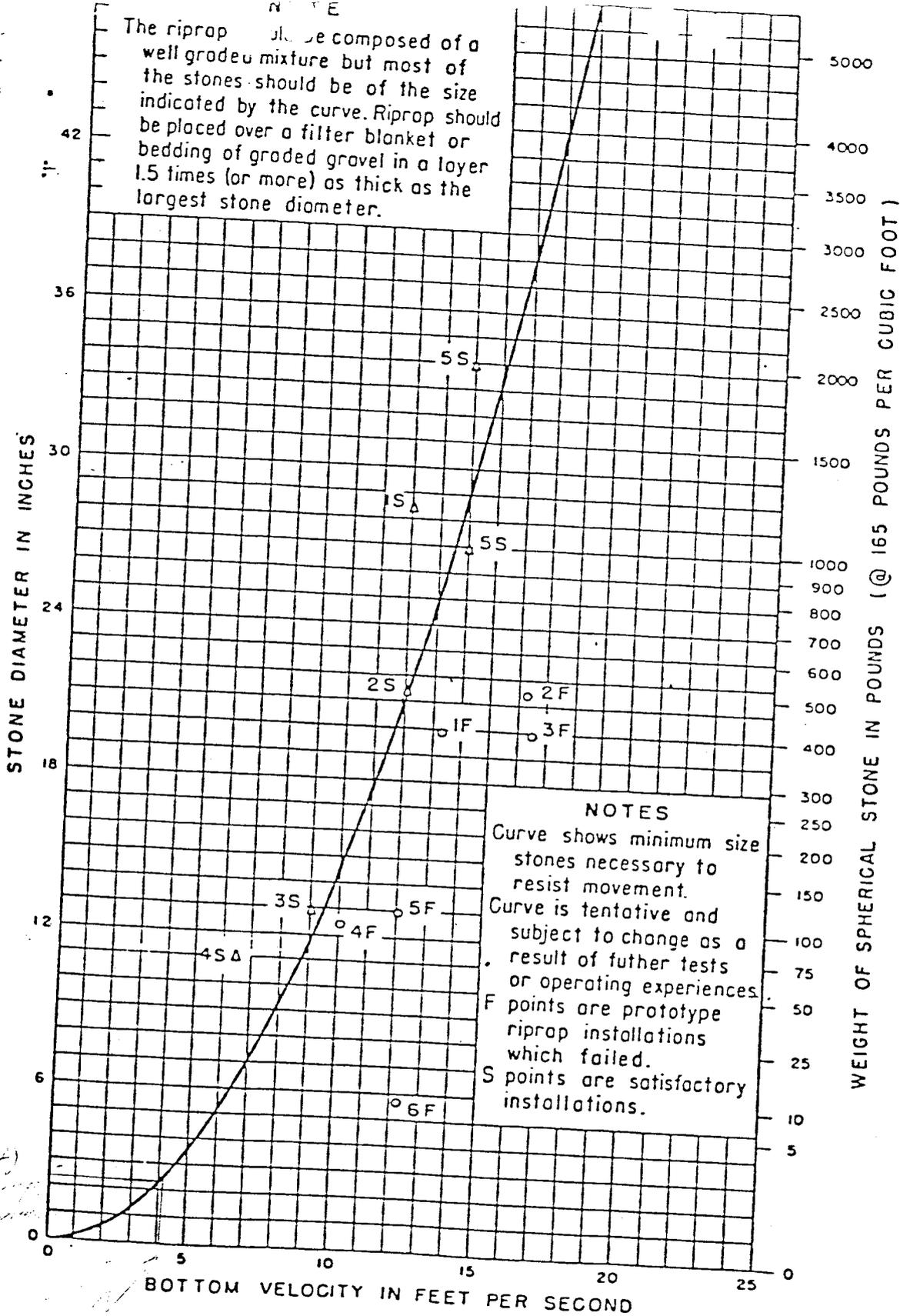
Riprap sizing:

see attached chart:

2" riprap adequate.

Final design:





Curve to determine maximum stone size in riprap mixture

*Handwritten signature and date:*  
 H. J. ...  
 4-2-56



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 28, 1986

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

Dear Mr. Klein:

RE: MRP Amendment, Request to Revise Approved Subsidence  
Monitoring Plan, Skyline Mine, Utah Fuel Company,  
ACT/007/005-86B, #3, Carbon County, Utah.

Enclosed are seven (7) copies of Utah Fuel Company's plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by June 12, 1986. The Division anticipates completing its review by this date.

If you have questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh:djh  
cc: Susan Linner  
0341R-15



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 28, 1986

Mr. Reed Christiansen  
U.S. Forest Service  
350 East Main Street  
Price, Utah 84501

Dear Mr. Christiansen:

RE: MRP Amendment, Request to Revise Approved Subsidence  
Monitoring Plan, Skyline Mine, Utah Fuel Company,  
ACT/007/005-86B, #3, Carbon County, Utah.

Enclosed are two (2) copies of Utah Fuel Company's plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by June 12, 1986. The Division anticipates completing its review by this date.

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Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh:djh.  
cc: Susan Linner  
0341R-16



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 28, 1986

Leon Berggren, Area Manager  
Bureau of Land Management  
900 North 700 East  
P. O. Box AB  
Price, Utah 84501

Dear Mr. Berggren:

RE: MRP Amendment, Request to Revise Approved Subsidence  
Monitoring Plan, Skyline Mine, Utah Fuel Company,  
ACT/007/005-86B, #3, Carbon County, Utah.

Enclosed are two (2) copies of Utah Fuel Company's plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by June 12, 1986. The Division anticipates completing its review by this date.

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Sincerely,

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D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh:djh  
cc: Susan Linner  
0341R-17



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 28, 1986

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U.S. Forest Service  
350 East Main Street  
Price, Utah 84501

Dear Mr. Christiansen:

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If you have questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg". The signature is written in dark ink and is positioned above the printed name and title.

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh:djh.  
cc: Susan Linner  
0341R-16



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
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Sincerely,

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D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh:djh  
cc: Susan Linner  
0341R-17



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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May 28, 1986

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Office of Surface Mining  
Brooks Towers  
1020 Fifteenth Street  
Denver, Colorado 80202

FILE COPY

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Monitoring Plan, Skyline Mine, Utah Fuel Company,  
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If you have questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh:djh  
cc: Susan Linner  
0341R-15



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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Dianne R. Nielson, Ph.D., Division Director

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

July 28, 1986

Mr. Glen A. Zumwalt  
Vice President/General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

Re: MRP Amendment, Underground Mine Plan Modification, Skyline Mine, ACT/007/005, Folder No. 3 & 4, Carbon County, Utah

The Division has reviewed Skyline's proposal (December 28, 1986) for a minor mine plan modification along l right l west to avert unfavorable roof and rib conditions.

We find that these minor underground changes should not cause any adverse impacts, and have no further comments or concerns. Please accept our apologies for the delay in providing our response. Thank you for keeping our office informed of changing conditions and mine status.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

DWD:jvb  
cc: L. P. Braxton  
D. Darby  
S. Linner  
0005R-38



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

Norman H. Bangerter, Governor  
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Dianne R. Nielson, Ph.D., Division Director

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

August 5, 1986

Dennis Dalley, Assistant Director  
Utah Department of Health  
Division of Environmental Health  
P. O. Box 45500  
Salt Lake City, Utah 84145-0500

Dear Mr. Dalley:

RE: MRP Amendment, Addition of Stoker Coal Circuit, Utah Fuel Company, Skyline Mine, ACT/007/005, File #3, Carbon County, Utah

Enclosed are two (2) copies of Utah Fuel Company's preliminary plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by August 12, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or David Wham, Reclamation Hydrologist, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

Enclosure(s)  
djh  
cc: D. Wham  
0341R-73



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

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Dear Mr. Klein:

RE: MRP Amendment, Addition of Stoker Coal Circuit, Utah Fuel Company, Skyline Mine, ACT/007/005, File #3, Carbon County, Utah

Enclosed are eight (8) copies of Utah Fuel Company's preliminary plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by August 12, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or David Wham, Reclamation Hydrologist, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

Enclosure(s)  
djh  
cc: D. Wham  
0341R-74



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 9, 1986

Mr. Glen A. Zumwalt  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

FILE COPY

*Glen*  
Dear Mr. Zumwalt:

Re: Approval to Suspend Annual Vegetation Monitoring Skyline Mine,  
ACT/007/005, Folder No. 3 & 4, Carbon County, Utah

The Division has reviewed your August 7, 1986 letter requesting that the annual vegetation monitoring be suspended and that a "study plan" (test plot program) be developed to determine the type of revegetation to be under taken for non-vegetated areas. The Division is in agreement with this proposal and will look forward to reviewing the proposed study plan to be submitted by October 1, 1986.

The plan to install a fiber blanket in the North Fork emergency overflow channel is also approved. As discussed between Mr. Keith Zobell of Utah Fuel Company and Lynn Kunzler of the Division, the approved interim seed mix will be used for the necessary seeding inconjunction with installation of the fiber blanket.

The Division appreciates your concern and willingness to address these reclamation concerns.

Sincerely,

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

LK:jvb  
cc: S. Linner  
D. Lof  
0028R-49



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 9, 1986

Mr. Keith Zobell  
Environmental Engineer  
Utah Fuel Company  
P.O. Box 719  
Helper, Utah 84526

Dear Mr. Zobell:

Re: Approval of MRP Amendment, Subsidence Monitoring, Skyline Mine, Utah Fuel Company, ACT/007/005-(86B), Folder #3, 4 and 10, Carbon County, Utah

The Division has completed a review of U.S. Fuels Company's May 12, 1986 proposal to develop and implement a new subsidence monitoring program using the photogrammetric method.

Your proposal is technically complete and satisfactory. The Division hereby grants its approval to implement the program. We have no further questions at this time and apologise for the unforeseen delay in responding to your request.

Sincerely.

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: R. Christensen  
A. Klein  
L. Braxton  
D. Darby  
0873R-24



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

October 28, 1986

Mr. Marv Maxell, Assistant Director  
Utah Department of Health  
Division of Environmental Health  
P.O. Box 16700  
Salt Lake City, Utah 84116-0700

Dear Mr. Maxell:

Re: MRP Amendment, Minor Change to Permanent Open Coal Storage  
Area, Utah Fuel Company, Skyline Mine, ACT/007/005-86E,  
Folder #3, Carbon County, Utah

Enclosed is one (1) copy of Utah Fuel Company's preliminary plans for a MRP Amendment for the Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by November 10, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
Enclosure(s)  
cc: S. Linner  
0341R-35



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

October 28, 1986

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

Dear Mr. Klein:

Re: MRP Amendment, Minor Change to Permanent Open Coal Storage Area, Utah Fuel Company, Skyline Mine, ACT/007/005-86E, Folder #3, Carbon County, Utah

Enclosed are eight (8) copies of Utah Fuel Company's preliminary plans for a MRP Amendment for the Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by November 10, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
Enclosure(s)  
cc: S. Linner  
0341R-34



STATE OF UTAH  
 NATURAL RESOURCES  
 Oil, Gas & Mining

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

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

ACT/007/005-D  
 # 3

October 28, 1986

**FILE COPY**

Mr. Glen A. Zumwalt  
 Vice-President/General Manager  
 Utah Fuel Company  
 P.O. Box 719  
 Helper, Utah 84526

Dear Mr. Zumwalt:

Re: Follow-up Request for Additional Copies of As-built Designs,  
 Conditional Approval of Sedimentation Pond Cleanout Proposal,  
 Utah Fuel Company, Skyline Mine, ACT/007/005-D, Folder #3,  
 Carbon County, Utah

On May 5, 1986 the Division transmitted a certified letter to you which revised Condition #1 of the approved plans as referenced above. Our letter requested an additional ten (10) copies of the finalized plans and as-built drawings in a format to allow direct insertion into the approved MRP's on file with the regulatory agencies. A recent review of our records failed to locate a response to this request.

Recently, Utah Fuel Company provided the Division with revised five-year permit applications. Technical staff hydrologists have performed a preliminary review of the new applications and were not able to locate any of the requested information in the revised MRP. The Division will attempt to resolve this issue as part of the ongoing review of the updated five year permit applications.

Please contact me or Rick Summers of the permitting staff should you have questions or need additional information.

Sincerely,

D. Wayne Hedberg  
 Permit Supervisor/  
 Reclamation Hydrologist

jvb  
 cc: Lowell Braxton      Dave Lof  
      Sue Linner         Rick Summers  
 8992R-93



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

February 4, 1986

Mr. Vernal J. Mortensen  
Vice President Utah Operations  
Coastal States Energy Company  
411 West 7200 South, Suite 200  
Midvale, Utah 84047

Dear Mr. Mortensen:

Re: Determination of Completeness, Lease Modification, Skyline Mine,  
ACT/007/005, Folder No. 2 and 3, Carbon County, Utah

The Division has reviewed the submittal received January 13, 1986, proposing to modify the permit area for the Skyline Mine to accommodate an amendment to Lease U-0142235. The submittal has been found to be incomplete.

Attached is a review document which details the information which Coastal States Energy Company must provide to make the plan complete. Please feel free to contact me or Susan Linner should you have questions.

Sincerely,

*L. P. Braxton*

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

SCL:jvb  
Enclosure  
cc: R. Holbrook  
S. Linner  
R. Summers  
0028R-65

Determination of Completeness Review  
Lease Modification  
Skyline Mine  
ACT/007/005  
Carbon County, Utah

February 4, 1986

UMC 783.13 Description of Hydrology and Geology: General Requirements and  
UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance - RS, DD

Existing baseline data for seeps, springs, and streams in the new lease and adjacent area (i.e. Winter Quarters Canyon) should be presented (or referenced) and the hydrologic connection between any aquifers and springs in the lease area should be established. A description of the probable hydrologic effects relative to the mining of the new lease based upon that data should be included. Based upon the data and geologic description to be submitted, additional baseline data may be required.

The applicant shall describe the attitude of the formation in the vicinity of lease area U-0142235.

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance - RS, DD

- (b)(2) A narrative should be submitted describing any anticipated production of increased mine water and plans for treatment of that water (UMC 817.42).
- (b)(3) Existing water monitoring points in the area should be presented. The monitoring plan should be updated to include all (or representative) springs and streams in the area of projected subsidence, potentially impacted water sources based on the dip and geologic description of the area, and water sources in the area which have baseline data collected. Proposed monitoring point 004 should reference to a specific spring (the map of springs simply shows the point near "numerous seeps & springs from 0.1 to 5 gpm"). All proposed monitoring should be in accordance with the attached guidelines.

- (c) Data submitted in the application indicates that stream flow still occurs on the area in September. This information suggests that the stream might be a perennial stream instead of an intermittent stream as shown in the mine plan. If the stream is perennial the applicant will be required to adhere to regulation UMC 817.126.

UMC 784.20 Subsidence Control Plan - DD

- (b) The applicant shall submit a subsidence monitoring plan that indicates results of pre-subsidence surveys and methods for monitoring the impacts from subsidence.

0028R-66



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 12, 1986

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

Dear Mr. Klein:

RE: Application for Permit Modification, Lease Amendment, Utah  
Fuel Company, Skyline Mine, ACT/007/005, #2 and #3, Carbon  
County, Utah

Enclosed please find eight (8) copies of Utah Fuel Company's application for a permit modification for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by March 28, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
Enclosures  
0341R-39

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 12, 1986

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

Dear Mr. Geer:

RE: Application for Permit Modification, Lease Amendment, Utah Fuel Company, Skyline Mine, ACT/007/005, #2 and #3, Carbon County, Utah

Enclosed please find one (1) copy of Utah Fuel Company's application for a permit modification for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by March 28, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
Enclosures  
0341R-40

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 12, 1986

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

Dear Mr. Smith:

RE: Application for Permit Modification, Lease Amendment, Utah  
Fuel Company, Skyline Mine, ACT/007/005, #2 and #3, Carbon  
County, Utah

Enclosed please find one (1) copy of Utah Fuel Company's application for a permit modification for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by March 28, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
Enclosures  
0341R-41

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 26, 1986

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

Dear Mr. Klein:

RE: Response to DOC, Skyline Mine, Lease Modification,  
ACT/007/005-1, Folder No. 2 and 3, Carbon County, Utah

Enclosed are eight (8) copies of the response to the Division's Determination of Completeness review of February 4, 1986 for the Lease Modification to the Skyline Mine.

The Division will review this information to see if the plan can now be determined complete and an appropriate publication notice filed. This review is scheduled to be completed by April 11, 1986. Please provide comments to myself or Susan Linner by that date if possible.

Sincerely,

A handwritten signature in cursive script that reads "L. P. Braxton".

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

SCL:jvb  
cc: S. Linner  
0028R-92

**FILE COPY**



STATE OF UTAH  
 NATURAL RESOURCES  
 Oil, Gas & Mining

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

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

#3

April 18, 1986

Mr. Keith Welch  
 Coastal States Energy Company  
 411 West 7200 South  
 Midvale, Utah 84047

**FILE COPY**

Dear Mr. Welch:

Re: Determination of Completeness Review Response, Skyline Mine, Lease Modification, ACT/007/005-1, Carbon County, Utah

The Division has reviewed the submittal, dated March 12, 1986, responding to the February 4, 1986 Determination of Completeness review. The submittal only partially responds to the Division's concerns and cannot be considered complete enough to allow preparation of a technical analysis or a Cumulative Hydrologic Impact Assessment (CHIA).

As you are aware, UMC 788.12 requires that "any extensions to the approved permit area, except for Incidental Boundary Changes, must be processed and approved through application for a new permit and may not be approved under this section" (emphasis added). The Division Policy for Mining and Reclamation Plan Content Requirements for Lease Amendments to Coal Permits, dated November 19, 1985, (copy enclosed) states "the proposed permit application should stand on its own, i.e., contain all necessary information to fully describe and support all activities and impacts directly associated with mining the additional lease area". Additionally, the policy states that "For those items which will not be impacted or changed by the additional lease area, the permit application may refer back to an approved MRP by referencing the chapter and page number or section" (emphasis added), and "...the lease application) will be considered a new permit and as such each regulation must be addressed.....some by reference...". The two submittals received to date do not meet those criteria.

At this time Utah Fuel Company must make a diligent effort to compile (including references to the existing MRP by volume and page) a complete permit application that can stand on its own. Specifically the applicant must address the following regulations, which have been determined to be applicable to the new lease proposal.

Page 2  
Mr. Keith Welch  
ACT/007/005-1  
April 18, 1986

783.13-Description of Hydrology and Geology  
783.14-Geology Description  
783.15-Groundwater Description  
783.16-Surface water description  
783.17-Alternative water supply information.  
784.14-Protection of Hydrologic Balance  
784.20-Subsidence Control Plan  
786.19(c)-Probable cumulative hydrologic impacts  
817.46 and 50-Sediment ponds and Underground entry discharges  
(applicable only if analysis indicates an expected significant  
increase in mine water)  
817.123-.126-Subsidence Control

The attached specific review comments should be addressed within  
the context of the appropriate regulations.

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

Sincerely,



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

SCL:jvb  
cc: A. Klein  
K. May  
S. Linner  
B Team  
0753R-1

Determination of Completeness Review  
Lease Modification  
Skyline Mine  
ACT/007/005-1  
Carbon County, Utah

- 1-RS Page 6, January 13, 1986 submittal. The applicant must commit to conducting all proposed new monitoring (i.e. station S11-1) according to the recently adopted water quality monitoring guidelines prepared by the Division. Additionally, the applicant must commit to a date when monitoring will commence.
- 2-RS The monitoring plan for the proposed lease area must be developed more specifically. An adequate monitoring plan can only be developed following a determination of the existing geologic conditions at the site. The information requested in the Divisions February 4th, 1986 letter (additionally reiterated in this document) concerning the geologic structure, strike and dip of the affected formations, and projected subsidence area must be completed and included in the rationale used to determine representative monitoring locations. The applicant must propose monitoring locations based upon this information. Following the determination of the above information, the Division will be available to assist in the selection of representative sampling points. Additionally, all sources of water with an associated water right in the area of projected subsidence must be included in the plan.
- 3-RS Response to DOGM comment 784.14(b)(3), March 10, 1986 submittal from Skyline. The applicant must compile and submit all data collected in the lease and adjacent areas. This should include baseline data collected for the original MRP submittal (referencing by specific volume, page and/or plate is acceptable) and all data collected since the submittal of the original MRP. The applicant must summarize this data, draw conclusions based upon that summary, and include a discussion addressing the requirements of UMC 783.15, 783.16, and 784.14 (c).
- 4-RS Response to DOGM comment 784.14(b)(2), March 10, 1986 submittal from Skyline. The applicant has not clearly answered the question. Chart 1 depicts the past correlation between the mine water produced and the production of coal in tons/month. The analysis needs to be taken a step further and the applicant must discuss

what conclusions can be extrapolated from the data and how the inclusion of the new lease will affect the mine water produced (i.e. production per month versus expected mine water discharged). The sedimentation system at the minesite is currently operating near full capacity and is not designed to handle significant amounts of expected mine water.

- 5-RS Attachment A, March 10, 1986 submittal, paragraph 2. A copy of Ground Water in Eccles Canyon (Roy P. Full) was not included in the submittal. The Division requests that this report be submitted.
- 6-DD List the type of mining that will take place on the new lease and all coal seams to be mined and the thickness of each coal seam. Provide an isopach map of the overburden and portray each geologic unit down to and including the formation below the lowest coal seam to be mined. If mining will occur in the same seams currently mined, provide specific references to where this information can be found in the approved MRP.
- 7-DD Identify all aquifers on and adjacent to the lease area and establish their association to springs and streams. Evaluate groundwater flow patterns.
- 8-DD Determine potential subsidence impacts showing areas, structures and renewable resources in the zone of subsidence and evaluate potential effects to those features.

0753R

(November 1985)

POLICY DECISION  
(COAL MINING AND RECLAMATION PLANS)

RE: Content Requirements for Mining and Reclamation Plans Which Add Additional Lease Areas to an Existing Approved Permit and Do Not Have Associated Additional Surface Disturbance and Facilities

For those permit applications which add additional lease areas to an approved Mining and Reclamation Plan (MRP) and do not have any additional disturbed surface area or facilities, the following requirements apply to the content of the proposed permit application.

1. The proposed permit application should stand on its own, i.e., contain all necessary information to fully describe and support all activities and impacts directly associated with mining the additional lease area.

Examples would include designs and justification for:

- A. mine water treatment facilities;
  - B. coal refuse and noncoal development waste disposal areas;
  - C. coal stockpile storage areas and loadout facilities;
  - D. changes to transportation facilities necessitated by the mining of the lease addition;
  - E. other changes to surface facilities necessitated by the lease addition;
  - F. subsidence related items such as springs and seeps, raptor nests, etc.;
  - G. probable hydrologic consequences.
2. For those items which will not be impacted or changed by the additional lease area, the permit application may refer back to an approved MRP by referencing the chapter and page number or section. Examples of items which can be referred to may include, but are not limited to:
    - A. sediment control structures;
    - B. signs and markers associated with the original permitted disturbed area;
    - C. baseline environmental data.

The intent of this policy is to avoid duplicating large amounts of information, maps and plans from an existing approved MRP into a permit application when not pertinent to the review at hand.

However, it should be noted that the lease addition in most cases will be considered a new permit and as such each regulation must be addressed (albeit, some by reference to an approved permanent program MRP).

0432R

FILE COPY

April 16, 1986

TO: Technical File

FROM: Rick P. Summers, Reclamation Hydrologist *RS*

RE: Utah Fuel Co., Skyline Mine, Determination of  
Completness Review Responses-Lease Modification,  
ACT/007/005, Folder No. 3, Carbon Co., Utah

Summary: The above referenced submittal, dated March 12, 1986 was reviewed for adequacy of response to the Division's letter of February 4, 1986. The response consisted of a partial response to the Division's concerns and cannot be considered complete enough at this time to prepare a technical analysis and CHIA findings document.

Final rule ammendments for UMC 700.5 and UMC 788.12, dated January 16, 1986 require that "any extensions to the approved permit area, except for Incidental Boundary Changes, must be processed and approved through application for a new permit and may not be approved under this section" (emphasis added).

The Division Policy for Mining and Reclamation Plan Content Requirements for Lease Ammendments to Coal Permits, dated November 19, 1985, states "the proposed permit application should stand on its own, i.e., contain all necessary information to fully describe and suport all activities and impacts directly associated with mining the additional lease area". Additionally, the policy states that "For those items which will not be impacted or changed by the additional lease area, the permit application may refer back to an approved MRP by referencing the chapter and page number or section" (emphasis added), and "...(the lease application) will be considered a new permit and as such each regulation must be addressed.....some by reference...".

The two submittals recieved to date do not meet those criteria.

Recommendations: The applicant must make a diligent effort to compile (including references to the existing MRP by volume and page) a complete permit application that can stand on its own. Specific concerns with the applicant's submittals to date are as follows:

1. Page 6, January 13, 1986 submittal. The applicant must commit to conducting all proposed new monitoring (i.e. station S11-1) according to the recently adopted water quality monitoring guidelines prepared by the Division. Additionally, the applicant must commit to a date when monitoring will commence.
2. The monitoring plan for the proposed lease area must be developed more specifically. An adequate monitoring plan can only be developed following a determination of the existing geologic conditions at the site. The information requested in the Divisions February 4th, 1986 letter (additionally reiterated in this document) concerning the geologic structure, strike and dip of the affected formations, and projected subsidence area must be completed and included in the rationale used to determine representative monitoring locations. The applicant must propose monitoring locations based upon this information. Following the determination of the above information, the Division will be available to assist in the selection of representative sampling points. Additionally, all sources of water with an associated water right in the area of projected subsidence must be included in the plan.
3. Response to DOGM comment 784.14(b)(3), March 10, 1986 submittal from Skyline. The applicant must compile and submit all data collected in the lease and adjacent areas. This data is to include baseline data collected for the original MRP submittal (referencing by specific volume, page and/or plate is acceptable) and all data collected since the submittal of the original MRP. The applicant must summarize this data, drawn conclusions based upon that summary, and include a discussion addressing the requirements of UMC 783.15, 783.16, and 784.14 (c).
4. Response to DOGM comment 784.14(b)(2), March 10, 1986 submittal from Skyline. The applicant has not clearly answered the question. Chart 1 depicts the past correlation between the mine water produced and the production of coal in tons/month. The analysis needs to be taken a step further and the applicant must discuss what conclusions can be extrapolated from the data and

Page 3  
Memo to File  
ACT/007/005  
April 16, 1986

how the inclusion of the new lease will affect the mine water produced (i.e. production per month verses expected mine water discharged). The sedimentation system at the minesite is currently operating near full capacity and is not designed to handle significant amounts of expected minewater.

5. Attachment A, March 10, 1986 submittal, paragraph 2. A copy of Ground Water in Eccles Canyon (Roy P. Full) was not included in the submittal. The Division requests that this report be submitted.

In conclusion (and for the applicant's reference), the following hydrology related regulations have been determined to be applicable to the New Lease proposal and must be addressed. It is suggested that the applicant address each subsection of each regulation in sequential order to expedite and facilitate a prompt review and approval. The information submitted to date should be incorporated into this final package.

783.13-Description of Hydrology and Geology  
783.14-Geology Description  
783.15-Groundwater Description  
783.16-Surface water description  
783.17-Alt. water supply information.  
784.14-Protection of Hydrologic Balance  
786.19(c)-Probable hydrologic cumulative impacts  
817.46 and 50-Sediment ponds and Underground entry discharges (applicable only if analysis indicates an expected significant increase in mine water)

cc: L. Braxton  
D. Cline  
D. Darby  
S. Linner

0317R-82

April 16, 1986

To: Technical File

From: David W. Darby *DWD*

RE: U.S. Fuel Co., Skyline Mine, Determination of Completeness Review Response, Lease Modification, ACT/007/005, Folder No. 3, Carbon Co., Utah

Summary: The geologic, hydrologic and subsidence aspects of Skyline's lease modification response dated March 12, 1986 has been reviewed for adequacy. More detail is requested to ascertain the hydrologic connection between ground water aquifers and springs in and adjacent to the lease area and the potential impacts subsidence will have on springs, streams and aquifers.

The technical information requested should be provided as a separate review submittal that can stand alone in describing the hydrologic and geologic parameters of the lease area.

Recommendations: The applicant should evaluate the geologic structure and stratigraphy with respect to mining activities and relate potential subsidence effects to the surrounding hydrologic regime. The applicant should provide maps, data and references of geologic and hydrologic submittals to substantiate responses.

Specific concerns are as follows:

- 1). List the type of mining that will take place on the new lease.
- 2). List all coal seams to be mined and the thickness of each coal seam. Provide an isopach map of the overburden and portray each geologic unit down to and including the formation below the lowest coal seam to be mined (including litho facies changes).
- 3). Evaluate the structure of the lease area showing all faults, folds and the attitude of each formation.
- 4). Establish all aquifers on and adjacent to the lease area and their hydrologic association to springs and streams.
- 5). Evaluate groundwater flow patterns

**FILE COPY**

6). Establish potential subsidence impacts showing areas, structures and renewable resources in the zone of subsidence and evaluate potential effects to those features.

The following regulations have been determined to be applicable to the lease proposal.

- 783.13 Description of Hydrology and Geology
- 783.14 Description of Geology
- 783.15 Groundwater Description
- 784.14 Protection of Hydrologic Balance
- 786.19 Probable Cumulative Hydrologic Impacts
- 784.20 Subsidence Control Plan
- 817.123-126 Subsidence Control

cc: S. Linner  
0005R-16

bcc

April 21, 1986

TO: Technical File

FROM: Rick P. Summers, Reclamation Hydrologist *RS*

RE: Revision of Condition #1, Removal and Disposal of Sediments from Sedimentation Pond, Utah Fuel Co., Skyline Mine, ACT/007/005, Folder 3 and 4, Carbon, Co. Utah.

Summary

The Division approved the designs for diversion BC-12 with one condition in the letter to Glen Zumwalt dated January 15, 1986. This condition essentially requires 4 inch riprap to be placed in the diversion. Following discussions with Keith Zobel and Keith Welch at the Division offices on March 14, 1986, it was agreed that the railroad ballast material available at the site could be used for riprap of the channel. They informed me the material was 2 inch plus and I responded that I would complete the diversion design and revise the condition.

Recommendations

Analysis of the proposed 2 inch riprap indicate that the riprap is adequate for the expected flow velocities (4.01 fps) resulting from a 50 yr - 24 hr event. Since the regulations only require a 10 yr. -24 hr. design, the diversion is oversized and should be approved (see attached technical memo for calculations and rationale). I recommend that we revise the condition referenced above as follows:

Condition #1 (revised). The applicant must commit to installation of a channel lining of two (2) inch material in diversion BC-12 prior to July 15, 1986. The diversion must be riprapped to provide for a depth of flow of 1.0 ft. for the entire reach.

cc: L. Braxton  
S. Linner  
D. Lof

6000R-2

**FILE COPY**

Project: Skyline Mine, Division BC-12.

Date: April 18, 1984

Reviewer: Rick Summers, Hydrologist

The calculations of memo dated 12-23-85 need revision due to agreement by SM to riprap BC-12 with 2"-3" riprap (railroad ballast) (Robell & Welch agreement, DOGM offices, 3-14-86 p.m.).

Assumptions:

Area.	2.7 ac.
Hyd. Length	1320'
Slope	5.68%
CN	90
Tc (min)	11.7 min (.1961 hrs)
10yr - 24hr ppt.	2.4"
100yr - 24hr ppt.	3.6"

Results Analysis of the proposed 2 inch diameter indicates that

10yr - 24 hr peak	3.7 cfs
50yr - 24 hr peak	5.44 cfs.
100yr - 24 hr peak	6.32 cfs.

Design

Design for 50yr event (agreed by Robell & Welch 3-14-86).

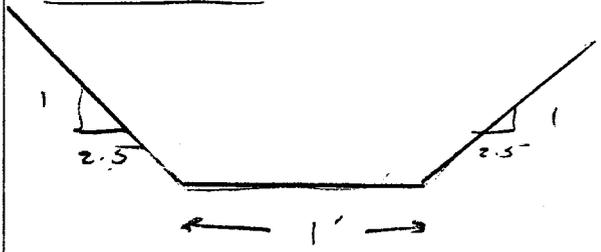
Assume:

1) Trapezoidal channel, 1 ft. bottom width, 2.5:1 sideslopes.

2) Two sections: 2.5% and 3.8% slope.

Results. next page.

Results:



Assume:  $n = 0.035$   
 $Q = 5.44 \text{ cfs}$

For 2.5% section:

- Depth = 0.62 ft.
- Area = 1.58 ft<sup>2</sup>
- Wet Perimeter = 4.34 ft.
- Velocity = 3.44 fps

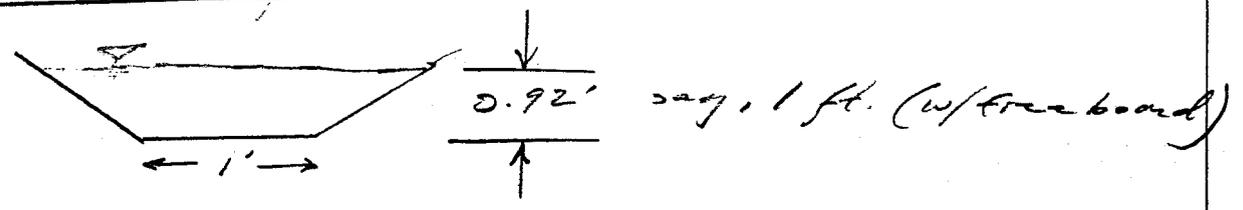
For 3.8% section

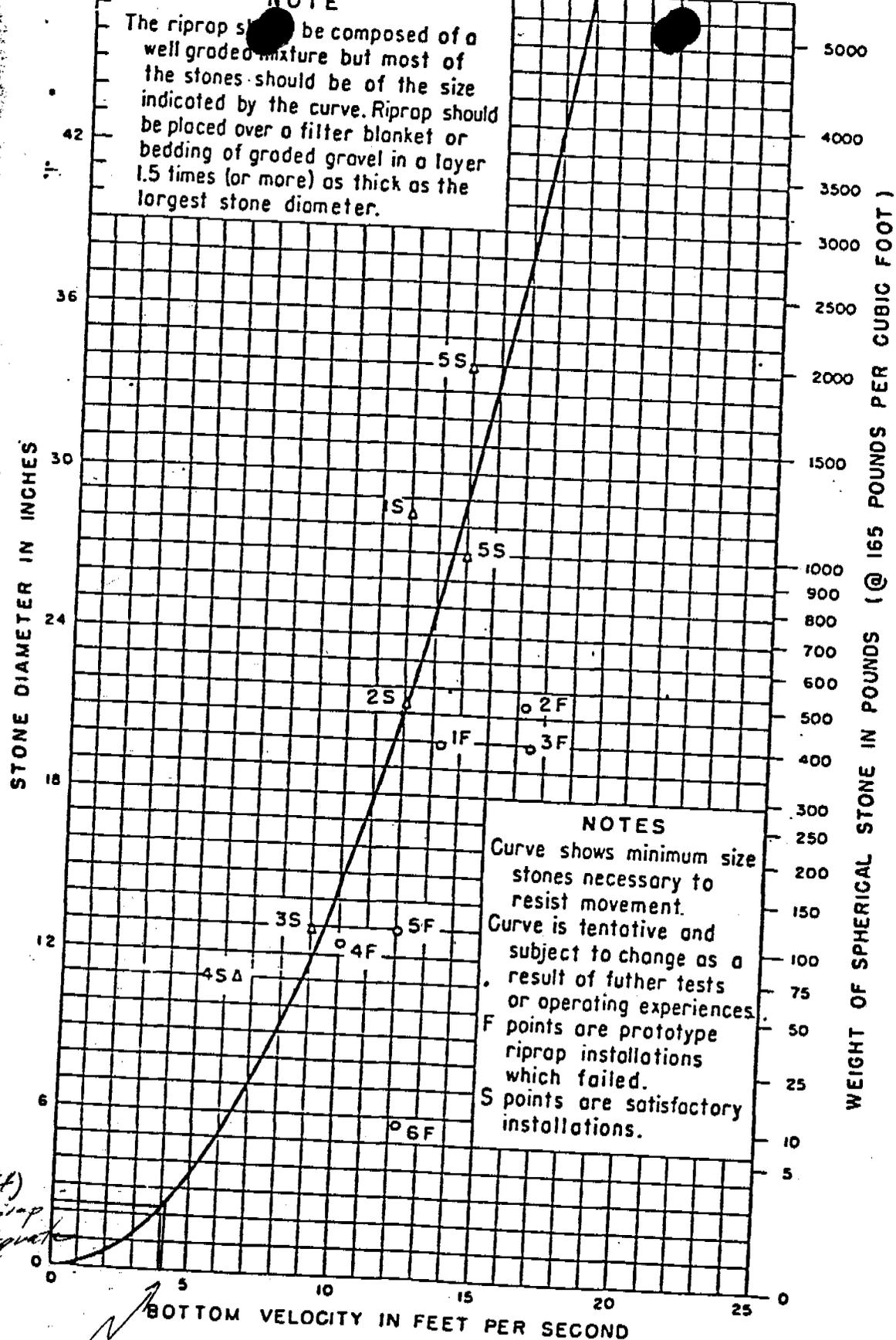
- Depth = 0.56 ft.
- Area = 1.36 ft<sup>2</sup>
- Wet Perimeter = 4.03 ft.
- Velocity = 4.01 fps

Riprap sizing:

see attached chart:  
 2" riprap adequate.

Gravel sizing:





2.2(A)  
 riprap  
 adequate

4.01 cfs  
 max. velocity

Curve to determine maximum stone size in riprap mixture

*Kylene Minie*  
 4-21-86



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 6, 1986

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

Dear Mr. Klein:

RE: MRP Amendment, Request to Amend Aquatic Monitoring Plan,  
Utah Fuel Company, Skyline Mine, ACT/007/005, Carbon County, Utah

Enclosed, please find eight (8) copies of Utah Fuel Company's plans for MRP Amendment, request to Amend Aquatic Monitoring Plan, for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by May 22, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

jvb  
cc: S. Linner  
0141R-29

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

May 7, 1986

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

Dear Mr. Dalley:

Re: MRP Amendment, Request to Amend Aquatic Monitoring Plan,  
Utah Fuel Company, Skyline Mine, ACT/007/005, Carbon County, Utah

Enclosed, please find two (2) copies of Utah Fuel Company's plans for MRP Amendment, request to Amend Aquatic Monitoring Plan, for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files. Should your office wish to provide comments, please do so (or call us directly) by May 22, 1986. The Division anticipates completing its review by this date.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

jvb  
cc: S. Linner  
0141R-30

**FILE COPY**



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 11, 1986

Mr. Robert L. Morgan  
State Engineer  
Division of Water Rights  
1636 West North Temple  
Salt Lake City, Utah 84116

Dear Mr. Morgan:

Re: Five Year Mine Plan Submittal Coastal States, Skyline Mine, ACT/007/005, Folder No. 2, Carbon County, Utah

Enclosed please find one (1) copy of the Five Year Mine Plan Submittal, Coastal States, Skyline Mine, ACT/007/005, Carbon County, Utah. This information is being forwarded for review by the Dam Safety and Water Rights sections of your office in accordance with our Divisions' Memorandum of Understanding (MOU).

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

B. Mine Plan Review:

1. Upon submission of a mining and reclamation plan to DOGM, the DOGM will forward a copy of the mining and reclamation plan to Dam Safety. If information additional to that contained in the operator's submission is required, Dam Safety is responsible for contacting the operator to obtain such information. Copies of such requests and also copies of the company's submittal in response to the request will be submitted to DOGM.
2. Within 30 days of receipt of the mining and reclamation plan, Dam Safety shall contact DOGM with their final response to the agency's proposed action on the operator's application.

Page 2

Mr. Robert L. Morgan, State Engineer  
September 11, 1986

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. The Division is attempting to complete its review of these plans by November 11, 1986. If your agency has any comments on these plans please forward them by the above date. If you have any questions, please contact myself or Susan C. Linner of my staff.

Sincerely,



Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

JL:jvb  
Enclosure  
0095R



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 11, 1986

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

Dear Mr. Geer:

Re: Five Year Mine Plan Submittal Coastal States, Skyline Mine, ACT/007/005, Folder No. 2, Carbon County, Utah

Enclosed please find one (1) copy of the Five Year Mine Plan Submittal, Coastal States, Skyline Mine, ACT/007/005, Carbon County, Utah. This information is being 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 2

Mr. William H. Geer, Director  
September 11, 1986

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. The Division is attempting to complete its review of these plans by November 11, 1986. If your agency has any comments on these plans please forward them by the above date. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,



Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

JL:jvb  
Enclosure  
0095R



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 11, 1986

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

Dear Mr. Smith:

Re: Five Year Mine Plan Submittal Coastal States, Skyline Mine, ACT/007/005, Folder No. 2, Carbon County, Utah

Enclosed please find one (1) copy of the Five Year Mine Plan Submittal, Coastal States, Skyline Mine, ACT/007/005, Carbon County, Utah. This information is being 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.

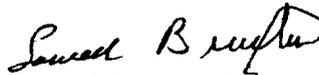
Page 2

Mr. Melvin T. Smith  
September 11, 1986

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. The Division is attempting to complete its review of these plans by November 11, 1986. If your agency has any comments on these plans please forward them by the above date. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,



Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

JL:jvb  
Enclosure  
0095R



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 11, 1986

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

Dear Mr. Alkema:

Re: Five Year Mine Plan Submittal Coastal States, Skyline Mine, ACT/007/005, Folder No. 2, Carbon County, Utah

Enclosed please find one (1) copy of the Five Year Mine Plan Submittal, Coastal States, Skyline Mine, ACT/007/005, Carbon County, Utah. This information is being forwarded for review by the Division of Environmental Health of your office.

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

B. Mine Plan Review.

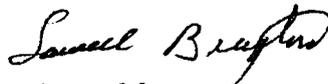
1. Upon submission of a mining and reclamation plan to DOGM, the DOGM, shall, in consultation with DOH, review the operator's list of licenses, permits or approvals to determine whether or not approvals from DOH have been issued.
2. If any permits or approvals from the DOH have not been issued, the DOGM will submit to the DOH those parts of the permit application containing matters within the DOH's jurisdiction or interest for review and response and inform the operator in writing that he must contact DOH for the appropriate permits and approvals.
3. If additional information is required by DOH for any permit or approval, the DOH shall contact the operator for such information. Copies of any such requests and the operator's response to such request shall be forwarded by DOH to DOGM.

Page 2  
Mr. Kenneth Alkema  
September 11, 1986

4. Within two weeks of receipt by DOGM of the mining operator's submission and any additional information requested, each DOH bureau shall contact the DOGM with preliminary written notification of the status of any outstanding permits or approvals. If DOH determines to reject the operator's permit application or has any major problems with the operator's mine plan, the DOGM may convene a conference between the state agencies and the operator as soon as possible.
5. The DOH will make every effort to have their response to the mine plan and any other DOH permits and approvals finally completed within 60 days of the DOH receipt for the operator's complete application for DOH permits and approvals.

The Division appreciates your cooperation and asks that all comments and communications, regarding the mining and reclamation plan review, be channeled through this office to allow a single set of stipulations and requirements to be sent to the operator. The Division is attempting to complete its review of these plans by November 11, 1986. If your agency has any comments on these plans please forward them by the above date. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,



Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

JL:jvb  
Enclosure  
0095R



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 11, 1986

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

Dear Mr. Klein:

Re: Five Year Mine Plan Submittal Coastal States, Skyline  
Mine, ACT/007/005, Folder No. 2, Carbon County, Utah

Enclosed please find seven (7) copies of the Five Year Mine Plan Submittal, Coastal States, Skyline Mine, ACT/007/005, Carbon County, Utah. This information is being forwarded for your information.

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. The Division is attempting to complete its review of these plans by November 11, 1986. If you have any comments on these plans please forward them by the above date. If you have any questions, please contact me or Susan C. Linner of my staff.

Sincerely,

A handwritten signature in cursive script that reads "Lowell Braxton".

Lowell Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

jvb  
Enclosure  
0095R



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

November 18, 1986

Mr. Vernal J. Mortensen  
Vice President, Utah Operations  
Coastal States Energy  
175 East 400 South, Suite 800  
Salt Lake City, Utah 84526

Dear Mr. Mortensen:

Re: Utah Fuel Company, Skyline Mine, ACT/007/005, Carbon County, Utah

Enclosed is an Initial Completeness Review of Utah Fuels Skyline Mine five-year permit renewal package. Deficiencies noted in this review fall in three broad categories:

- (a) Information that must be incorporated into the plan prior to approval (legal financial clarification, references to baseline studies, clarification of disturbed acreages, etc.).
- (b) Information required to update the existing permit application prior to approval (current compliance information, etc.).
- (c) Specific technical data (e.g., classification of roads supported by requisite design information, etc.).

Upon approval, the new mine plan will completely supercede the plan presently in existence. On this basis all resource information, consultants' reports, baseline information, must be incorporated into or appended to the new plan.

Page 2  
Mr. Vernal J. Mortensen  
ACT/007/005  
November 18, 1986

A complete response to the enclosed deficiencies to the Division of Oil, Gas and Mining by January 15, 1987 will allow our review prior to the April 30, 1987 expiration date for the existing permit. Should additional information be required, please advise.

Sincerely,



Lowell P. Braxton  
Administrator  
Mineral Resources Development  
and Reclamation Program

jvb  
Enclosures  
cc: Glen Zumwalt w/enclosures  
Keith Zobell  
Ken May  
S. Linner  
0799R-53

Initial Completeness Review

Permit Renewal  
Utah Fuel Company  
Skyline Mine  
ACT/007/005  
Carbon County, Utah

November 18, 1986

GENERAL COMMENTS - DL

1. "Part 1 - Legal, Financial Compliance Information", should be reformatted to follow and address the information requirements of UMC 782 in the same order as each pertinent regulation.
2. Through a cursory review it appears that many of the Maps/Figures throughout the PAP do not include or indicate the entire permit area but just the coal lease area.

UMC 782.13 Identification of Interests - DL/SCL

Map 1-1 entitled, "Coal and Surface Ownership Permit and Adjacent Area" (pg 1-11) is too small of scale and is illegible.

The applicant must provide complete information regarding the Scofield Waste Rock Disposal Site pertinent to UMC 782.13.

- (a)(2) The applicant must provide clear information in the text and on Map 1-1 which states who the legal or equitable owner(s) of record of the surface area to be affected by surface operations and facilities is.
- (a)(4) The applicant must state whether, or not, there are any purchasers of record under a real estate contract of affected surfaces areas or coal to be mined.
- (b)(3) The applicant must clearly state whether, or not, Skyline Coal Company has previously operated underground or surface coal mining activities in the United States within the five years preceding the date of application.

On Page 1-4 the applicant states that Coastal States Energy Company currently owns a mine operated by Southern Utah Fuel Company. However, it does not

state whether, or not, this is the only coal mining activity in the U. S., within the five years preceding the date of application, which Coastal States Energy Company has operated.

- (c) The applicant must provide the information required by this regulation for all owners and purchasers included in the applicants response to comments regarding UMC 782.13(a)(2) and (4).
- (d) The applicant states on page 1-8 of the PAP that two mining permits are currently held by the applicant. The applicant must also state whether, or not, the applicant held any previous coal mining permits in the United States subsequent to 1970 and if any other coal mining permits are pending.
- (e) Phelps-Dodge, Kemmerer Coal Company and Utah Power and Light Company are all shown on Map 1-1 as being owners of record of surface areas contiguous to the proposed permit area. However, on page 1-16 of the PAP they are not listed as contiguous surface land owners. The applicant must clarify whether, or not, the above are in fact contiguous land owners, and if so include their names and addresses in the text.

Looking at Map 1-1 it is difficult to determine who the surface and subsurface owners are contiguous to the eastern most projection of the permit area in the SE 1/4, Section 17, Township 13 South, Range 7 East. The applicant must provide information in the text and Map 1-1 regarding ownership of the above mentioned parcel.

Kaiser Steel is shown on Map 1-1 as being the owner of record of mineral acreage contiguous to the proposed permit area. However, on pages 1-16, 17 of the PAP they are not listed as contiguous mineral acreage owners. The applicant must clarify whether, or not, Kaiser Steel is a contiguous subsurface landowner, and if so include their name and address in the text.

The applicant must state in the text and on Map 1-1 who the owners of record are of the three parcels of land designated on Map 1-1 as "ROW Easement-Skyline Property."

- (g) The applicant should indicate interest in the contiguous 120 acre lease, since an application has been made with the Bureau of Land Management.

On page 1-18 of the PAP the applicant states that some 836.57 acres of minerals (less oil and gas), which are contiguous to the permit area, were deeded to the applicant by Kaiser Steel Corporation on April 9, 1980. Is the acreage referred to on this page, those identified on Map 1-1 as "Utah Fuel Company" in Section 12, Township 13 South, Range 6 East and Sections 18 & 17, Township 13 South, Range 6 East? If this is true why aren't these acreages identified as Coastal States Energy - Coal instead? The applicant must clarify in the text and Map 1-1 the subsurface ownership of the parcels in question.

UMC 782.14 Compliance Information - SCL

- (c) The applicant must provide all information required by this section for violations received within the last three years prior to submittal of the application.

UMC 782.15 Right of Entry and Operations Information - DL

- (a) The applicant must provide clear and complete documentation of their legal right to enter and begin underground mining activities in the permit area, including the Scofield Waste Rock Disposal Site; i.e. U. S. Forest Service Special Use Permits, complete documentation of the subleasing and/or assignment of coal leases to the applicant, documentation of right-of-ways or easements indicated on Map 1-1, etc.

UMC 782.17 Permit Term Information - DL

The applicant should submit mine development maps for the permit term in order to help explain information required for this section.

- (a) In Section 1.10.3 of the permit it states that the "total acreage to be disturbed by underground mining during the life of the entire mining operation is 47.6 acres." This statement is inaccurate, a more accurate statement would be 47.6 acres is the number of acres disturbed for the mines surface facilities. The prior statement inferred that the affected area would be 47.6 acres.

The operator must explain how the figure "1,295.59 acres" of affected area for the first five years is derived. The acreage given is confusing since Mine No. 1 will cover 1,128.47 acres, Mine No. 3 will cover 755.13 acres and there will be 46.32 acres disturbed for surface facilities.

According to current Division records the applicant is bonded for 75.8 acres of disturbance. The PAP states that the total surface disturbance for the life of the project will be 47.6 acres. Please explain the discrepancy between these two figures.

UMC 782.18 Personal Injury and Property Damage Insurance Information- DL

The applicant must provide the required information.

UMC 782.19 Identification of Other Licenses and Permits - DL

- (b) The applicant must provide addresses for all issuing authorities.
- (c) The applicant must provide the identification numbers for all the permits and licenses.

UMC 782.21 Newspaper Advertisement and Proof of Publication - DL

The applicants announcement must include the applicants business address.

The applicants proposed announcement only describes the legal boundaries of the lease area. The applicants announcement must provide a legal description of the entire permit area, which should include at a minimum the lease area, conveyor corridor, loadout facilities, and Scofield Waste Rock Disposal Site.

The announcement must include information regarding mining within 100 feet of the outside right-of-way of a public road, as per UMC 786.11(a)(5).

UMC 783.12 General Environmental Resources Information - SCL

- (b) The applicant must reference the archaeological survey (Vol. A-4) and the sign-off received from the State Historic Preservation Officer to make this section complete.

UMC 783.12 General Environmental Resource Information - JRH

All resource information, consultant's reports, base line information and information referenced in this section as well as in all sections of the MRP shall be included as appendices to this MRP. The previously approved plan will no longer remain valid upon approval of the new 5-year permit thus all pertinent information required for the new permit must be contained within the new plan.

UMC 783.13 Description of the Hydrology and Geology - DD

The operator shall provide a complete description of the hydrology. Describe the effects mining will have on the springs in Huntington Canyon, flow in Huntington Creek, regional and perched aquifers and increased flow to Eccles Creek.

UMC 783.14 Geologic Description - DD

The operator shall submit logs of drill holes showing the lithology of the strata.

UMC 783.15 Ground Water Information - DD

The operator shall discuss the depth below the surface and the horizontal extent of the water tables and aquifers, the lithology of the aquifers, the use of the water in aquifers and the quality of subsurface waters.

The operator will be required to describe the quantity of water on the permit area that discharges into Huntington Creek.

UMC 783.16 Surface Water Information - DC

The operator must submit a summary of all surface water quality data that has been collected to date. The summary must include minimum, maximum, and average discharge conditions which identify critical low flows and peak discharge rates for all surface water monitoring stations. The summary must also contain information to identify the characteristics of surface waters sufficient to identify seasonal variations of total dissolved solids, total suspended solids, acidity, pH, total and dissolved iron, and total manganese at all surface water stations.

The operator must include a discussion of any discharge from abandoned portals in and adjacent to the permit area. Specifically, this discussion should include Winter Quarters Canyon, Green Canyon, Blowout Canyon, Upper Huntington Canyon, and any other known portal discharge in the area.

Tables 2.4-1 and 2.4-2 must state what years this summary was derived from. Additionally, any tables or summaries prepared from the information listed above, should include what years the summaries are derived from.

Discussions of surface water quality in Chapter 2.4 of the Mining and Reclamation Plan must be referenced if water quality parameters are quantified. This chapter includes numerous water quality quantification without being referenced. The methodology and calculations used by the Pacific Southwest Inter-Agency Committee to determine the sediment yield at the Skyline project area must be presented for review.

The operator must submit a summary of the rainfall/snowfall at the Boardinghouse Peak weather station and any rainfall/snowfall data collected at the minesite. Additionally, the average annual precipitation values presented on page 2-122 must be referenced.

UMC 783.17 Alternative Water Supply Information - RS

The applicant should update the water rights discussion to include information current to the submittal date.

UMC 783.18 Climatological Information - LK

The data from the NOAA weather station located at the mine site should be summarized and presented in the application (in the baseline data volume suggested under UMC 783.19).

UMC 783.19 Vegetation Information - LK

The application does not include sufficient data on total vegetation cover and woody plant density. Data on cover by species, productivity, range condition, sample adequacy (including methodology on determination of standard deviation of sample size), similarity of predisturbed vegetation with reference areas and a list of species found in each vegetation type, including a negative determination for threatened and endangered plant species is located in volume A-5. Based on verbal communication with Mr. Keith Zobell, a letter is being prepared which indicates that volumes A-1 thru A-8 of the current permit contain the required baseline studies. This data needs to be incorporated into the mine plan by reference.

Map 2.7.1.1 (vegetation map) does not show the location of the sagebrush and riparian reference areas. The application must also discuss how each reference area is marked in the field.

The limits of surface disturbance should be shown on the vegetation map.

Adequate vegetation data, including a map which shows the location of the reference area for the Waste Rock Disposal Site is located in a submittal dated March 28, 1984. This data needs to be incorporated into the repermit application.

UMC 783.20 Fish and Wildlife Information - LK

The application should include and reference the results of the big game migration studies conducted in Eccles Canyon. This could be included in the "baseline data" volume suggested under UMC 783.19.

UMC 783.21 - Soil Survey - JSL

This section is not complete. The applicant must include the updated order 1 and order 2 soil survey for all areas to be disturbed. The submitted soils map is not sufficient. A soils map for the load out area and the conveyor belt area must be submitted. All soil maps/surveys must be surveyed to a series level of

intensity, not the family level (see soils map). "Cryoboralls" must be changed to Cryoborolls on the soils map. The applicant may submit the referred to soil survey in Volume A-8. However, maps 3-100-C, 2-101-C through 2-109-C are illegible. Clear and concise soil maps must be submitted. The soil survey must also include the present and potential productivity and the moisture regime for each soil series.

UMC 783.24-25 Maps: General Requirements, Cross Sections, Maps, and Plans - JRH

Maps pertaining to the reclamation of the affected area are not clear in indicating the affected area boundaries, the number of acres affected, reclamation contours or finished grades, location and identification of specific reclamation treatments for corresponding areas, and do not provide reclamation treatments for the rock waste disposal facility and the loadout facility. Maps should be upgraded to include this information in order to make the plan clear and comprehensive as well as to determine the quantities required in determining the reclamation costs for bonding. This section is not considered complete.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 49.

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

The operator must submit cross-sections, maps and plans showing the location and extent of sub-surface water within and adjacent to the permit area, including the areal and vertical distribution of aquifers and a portrayal of seasonal differences in head in different aquifers.

UMC 783.25 Cross-Sections, Maps and Plans - DD

The operator shall submit geologic cross sections of the mine plan area indicating the attitudes of beds, location of coal seams, aquifers, faults and bore holes.

The operator shall submit maps showing known workings of active and inactive mines on and adjacent to the mine plan area.

UMC 784.13 Reclamation Plan: General Requirements - JRH

- (b)(3) No maps or cross sections are provided of the affected areas which are sufficient to determine the amount of earthwork which will be required during reclamation. The Operator shall provide adequate drawings in order to determine the location and disposition of excess spoils and mine development waste. The Operator shall provide contour maps and or cross sections indicating

the original surface contours, the surface configuration planned during mining operations and the proposed configuration of the surface upon completion of reclamation. These maps and cross sections shall be utilized in determining the amount of earthwork required during reclamation activities for the bond cost estimate.

No conceptual or planned post-reclamation contours for the rock waste disposal site or the loadout facilities area are found in the mining and reclamation plan. Those contour maps provided for the mine facilities area are not of sufficient scale to provide information for regrading of the area. This part of the mining and reclamation plan is not considered adequate.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 4.

UMC 784.13 Revegetation Plan - LK

- (b)(5) Clarification is needed in the plan to identify what has been done (contemporaneous reclamation) and what the proposed final revegetation plan is. A map showing where each final seed mix, seeding/planting method, mulching method, etc. will be used should be provided.

The operator is also requested to provide a map which identifies what areas have been seeded and correlate the map with the specific plans identified in the text.

- (ii) The seed mixes listed in Tables 4.7-1 through 4.7-3 and the seed mix for the waste disposal area are not acceptable in that they lack diversity and seeding/planting rates are too high for several species. As discussed with Mr. Keith Zobell on October 31, 1986, the attached seed mixes and rates would be acceptable.
- (iv) The applicant needs to provide the application rates for straw and hydromulch and provide plans for how it will be anchored to the soil.
- (v) Please clarify what constitutes lower precipitation or irregularities in distribution that would indicate irrigation is necessary. Also, since it appears that irrigation will be used only as part of a contingency plan, please note that DOGM approval of an irrigation plan must be obtained before it is implemented.

- (vi) The applicant needs to correlate the areas of revegetation with the specific reference area(s) that will be used to determine revegetation success. The applicant must also develop a monitoring plan for final reclamation. Also, the applicant must identify the success criteria for the waste rock disposal area.

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance - DC

- (c) The operator must include a discussion of the probable hydrologic consequences of the mining activities with respect to the quality of water in the surface and groundwater systems under all seasonal conditions, including the contents of total dissolved and suspended solids, total iron, pH, total manganese and oil and grease. Analysis of probable hydrologic consequences to surface and groundwater quantity should include changes in stream discharge (i.e. reduced flow due to runoff interception, increased flow due to discharge of mine water), reduced springflow, affects on seasonal timing of high and low flows, and groundwater depletion. Probable hydrologic consequences must be analyzed at the mine site, loadout area and the disposal area.

A discussion of the effects on the surface and groundwater systems due to encountering and discharging water made in the mine must be included.

- (b)(3) The operator has submitted a plan for reporting surface and ground water monitoring on pages 2-98 and 2-118. However, the operator must commit to submit an annual report that includes a summary of all water quality data for the previous year.

UMC 784.15 Postmining Land Use - LK

The applicant must provide written comments from the surface owner stating that the access road to the waste rock disposal area is needed for the post mining land use.

UMC 784.16 Reclamation Plan: Ponds, Impoundments, Banks, Dams, And Embankments - RPS

- (a)(1)(i) The general plan for the sedimentation ponds must be certified as required under this part.

- (a)(1)(ii) The cross-sections depicted on Plates 3.2.1-2 and 3.2.1-4 should be located on Plates 3.2.1-3 and 3.2.1-1. The cross-sections should depict the following elevations with numerical values: top of embankment, sediment storage volume, 10 year-24 hour runoff event volume, elevation of decant structures, primary and emergency spillway elevations, elevation of 25 year-24 hour (or larger) runoff event flow level, elevation of junction of spillway riser and barrel, and elevation of spillway outlet.

UMC 784.18 Relocation or Use of Public Roads - JRH

Forest Development Road 50227 passes through the mine site and was designated as a State Road (264) in the spring of 1986 as indicated in part 4.15 of the Operator's mining and reclamation plan.

The operator does not include a description of what measures will (are) to be used to protect the public interests as required under UMC 761.12(d).

The Operator has not included or referenced the approvals or use permits which are currently in effect.

The Operator has not provided a description or referenced the measures taken to minimize the impacts of conducting coal mining activities within 100 feet of the right-of-way.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 2.

UMC 784.19 Underground Development Waste - JRH

The Operator has not incorporated into the mining and reclamation plan, the detailed investigation and analysis that is required in the section that was previously submitted to the Division as the proposal to locate and install the rock waste disposal facilities at Scofield. That proposal and subsequent information required to obtain approval for the rock waste disposal site shall be incorporated into the mining and reclamation plan.

Coal spoils and coal waste materials have been deposited in the vicinity of the loadout facilities. The location, extent and plans for final disposition and reclamation of these materials shall also be incorporated into the mining and reclamation plan.

The Operator needs to incorporate into the plan, the location, disposition and reclamation treatments of mine waste materials including sediment pond cleanout materials, materials from cleanup of pads and ditches and other such mine waste materials that may be accumulated on the site.

- (a) The location and description of the rock waste disposal site is found on map 4.16.1-1B. The map does not indicate the location or the extent of the waste material to be placed at the disposal site. The map does not show the disturbed area boundaries nor the number of acres affected. The map does not show suitable cross sections or other information relating to the amount of cover material to be placed over the waste, the final slopes or configuration of the site or any of the pertinent information regarding operation or reclamation of the site. This section is not considered adequate.

Proper description and suitable maps and plans for underground mine development waste disposal must be incorporated into the mining and reclamation plan. The plan must include information regarding the design, installation, maintenance and reclamation of these facilities.

- (b) No geotechnical information or investigation of the rock waste disposal site is included in the mining and reclamation plan. The Operator must include this information for the waste rock disposal site and any other location of mine waste or mine development waste and this must be evaluated with regard to the geotechnical stability of the materials during mining operations and upon reclamation of the site.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 20.

UMC 784.19 Underground Development Waste - DC

The operator must submit information concerning the groundwater system at and in the vicinity of the underground development waste disposal area. Specifically, the operator must address the potential for leaching of toxic materials from the waste into the ground water system. Additionally, the operator must discuss the hydrologic connection, if any, between any ground water beneath the disposal area and Pleasant Valley Creek.

UMC 784.20 Subsidence Control Plan - DD

The operator shall indicate the existence and location of renewable resources.

The operator shall describe the measures to be taken to prevent subsidence from causing material damage to renewable resources.

The applicant shall describe how mining will be conducted to prevent damage from subsidence to perennial streams, roads and highways, springs and pipelines.

UMC 784.21 Fish and Wildlife Plan - LK

The application should include a copy of the U. S. Fish & Wildlife Service letter which documents raptor protection on power lines at the Skyline Mine.

The application does not include the name, address and position of persons consulted or responsible for the aquatic studies.

The application needs to provide a commitment to promptly report any threatened or endangered species (plant and animal) not previously reported which may be discovered within the permit area or adjacent areas.

UMC 784.24 Transportation Facilities - DC

The operator must submit a discussion and a map of the conveyor bench from the minesite to the loadout area. Specifically, this discussion must include drainage controls that have recently been placed on the bench area. A map showing the location of all water bars and berms must also be included.

TECHNICAL DEFICIENCIES

UMC 800 Bonding - JRH

The bond estimate provided by the operator is insufficient. The Operator must provide a detailed cost estimate with calculations for quantities, equipment selection, productivity and costs with references. A detailed map of the reclamation treatments to be implemented on the site, their location and extent is also needed for determination of the bond amount and for identification of the affected areas as required in Exhibit "A" of the bond.

Refer to the bonding guidelines attached to this review for specific requirements regarding bonding.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 63 AND GENERAL BONDING AND INSURANCE INFORMATION STARTING ON PAGE 66.

UMC 817.11 Signs and Markers - SCL

- (e) The application does not address stream buffer zone markers. These should be placed within the loadout area and permit area as required by UMC 817.57.

UMC 817.22 - Soil: Removal - JSL

In section 2.11, pg. 2-186 through 188, tables 2.11-1 and 2.11-2 various analytical errors have been identified. The volume of useable topsoil from the load out facility is 35,589 cyd, not 25,589 cyd. The conveyor route, mapping unit 2 useable topsoil equals 1694 cyd not 2258 cyd. Mapping unit 10 useable topsoil equals 2017 cyd not 1371 cyd. Mapping unit 13 useable topsoil equals 806 cyd not 80 cyd. The grand total volume of topsoil would now equal 131,742 cyd not 120,934. Please amend. Also include the basis for the determination for a poor soil.

UMC 817.24 - Soil: Redistribution - JSL

- (a) The applicant must elaborate on the "necessary measures" that will be used to ensure topsoil stability on graded slopes (see pg. 4-27).
- (b)(2) The applicant must commit to a minimum ripping depth of six inches.
- (b)(3) The period of time between topsoil redistribution and revegetation shall not be greater than 30 days, unless specific applicable soil stabilization techniques are committed to.

UMC 817.25 - Soil: Nutrients and Soil Amendments - JSL

The applicant must submit a detailed listing of all parameters to be analyzed for fertilization. The applicant must also include: (A) Data to support the fertilizer recommendation of 150 lb per acre of nitrogen, (B) Specific fertilizer distribution plan (i.e., broadcast, band, etc.), and (C) The equipment to be implemented for fertilizer distribution.

UMC 817.42 Hydrologic Balance: Water Quality Standards and Effluent Limitations - DC

The operator has delineated the areas that are exempt from UMC 817.42(a)(1) on Figure 3.2.1-3. However, the operator must submit additional information on each small area exemption. This information must include the volume of expected runoff from the design precipitation event, the alternative sediment control structure with a demonstration that the structure has potential to treat drainage to meet limitations, the location of the structure on a map, maintenance methods and schedule and a monitoring plan to demonstrate compliance with limitation standards.

UMC 817.43 Hydrology Balance: Diversions and Conveyance of Overland Flow, Shallow Ground Water Flow and Ephemeral Stream - DC

The operator has included a discussion of diversions in Chapter 3.2 and on Figures 3.2.1-1, 3.2.1-3 and 4.16.1-IB. However, the discussion presented in the Mining and Reclamation Plan is severely deficient in diversion design. The following comments must be addressed by the operator for approval of the diversions. These comments apply to all diversions in the permit area including the mine site, the loadout area, and the waste disposal area:

A map(s) of the area draining to each diversion must be submitted. The map(s) must depict the controls that delineate the areas (ie, berms, topographic, etc.), disturbed versus undisturbed areas, and location and label of each diversion. The map should be of a topographic scale that is sufficient to determine elevation change and hydraulic length;

A cross section for each diversion and each section of diversion that varies in configuration must be submitted;

Designs for each diversion must be submitted. Specifically, a peak flow for the design event for each diversion must be submitted. All input assumptions (ie, CN, precipitation watershed area etc.) and all calculations must be included. From the design discharge for each diversion the operator must calculate and present the design velocity and channel capacity. All diversions that will

experience erodible velocities at the design discharge must be lined and protected to prevent erosion. All channel lining designs must be submitted for review. These designs must include all input assumptions (i.e., Manning's n, area, slope etc.) and subsequent calculations for a stable channel lining.

The above comments apply to both undisturbed diversions around the minesite and disturbed diversions that report to treatment facilities.

#### UMC 817.44 Hydrologic Balance: Stream Channel Diversions - DC

The operator has included a discussion of diverting the three forks of Eccles Creek under the mine site area in Chapter 3.2. However, the discussion that is presented is deficient in the design of the diversions. The following comments must be addressed by the operator for approval of the diversions.

A map of the area draining to each culvert must be submitted. The map must depict the controls that delineate the areas, the location and label of each diversion, and delineate disturbed versus undisturbed areas. The map should be of a topographic scale that is sufficient to determine elevation change and hydraulic length.

Designs for each culvert must be submitted. Specifically, a peak flow for the design event with all input assumptions and calculations must be submitted. The operator must demonstrate that the culverts are capable of passing the design event runoff. From the design discharge the operator must calculate and present the exit velocities out of the culverts. If exit velocities are erodible, designs must be submitted for energy dissipators at the culvert outlets.

The operator has presented a discussion of the stream channel reclamation in chapter 4.19. The reclamation plans as proposed are not complete and cannot be considered adequate. The use of site specific runoff data for peak discharge determinations is encouraged by the Division, however, this information must be used in conjunction with the existing natural channel conditions to be effective. Additionally, the proposal to design the reclaimed channels with site specific runoff data must also meet the requirements of this regulation in regards to runoff events. Specifically, the regulations require that the channel be capable of passing the 100-yr, 24-hr. precipitation event runoff.

This regulation also requires that the reclaimed channel approximate the natural stream channel characteristics. These characteristics must include cross-sectional area, channel bed slope, pool-riffle ratio, pool-drop ratio, sinuosity ratio and channel roughness elements.

The operator must collect and submit information on the existing channel above and below the diversions. Such information must include the longitudinal profile of the existing channel, cross-sections of existing and proposed channel and flood plain, photo documentation of pre-existing channel, documentation of pre-existing critical habitat sections as determined in consultation with Division hydrologist and biologists, and upstream and downstream cross-sections and hydrologic parameters (Mannings inputs) to demonstrate equal channel capacity through the diverted reach. The operator must also demonstrate that the reclaimed channels will pass the design flow in an environmentally acceptable manner. This demonstration must include a backwater analysis for any channel sections steeper than ten percent, energy dissipators and channel stability and fish habitat and passage if any fish are present.

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - JRH

- (m) The loadout sediment pond does not meet the combined inslope and outslope criteria of 5:1. The Operator must provide justification for not achieving this criteria, request a variance from the Division and or modify the design of the pond to be in compliance with this section of the regulations.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 5.

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - RPS

The following deficiencies in the designs for the portal surface facilities sedimentation pond must be addressed:

1. Section 3.2.1 discusses general pond design considerations. The application states 31.1 acres contribute drainage to the pond and references plate 3.2.1-1 for the corresponding area. This plate should clearly depict the drainage boundary used to determine the 31.1 acres. Each drainage control that delineates this boundary (i.e. diversion, berm, swale, topographic control, etc.) must be clearly labeled and located on this plate. Of particular interest is the drop drain located to the south of the sediment pond on the shoulder of the State RDA road. Does this drain collect road drainage and discharge directly to the sedimentation pond? If so, this drainage must be accounted for in the pond design. If not, the map must clearly show the drainage control that prevents road drainage from discharging into the pond.
2. The application should address the requirement to include the accumulated sediment volume from the discharge of mine water for a one year period.

3. The application should contain a contour map of the sedimentation pond used to determine the available pond volume. A stage-volume curve including supporting calculations for the pond should be submitted.
4. The source for the the precipitation value(s) used in the design calculations should be cited.
5. Page 3-18 discusses the average inflow to the pond from mine water discharge. The applicant should submit data demonstrating the volume of water pumped from the mine. The Division considers the average mine water inflow discussed under UMC 817.46 (c) to be based upon the 24 hour or daily average. This decision is based upon the intent of the design criteria for sedimentation ponds. The pond design is based upon a 24 hour detention time. Clearly, when a 30 day average is used to design the pond, extreme values in that period could result in significantly deficient pond volume during any given 24 hour period. The worst case scenario could be a large volume of mine water pumped to the pond in a short period with little or no mine water pumped during the remainder of the 30 day period. The average inflow would still be within the 30 day average limit, but the pond would not have sufficient theoretical volume to treat a 10 year - 24 hour precipitation event.
6. The applicant discusses the correlation between mine water produced and mine production (Figure 4.11.4-A). The application should update this analysis to include data collected to date. This analysis should be projected to determine the increased mine water produced with expected mine production increases during this permit term. Plans for the treatment of this increased volume of water must be submitted. Additionally, inclusion of the actual data used for the analysis may aid the Division in the development of the CHIA document for the mine site.
7. The applicant must submit a monitoring and maintenance plan to be used to determine and control the maximum volume of water pumped to the sediment pond during a 24 hour period.
8. The application must submit design details for the spillway system. These include:
  - a. Peak flow determination(s) including referenced assumptions (including references): CN value(s), precipitation value(s), time of concentration calculation (reference inputs to appropriate map), storm distribution (the SCS type II should be used for this area), contributing drainage area).

- b. A stage-discharge curve must be included to demonstrate the requirements of UMC 817.46 (g) and (i). This curve must be supported by methods and calculations (including input values) used to determine curve. These include elevation of spillway crest, elevation of junction of riser and barrel, elevation of spillway outlet, maximum available water elevation (including free board), coefficient of pipe inlet, n-value for pipe or type of pipe, dimensions of all pipes (length), values of  $K_e$ ,  $K_f$ ,  $K_b$ . The proposal must include maximum expected mine water discharge in the design calculations.
9. The elevation of the decant device should be depicted. The application should demonstrate the decant system will have a discharge rate sufficient to meet the required detention time. If the pond is a total containment design, a commitment to only dewater the pond following a 24 hour detention time for all runoff events will be acceptable.
10. The applicant states the pond will be cleaned at the 60 percent level of the design sediment storage volume (section 4.13.1). The application should contain the method used to determine when this elevation is reached. Sediment volume markers in the pond and/or a commitment to survey the pond as deemed necessary will adequately address this regulation. The application briefly discusses the disposal method and location for sediments removed from the site in section 4.16.1. The application should describe this process in more detail (i.e. dewatering the sediments, control and monitoring of the bypass during pond dewatering, testing for toxic materials prior to disposal, etc.). Alternative disposal plans will be acceptable.
11. All plans and designs for the sediment ponds must be certified by a registered professional engineer. A certification statement that the ponds were constructed as proposed or certified drawings of the as-built structures must be submitted.
12. The postmining monitoring plans (related discussion in sections 4.11.2, 2.3.7, and 2.4.5) should incorporate a monitoring plan proposed to determine the quality of the drainage entering the sedimentation pond. The plan should include monitoring points, frequency of sampling, and a commitment to sample parameters required by State and Federal regulations at the time of reclamation.
13. The application must include a commitment for inspection of the pond according to UMC 817.46 (t).

The following deficiencies must be addressed for the loadout facility area sediment pond:

1. Plate 3.2.1-1 depicts the sediment pond and several drainage controls that delineate the drainage area for the pond. However, the hillslope drainage to the south of the site is unclear. The applicant should update this plate to include the drainage controls in this area. If this area drains to the pond, the calculations for the design sediment volume must include a predicted sediment volume from this area.
2. An error exists in the calculations on page 3-18. Surface runoff is estimated to be 5.10 inches. Please correct this typographical error.
3. The applicant should submit the contour map and/or calculations used to determine the stage-volume curve presented on Plate 3.2.1-4.
4. Elevations for the sediment storage volume, clean out level, and decant structure should be given in the application. Depicting these elevations on map 3.2.1-4 will adequately address this requirement.
5. Calculations for the runoff volume should include the curve number used in the determination.
6. Designs for the spillway system must be submitted. These include the following:
  - a. Calculation of design flow events. See item #8 discussed previously for required information.
  - b. The application states on P. 3-19 that a single pipe is used as the emergency and primary spillway system and this pipe will pass 30 cfs. The application must include sufficient information to demonstrate this statement. Typically, presentation of a stage-discharge curve (including calculations and assumptions) depicting the ability to pass the design events of UMC 817.46 (g) and (i) is submitted to demonstrate compliance with this regulation. See item #8 above for details. In addition to those items, the application must contain the diameter of the riser.
  - c. Map 3.2.1-1 should depict the elevation of the top of the spillway and the elevation of the design peak flow depth.

- d. The application should demonstrate the decant system will have a discharge rate sufficient to meet the required detention time. If the pond is a total containment design, a commitment to only dewater the pond following a 24 hour detention time for all runoff events will be acceptable.
7. Map 3.2.1 states the pond is designed to treat runoff from 5.76 acres, but P. 3-19 states the pond is designed to treat drainage from 7 acres. Please clarify and insure this drainage area corresponds to the drainage area depicted on Map 3.2.1.
8. The application should state how the 60 percent sediment volume elevation will be determined. The application should include a plan for removal and disposal of the sediments accumulated in the pond including a commitment to test the sediments for toxic materials. See comments under #10 previously.
9. The pond designs (including maps and plates) must be certified by a registered professional engineer. A certification statement that the ponds were constructed as per the designs or certified as-built drawings must be submitted.
10. The application should contain a commitment to conduct the inspections required by UMC 817.46 (t) and contain the certification reports required by UMC 817.49 (h).
11. The postmining monitoring plans (related discussion in sections 4.11.2, 2.3.7, and 2.4.5) should incorporate a monitoring plan proposed to determine the quality of the drainage entering the sedimentation pond. The plan should include monitoring points, frequency of sampling, and a commitment to sample parameters required by State and Federal regulations at the time of reclamation.

UMC 817.47 Hydrologic Balance: Discharge Structures - RPS

The application must contain designs and plans to protect the outlet area of the loadout facility sedimentation pond. These plans must include calculated outlet velocity (for a 25 yr. -24 hour peak flow event) and energy dissipator designs as needed.

UMC 817.48 Hydrologic Balance: Acid-Forming and Toxic-Forming Materials - RPS

The application should contain information as to the toxic-forming potential of the underground development waste from the mine. If the material is demonstrated to be toxic or acid forming, the application must address the requirements of this regulation.

UMC 817.52 Hydrologic Balance: Surface and Ground Water  
Monitoring - DC

The operator must submit all of the water quality data that has been collected to date. Additionally, this data must be summarized and presented in the MRP. The Division has established guidelines for Surface and Ground Water Monitoring since the operator received approval for their water monitoring plan. The Division will review the data and the summary submitted by the operator and make a determination if the monitoring plan needs to be modified in order to comply with the established guidelines.

UMC 817.59 Coal Recovery - JRH

Coal recovery information is found in the plan in part 3.1 of mining and reclamation plan. The Operator has indicated that the mining of coal shall be to the extent as is possible for the mining methods and equipment selected. In areas where longwall panels are not economically viable, room and pillar mining methods shall be employed to maximize coal recovery. Part 4.17 contains some specific information regarding coal reserves and coal recovery. Drawing 4.17.1-1 is incomplete in that it does not provide sufficient information to reference the drawing to the coal leases, surface features or surface location of the drawing. The following information should be provided in order to determine this section of the mining and reclamation plan complete:

The Operator shall provide the estimated total coal reserves for the permit area, the mineable reserves and the amount of reserves planned to be mined for the life of the mine. Any mineable areas within the lease permit areas which are not incorporated into the operator's mining plan should be indicated and the accessibility to such areas should be determined. Coal recovery calculations should include pillar sizing and ratio of extraction. Information should also be provided in the plan as evidence of protection of future reserves, under and overlying coal seams, oil and gas reserves and noncoal minerals.

The Operator has indicated that the information on page 3-11 of the mining and reclamation plans a CONFIDENTIAL. The Division can see no information on this page which should be held as confidential by the Division. If the operator provides justification as to why this information should be held confidential the Division will hold it as such.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 9.

UMC 817.61-68 Use of Explosives - JRH

The Operator needs to state in the plan that surface blasting on the site is not routine and in any event would be minimal. The Operator should also include that all surface blasting shall be conducted under 30 CFR 850 and other applicable regulations. This section is not considered complete.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 36.

UMC 817.71 Disposal of Excess Spoil and Underground Development Waste - DC

The operator must submit designs for the undisturbed diversions that conform to the comments made in section 817.43.

UMC 817.71-81 Disposal of Excess Spoil and Underground Development Waste: General Requirements - JRH

Comments made regarding excess spoil and underground development waste are found in the mining and reclamation plan in part 4.16. The Operator has not included in the plan, any comments or investigations as to the use of the development waste material in the construction of pad or other facilities as well as the location and disposition of this material when it is to be used for regrading and recontouring of the site. The Operator shall provide the information required in this section in order to determine the mining and reclamation plan complete.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 21.

UMC 817.72 Disposal of Underground Development Waste and Excess Spoil: Valley Fills - JRH

The operator must specifically address the requirements of this section as they apply.

UMC 817.72 Valley Fills - DC

The operator must submit a discussion that include designs for the rock drain in the topsoil fill area. Additionally, the operator must submit designs that demonstrate that the diversion conveying runoff from the area above the fill around the stockpile is capable of passing the 100-yr, 24-hr precipitation runoff. Diversion designs must comply with section 817.43.

UMC 817.74 Disposal of Underground Development Waste and Excess Spoil: Durable Rock Fills - JRH

The operator must specifically address the requirements of this section as they apply.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 23.

UMC 817.89 - Disposal of Non-Coal Waste - JSL

On page 4-40 the applicant states that non-coal waste will be transported to a "state approved sanitary landfill". Please define this landfill. Approval from the landfill operator for non-coal waste disposal must also be included.

UMC 817.99 Slides and Other Damage - JRH

Reference to this section is not found in the cross reference in the plan. The Operator must incorporate into the plan and commit to the requirements of this section. This section is not considered complete.

UMC 817.101 Backfilling and Grading: General Requirements - JRH

No plans are included in the mining and operation plan for the reclamation of the rock waste disposal site. Plans and commitments to be implemented during reclamation of the rock waste disposal site should be included in part 4.16 of the mining and reclamation plan. The Operator must include and commit to the requirements found in this section of the regulations and incorporate them into the mining and reclamation plan. Analysis of the material and treatment of potentially acid- and toxic-forming materials should also be addressed. Much of this information is found in the proposal for the rock waste disposal facility but has not been included in the Operator's mining and reclamation plan.

UMC 187.103 Backfilling and Grading: Covering Coal and Acid- and Toxic-Forming Materials - JRH

This regulation is not found in part 4.4 of the mining and reclamation plan as indicated in the cross-reference. No provisions are found in the mining and reclamation plan addressing this section. This section is not considered adequate or complete.

The Operator must include in the mining and reclamation plan, the following information regarding the covering of potentially acid or toxic-forming materials: cover material for burial and compaction; plans for stabilization of the materials including methods and design specifications; measures taken to protect surface and ground water including, migration of salts, exposure by erosion, protection of plant growth, adequate cover, and protection from runoff; treatment to prevent combustions and neutralize toxicity.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 14.

UMC 817.106 - Regrading and Stabilizing Rills and Gullies - JSL

The operator must commit to fill, regrade, and reseed all rills and gullies prior to an eroded depth of nine inches.

UMC 817.150-.156 Class I Roads - JRH

UMC 817.160-.166 Class II Roads - JRH

UMC 817.170-.176 Class III Roads - JRH

Information found in the mining and reclamation plan with respect to roads is incomplete. Part 4.20 of the mining and reclamation plan identifies the roads which are to be used for coal haulage. The Operator shall identify and categorize all roads within the permit area as to Class I, II, or III. The Operator shall provide and incorporate into the mining and reclamation plan, all of the specific requirements regarding the design, construction, maintenance, removal and reclamation of the roads located within the permit area as they apply to each road classification. The Operator shall clearly indicate on the maps and plans, which roads are to be left as part of the post mining land use.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 39.

UMC 817.180 Other Transportation Facilities - JRH

The Operator has not provided sufficient information in order to determine this section complete. Partial description of transportation facilities to be utilized on the site are included in part 4.20 of the mining and reclamation plan.

In order to consider this section of the mining and reclamation plan complete, the Operator shall provide: specifications for roads, drainages, embankments, culverts, fills; geotechnical reports for steep outcrops; plans and approvals for relocations of natural drainage ways; a general description of each transportation facility contained within the mine permit area.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 46.

UMC 817.181 Support Facilities and Utility Installations - JRH

The Operator has misinterpreted this section to mean facilities outside the permit area; this regulation pertains to support facilities found within the permit area. Such facilities shall include but not be limited to mine buildings, coal loading facilities, coal storage facilities, fan buildings, sheds, shops, and other buildings. The Operator shall be required to furnish the information and commitments with regard to this regulation.

REFER TO ENGINEERING GUIDELINES ON STARTING ON PAGE 48.

Table 4.7-1

Seed mixture  
south-facing slopes of 1h:3v or less and flat areas

<u>Species:</u>	<u>Rate*</u>
<u>Grasses:</u>	
<u>Agropyron riparium</u> Streambank wheatgrass	4.0
<u>Agropyron dasystachyum</u> Thickspike wheatgrass	4.0
<u>Bromus marginatus</u> Mountain brome	5.0
<u>Phleum pratensis</u> Timothy	0.5
<u>Poa pratensis</u> Kentucky bluegrass	0.1
<u>Forbs:</u>	
<u>Achellia millifolium</u> Yarrow	0.1
<u>Artemisia ludoviciana</u> 'Summit' louisiana sagewort	0.1
<u>Linum lewisii</u> Lewis flax	1.0
<u>Melilotus officinalis</u> Yellow sweetclover	2.0
<u>Penstemon strictus</u> 'Bandera' rocky mountain penstemon	0.5
<u>Shrubs and trees:</u>	
<u>Amelanchier alnifolia</u> Sacatoon serviceberry	2.0
<u>Artemisia tridentata vaseyana</u> Mountain big sagebrush	0.2
<u>Rhus trilobata</u> Squawbush	3.0
<u>Rosa woodsii</u> Wood's rose	1.0
<u>Symphoricarpos oreophylus</u> Mountain snowberry	2.0
<u>Transplants:</u>	
<u>Chrysothamnus nauseosus albicaulis</u> Whitestem rubber rabbitbrush	#/ac. 250
<u>Populus tremuloides</u> Quaking aspen	400
<u>Sambucus cerulea</u> Blue elderberry	400

\* Rate is pounds pure live seed per acre for broadcast seeding methods.

Table 4.7-2

Seed mixture  
north-facing slopes

<u>Species:</u>	<u>Rate*</u>
<u>Grasses:</u>	
<u>Agropyron trachycaulum</u> Slender wheatgrass	3.0
<u>Bromus marginatus</u> Mountain brome	6.0
<u>Festuca ovina</u> Hard sheep fescue	1.0
<u>Poa pratensis</u> Kentucky bluegrass	0.2
<u>Forbs:</u>	
<u>Achellia millifolium</u> Yarrow	0.1
<u>Aster chilensis</u> Pacific aster	0.1
<u>Lupinus sericeus</u> silky lupine	2.0
<u>Melilotus officinalis</u> Yellow sweetclover	1.5
<u>Osmorhiza occidentalis</u> Sweet anise	2.0
<u>Penstemon strictus</u> 'Bandera' rocky mountain penstemon	0.5
<u>Shrubs and trees:</u>	
<u>Sambucus racemosa</u> Red elderberry	1.0
<u>Symphoricarpos oreophylus</u> Mountain snowberry	2.0
<u>Transplants:</u>	
<u>Abies concolor</u> White fir	#/ac. 200
<u>Picea englemanii</u> Engleman spruce	400
<u>Potentilla fruticosa</u> woody cinquefoil	100
<u>Rubus idaeus</u> American raspberry	100

\* Rate is pounds pure live seed per acre for broadcast seeding methods.

Table 4.7-3

Shrub supplement for riparian zone

Species:	#/acre
<u>Cornus stolonifera</u> Red-oiser dogwood	400
<u>Mahonia reopens</u> Creeping oregon grape	400
<u>Salix sp.</u> Willow cuttings	2,000
Total	2,800

Seed mixture  
Waste rock disposal area

Species:	Rate*
Grasses:	
<u>Agropyron smithii</u> Western wheatgrass	4.0
<u>Agropyron dasystachyum</u> Thickspike wheatgrass	4.0
<u>Bromus marginatus</u> Mountain brome	6.0
<u>Poa pratensis</u> Kentucky bluegrass	0.1
Forbs:	
<u>Artemisia ludoviciana</u> 'Summit' louisiana sagewort	0.1
<u>Linum lewisii</u> Lewis flax	1.0
<u>medicago sativa</u> 'ladak' alfalfa	1.0
<u>Melilotus officinalis</u> Yellow sweetclover	1.0
<u>Penstemon strictus</u> 'Bandera' rocky mountain penstemon	0.5
Shrubs and trees:	
<u>Artemisia tridentata vaseyana</u> Mountain big sagebrush	0.25
<u>Rosa woodsii</u> Wood's rose	1.0
Transplants:	
<u>Chrysothamnus nauseosus albicaulis</u> Whitestem rubber rabbitbrush	#/ac. 200

\* Rate is pounds pure live seed per acre for broadcast seeding methods.



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

ACT/007/005 #2  
Norman H. Bangerter, Governor  
Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

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

December 29, 1986

Mr. Glen Zumwalt  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

*Glen*

Dear Mr. Zumwalt:

Re: Forest Service Comments, Five-Year Permit Renewal, Skyline Mine, ACT/007/005, Folder No. 2, Carbon County, Utah

Enclosed are copies of comments received from the Forest Service and the Bureau of Land Management regarding the five-year permit renewal application for the Skyline Mine. Please incorporate responses to these concerns into the resubmittal you are preparing for the Division.

Feel free to contact myself or Susan Linner if there are questions.

Sincerely,

*Lowell*

Lowell P. Braxton  
Administrator  
Mineral Resource Development  
and Reclamation Program

jvb

cc: V. Mortenson, Coastal States  
R. Harden  
S. Linner  
D. Lof

0028R-61



*S. Linn*

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



RECEIVED  
NOV 19 1986

November 14, 1986

DIVISION OF  
OIL, GAS & MINING

Dr. Dianne Nielson, Director  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Dr. Nielson:

The Office of Surface Mining Reclamation and Enforcement, Western Field Operations (OSMRE), received the enclosed letter from the Moab District Office of the Bureau of Land Management (BLM). The BLM has completed their review of the Skyline Mines' renewal application and has identified several problems. These problems are related to the approved Resource Recovery and Protection Plan, and must be addressed by Coastal States Energy Company before the submittal can be considered to be complete.

If you have any questions, please contact Meg Estep-Johnston or Rick Holbrook at (303) 844-2451.

Sincerely,

Melvin L. Shilling, Chief  
Division of Federal Programs  
Western Field Operations

Enclosure

cc: BLM, Moab District (w/o enclosure)



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Moab District  
P. O. Box 970  
Moab, Utah 84532

3482  
U-073120  
(U-066)

NOV 7 1986

OSMRE-WFO  
NOV 13 11 9 21  
WESTERN FIELD OPERATIONS

## MEMORANDUM

To: Richard Holbrook, Senior Project Manager for Utah  
Office of Surface Mining Reclamation and Enforcement - Denver

From: <sup>ACTING</sup> District Manager, Moab

Subject: Mining and Reclamation Plan 5-Year Renewal,  
Skyline Mines, Coastal States Energy Company

The three volume Skyline Mines, Mining and Reclamation Plan, Coastal States Energy Company, forwarded by your office to the Moab District Office, and received by the Price River Resource Area Office on October 14, 1986, have been reviewed for completeness and relative effect on the approved Resource Recovery and Protection Plan (R2P2).

The OSM forwarding letter identified the three volumes as "Mining and Reclamation Plan, 1986". Actually the submittal is an application for renewal of an approved 5-year mining permit number ACT/1006/1005 for the Skyline Mines dated November 9, 1982. The approved R2P2, as modified, has not been changed but is described by narrative in Volume 2, Part 3, 3.1 Skyline Mining Operation Plan. The R2P2 was approved for the life of the mine, and therefore BLM regulations 43 CFR 3482.1(c) have been met and satisfied. However, the following items have been identified as deficient in the submittal in order for the document to stand alone as a complete mine plan:

1. Volatile matter and fixed carbon content of all economically recoverable coal seams;
2. Plates and maps showing for all three planned mines the following:
  - a) Extent of present mine workings,
  - b) Federal lease boundaries and serial numbers,
  - c) Strikes and dips,
  - d) Locations of abandoned mines,
  - e) Planned sequence of mining by year for the next five years and in 5-year increments for the remainder of the mine life,

- f) Location of planned shafts, slopes, main development entries and barrier pillars, panel development, bleeders, and permanent barrier pillars,
  - g) Location of areas where pillars will be left and an explanation why these pillars will not be mined,
  - h) Sketches of typical main and panel development showing centerline distances between entries and crosscuts and of typical panel recovery by such methods as room and pillar, longwall, second mining, etc., showing the sequence of development and retreat, and
  - i) Isopach maps showing interburden between all coal seams present.
3. Reference to the Skyline GMO-1 Addendum submitted to BLM in 1985 which contained an estimate of the coal reserve base, mineable reserve base, and recoverable coal reserves for each Federal coal lease included in the R2P2.
4. Cross referencing of BLM regulations 43 CFR 3482.1(c) instead of U.S. Geological Survey regulations 30 CFR 211.10(c).

Also, please find enclosed a checklist of items which must be included with R2P2 applications. Please forward a copy to Coastal States Energy Co. for inclusion in their update.



Enclosure:  
R2P2 Checklist

cc: Price (U-066)

Coal Mine \_\_\_\_\_ Mine Plan Date \_\_\_\_\_ Date Received \_\_\_\_\_

Current Resource Recovery and Protection Plan Approval Date \_\_\_\_\_

3482.1(c) Regulation	Separate Items	Included In Plan	Adequate	Comments
(1) Names, addresses, and telephone numbers of persons responsible for operations to be conducted under the approved plan to whom notices and orders are to be delivered; names and addresses of operators/lessees; Federal lease serial numbers; Federal license serial numbers, if appropriate and names and addresses of surface and subsurface coal or other mineral owners of record, if other than the United States.	Operations			
	Lessees			
	Lease Numbers			
	Surface Owners			
	Mineral Owners			
	Lease Numbers			
	MSHA I.D. #			
(2) A general description of geologic conditions and mineral resources, with appropriate maps, within the area where mining is to be conducted.	Geologic Conditions			
	Mineral Resources			
	Maps			
(3) A description of the proposed mining operation, including: (i) Sufficient coal analyses to determine the quality of the minable reserve base in terms including, but not limited to, Btu content on an as-received basis, ash, moisture, sulphur, volatile matter, and fixed carbon content.	Coal Analyses			
	Coal Quality			
	Btu			
	Ash			
	Moisture			
	Sulphur			
	Volatile Matter			
	Fixed Carbon			

3482.1(c)(3) Regulation	Separate Items	Included In Plan	Adequate	Comments
(ii) The methods of mining and/or variation of methods, basic mining equipment and mining factors including, but not limited to, mining sequence, production rate, estimated recovery factors, stripping ratios, highwall limits, and number of acres to be affected.	Mining Methods			
	Mining Equipment			
	Mining Sequence			
	Production Rate			
	Stripping Ratios			
	Highwall Limits			
	Acres Affected			
(iii) An estimate of the coal reserve base, minable reserve base, and recoverable coal reserves for each Federal lease included in the resource recovery and protection plan. If the resource recovery and protection plan covers an LMU, recoverable coal reserves will also be reported for the non-Federal lands included in the resource recovery and protection plan.	For each Fed. lease			
	For LMI			
	Coal Reserve Base			
	Minaable Reserve Base			
	Recov. Coal Reserves			
(iv) The method of abandonment of operations proposed to protect the unmined recoverable coal reserves and other resources.	Protect Coal Reserves			
	Protect Other Resources			
(4) Maps and cross sections as follows: (i) A plan map of the area to be mined showing the following: (A) Federal lease boundaries and serial numbers; (B) LMI boundaries, if applicable; (C) Surface improvements, and surface ownership and boundaries;	Plan Map(s)			
	A			
	B			
	C			

3482.1(c)(4)(i) Regulation	Separate Items	Included In Plan	Adequate	Comments
(D) Coal outcrop showing dips and strikes; and, (E) Locations of existing and abandoned surface and underground mines.	D			
	E			
(ii) Isopach maps of each coal bed to be mined and the overburden and interburden.	Coal Isopach Maps			
	Overburden			
	Interburden			
(iii) Typical structure cross sections showing all coal contained in the coal reserve base.	Cross Sections			
(iv) General layout of proposed surface or strip mine showing: (A) Planned sequence of mining by year for the first 5 years, thereafter in 5-year increments for the remainder of mine life; (B) Location and width of coal fenders; and, (C) Cross sections of typical pits showing highwall and spoil configuration, fenders, if any, and coal beds.	Gen. Layout Surface			
	A			
	B			
	C			
(v) General layout of proposed underground mine showing: (A) Planned sequence of mining by year for the first 5 years, thereafter in 5-year increments for the remainder of mine life; (B) Location of shafts, slopes, main development entries and barrier pillars, panel development, bleeder entries, and permanent barrier pillars;	General Layout Underground			
	A			
	B			

3482.1(c)(4)(v) Regulation	Separate Items	Included In Plan	Adequate	Comments
<p>(C) Location of areas where pillars will be left and an explanation why these pillars will not be mined;</p> <p>(D) A sketch of a typical entry system for main development and panel development entries showing centerline distances between entries and crosscuts;</p> <p>(E) A sketch of typical panel recovery (e.g., room and pillar, longwall, or other mining method) showing, by numbering such mining, the sequence of development and retreat.</p>	C			
	D			
	E			
<p>(vi) For auger mining:</p> <p>(A) A plan map showing the area to be auger mined and location of pillars to be left to allow access to deeper coal;</p> <p>(B) A sketch showing details of operations including coal bed thickness, auger hole spacing, diameter of holes and depth or length of auger holes.</p>	Auger Mining			
	A			
<p>(5) A general reclamation schedule for the life-of-the-mine. This should not be construed as meaning duplication of a permit application in a permit application package under SMCRA. The resource recovery and protection plan may cross-reference, as appropriate, a permit application submitted under SMCRA to fulfill this requirement.</p>	General Schedule			
	Included			
	Cross-Referenced			

3382.1(c)(6) Regulation	Separate Items	Included In Plan	Adequate	Comments
<p>(6) Any required data which are clearly duplicated in other submittals to the regulatory authority or Mine Safety and Health Administration may be used to fulfill the requirements of the above paragraphs provided that the cross-reference is clearly stated. A copy of the relevant portion of such submittals must be included in the resource recovery and protection plan.</p>	MSHA Approvals			
	Included			
<p>(7) Explanation of how MER of the Federal coal will be achieved for the Federal coal leases included in the resource recovery and protection plan. If a coal bed, or portion thereof, is not to be mined or is to be rendered unminable by the operation, the operator/lessee shall submit appropriate justification to the District Mining Supervisor for approval.</p>	MER			

~~Braxton~~

Mine file

S. Linn

United States  
Department of  
Agriculture

Forest  
Service

Manti-LaSal  
National Forest

599 West Price River Drive  
Price, Utah 84501

Reply to: 2820

Date: December 17, 1986

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

RECEIVED  
DEC 18 1986

DIVISION OF  
OIL, GAS & MINING

Dear Mr. Holbrook:

The Manti-LaSal National Forest has completed a review of the Coastal States Energy Company's Five-Year Mine Plan Submittal, Skyline Mine, ACT/007/005, Folder No. 2, Carbon County, Utah.

Our overall comment on the Plan is that it is not a complete self-explanatory document as was the original nine volume Mine and Reclamation Plan. The new three volume submittal references the original Plan and/or materials contained therein, as available for review at the mine office. It is our understanding that the new submittal is intended to replace, in total, the original Plan. If this is indeed the case, the referenced documents, letter, maps, etc., must be included in the new submittal to make it complete.

Specific comments on the Five-Year Mine Plan submittal are as follows:

1. Section 2.2.1, Page 2-4

. . . Castlegate Sandstone, the basal member of the Price River Formation  
. . .

According to Doelling, 1972, the Castlegate Sandstone is not the basal member of the Price River Formation but is classified as a separate formation included with the Price River Formation in the Mesaverde Group.

2. Section 2.3.5.1, Page 2-69

The Forest Service Federal reserved water rights claims (minimum instream flows) for Eccles Creek and Huntington Creek filed with the 7th Judicial District Court for Carbon County and the 7th Judicial District Court for Emery County, must be addressed in this section.

3. Section 2.3.6, Page 2-96

The locations of these wells, W13-1 and W17-1, are shown on Plate 2.3.6-1.

These wells are not shown on this plate as referenced.

4. Section 2.4.4, Page 2-116

The number of this section should be changed to 2.4.3.

5. Section 2.5.2, Page 2-119

Since the Blackhawk Formation is saturated above the proposed mine workings, it stands to reason that as subsidence occurs and fractures the shales, more water will be intercepted in the mine workings. Self sealing of the fractures may occur as stated, however, there is no direct information to substantiate this theory. The water inflow and sealing characteristics of the shales should be monitored and reported in the annual summary for subsidence and hydrologic monitoring.

6. Section 2.7.1, Page 2-129

A species list by plant community with a discussion of the methods used in the community analysis were presented in the original Skyline Mining and Reclamation Plan application and are on file at the Skyline Mine Office.

Each version of the Mine Plan should be self explanatory documents. The species list, etc., should be included in the new submittal.

7. Section 2.8, Page 2-134

The limiting factor to spawning success and number of resident trout in Eccles Creek is the amount of water available rather than water quality and habitat available.

The data shown on Table 2.8-3, page 2-146, shows that sediment fines are increasing, degrading, spawning habitat in Eccles Creek. Water quality and spawning habitat are also critical factors. The mine development disturbances and the open coal stockpiles may be partially responsible. Forest officers have observed that effluent from the sediment ponds is often murky.

8. Section 2.8, Page 2-137

Cut-throat trout, according to Utah Division of Wildlife Resources (UDWR) surveys, are increasing in numbers in Huntington Creek above Electric Lake.

This statement is misleading since the numbers decreased during construction. This decrease in population should also be discussed and the present population compared with the pre-existing population.

9. Section 2.8.1, Page 2-139, Paragraph 2

The reference to the Forest Service "USDFS" should be changed to "USDAFS".

10. Section 2.9.1, Page 2-149

Mammals, amphibians, reptiles, and raptors are listed. There is no species list of small birds found in the lease area. Several birds found in the lease area are game species and some are classified as high interest species. Birds need to be included.

11. Section 2.9.4, Page 2-170

Subsidence could alter ground water flow and vegetation. These changes or resulting trends could also alter wildlife habitat. This possibility must be brought out in the discussion.

12. Section 2.11, Page 2-183

The maps of soil/plant associations, the vegetation and soils report, and other referenced soil maps submitted in the original application should also be included in the new submittal.

13. Section 2.12.2, Page 2-200 and 201

The Manti-LaSal National Forest Final Environmental Impact Statement (FEIS) and Land and Resource Management Plan (LRMP) have been published and distributed to the general public. These documents supersede the Ferron-Price Land Management Plan.

14. Section 2.12.2, Page 2-204

To date, there are no known archeological or paleontological sites within the proposed disturbed areas.

The archeological and paleontological survey report should be cited and included in the appendix for reference. This statement must be supported.

15. Section 3.1.5, Page 3-9

This section discusses storage of underground wastes, excess surface spoil, or coal processing wastes in underground workings. If potentially contaminating materials are temporarily stored underground, a plan including provisions for proper temporary containment of such materials must be reviewed for approval by the regulating agencies. Permanent storage of contaminating materials underground may not be allowed. This discussion needs clarification so that it can be determined what exactly is proposed.

16. Section 3.2.1, Page 3-18

After infiltration, the surface runoff is estimated at 5.10 inches.

5.10 inches is apparently a typo. It should be 1.50 inches.

17. Section 3.2.3, Page 3-23

Open storage of coal in this area was not approved by the Forest Service and may be responsible, in part, for the increasing sediment fires in Eccles Creek.

It is not planned for the piles to encroach onto the adjacent cut slopes.

We recently received an approved M&RP modification from OSM for encroaching the north stockpile onto the cut slopes. The Forest is opposed to this modification which we have not consented to.

18. Table 3.2-2, Page 3-27

Discharges reported by UFCo are within the NPDES permit standards, however, the pre-existing water quality has most likely been degraded due to operations. The monitoring program data should include any available data on the pre-existing baseline water quality, for comparison, with an appropriate discussion.

19. Section 3.2.6, Page 3-37

Contaminated materials from the sedimentation pond, if any, must be removed and hauled to the approved disposal area before the pond can be backfilled and reclaimed.

The pond is shown in plan view (Map 3.2.1-4) and in cross section (Map 3.2.1-2).

Map 3.2.1-4 does not contain a plan view of the pond showing the emergency spillway.

20. Section 3.2.6, Page 3-29

Upon abandonment and reclamation, the concrete foundations must not be left in the canyon bottom. The concrete should be used as the initial backfill at the base of the cut slopes to provide support for the backfilled materials and topsoil. Only clean materials will be allowed to be used as fill materials.

The discussion of fracturing and burying the concrete foundations in-place in this section and in Section 4.12.1, page 4-57, should be changed as discussed above.

21. Section 4.7.2, Page 4-33

Revegetation analyses have been conducted annually and reported to the regulating authority.

The Manti-LaSal National Forest has not routinely received these reports. OSM and/or UDOGM must forward copies to the Forest or they must be sent directly to the Forest from the operator.

22. Section 4.7.5, Page 4-35

These data are from those communities disturbed and for reference areas which will be used for comparison (aspen, sagebrush, spruce-fir, riparian).

The reference area must be identified and the monitoring data reported.

23. Section 4.7.7, Page 4-38

Yarrow (*Achillea millefolium*) should be replaced in the seed mix at an equal coverage by Pacific Aster (*Aster chilensis* var. *adscondens*) which is more suited to this environment.

24. Section 4.8.2, Page 4-41

The permittee has prepared and has available at the mine site a Spill Prevention Control Plan as required to be implemented in the event of a spill or leakage of the stored fuels, oils or oil products.

This plan should be included in the M&RP.

25. Section 4.9, Page 4-43

The location of the discussed drill holes and shafts should be addressed by reference to a map or plate.

26. Section 4.11.4

See comments for item 6.

27. Section 4.17.1, Page 4-74

An analysis of the lateral extent of subsidence expected, including the angle of draw, and the amount of vertical subsidence expected in the specific undermined areas must be completed and included in this plan. This must also be graphically displayed on a map which shows the surface features, topography, mined-out areas, projected mining configuration, zone of influence of subsidence (angle of draw projection to the surface), and areas where subsidence will be prevented. Map 4.17.1-1 is not adequate.

Electric Lake and Huntington Creek must be protected from any subsidence. This section states that the upper reaches of Electric Lake Reservoir and perennial streams in the area face potential impact caused by mining. In Section 4.17.2, page 4-74, it is stated that: There will be no mining caused subsidence under either the Electric Lake Reservoir or Upper Huntington Creek inlet to the reservoir.

28. Section 4.17.5, Page 4-79

The initial photography must include color infrared coverage of the entire permit area.

29. Section 5.1, Page 5-1

The fourth item listed under Usage Guidelines is the Manti-LaSal National Forest's Forest Plan for studying the Effects of Underground Coal Mining on Surface and Subsurface Resources, 1978.

As referenced, this plan was a draft version. The plan was revised and finalized on June 6, 1986, and the title was changed to "Manti-LaSal National Forest Monitoring Plan for Studying the Effects of Underground Coal Mining on Surface and Subsurface Resources".

*W. H. Boley*

for

REED C. CHRISTENSEN  
Forest Supervisor

26?



STATE OF UTAH  
 NATURAL RESOURCES  
 Oil, Gas & Mining

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

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

November 6, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
 P402 459 411

**FILE COPY**

Mr. Glen A. Zumwalt  
 Vice President/General Manager  
 Utah Fuel Company  
 P.O. Box 719  
 Helper, Utah 84526

Dear Mr. Zumwalt

Re: Final Approval, MRP Amendment, Minor Modification to Permanent  
 Open Coal Storage Area, Skyline Mine, Utah Fuel Company  
 ACT/007/005-86E, Folder #4, Emery County, Utah

The Division has completed its review of Utah Fuel Company's October 24, 1986 submittal concerning drainage control modifications at the North Coal Storage Area. The proposed plans are acceptable and approval is hereby granted by the Division to proceed with implementation.

Thank you for your cooperation in this matter. Please contact me or Dave Cline should you have any questions.

Sincerely,

D. Wayne Hedberg  
 Permit Supervisor/  
 Reclamation Hydrologist

Review Chronology:

A. Operator Submittals  
 1. 10/24/86

DOGM Responses  
 1. 11/4/86

DMW:jvb  
 cc: Allen Klein  
 Lowell Braxton  
 Sue Linner  
 0851R-48



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

January 9, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
NO. P 402 458 118

Mr. Glen A. Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

Re: Assessment Conference for State Violations No. N85-2-19-2,  
No. N85-2-18-2 (2 of 2), and No. N85-2-16-2, ACT/007/005,  
Folder No. 8, Carbon County, Utah

As per your request of October 31, 1985, please be advised that Wednesday, January 15, 1986 at 2:30 p.m. has been established for the informal assessment conference on the referenced violations.

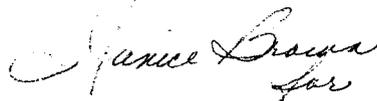
The 60-day time limit for scheduling this conference from the date of the proposed assessment (October 25, 1985) has been waived as a result of Mr. Keith Zobell's request to hold the conference in January, 1986.

Pertinent, written material you wish reviewed before the conference can be forwarded to me at 124 State Capitol Building, Salt Lake City, Utah 84114.

Page 2  
Mr. Glen A. Zumwalt  
January 9, 1986

The conference will be held in the office of the Division of Oil, Gas and Mining at the address listed on the previous page.

Sincerely,



Barbara W. Roberts  
Assessment Conference Officer

jb  
cc: V. J. Mortensen  
K. W. Zobell  
D. J. Griffin  
J. C. Helfrich  
Public Notice Board  
0264Q-38-39



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

March 7, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
P 001 720 565

Mr. Glen Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P O Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

RE: Finalized Assessment for State Violations No.'s N85-2-19-2,  
N85-2-16-2, N85-2-18-2 ACT/007/005, Folder #8, Carbon County, Utah

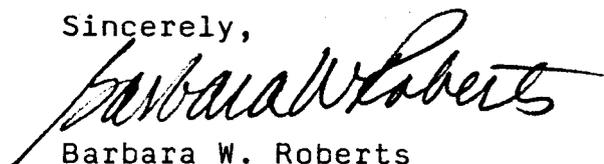
The civil penalties for the above referenced violations have been finalized. These assessments have been finalized as a result of a review of all pertinent data and facts which were not available on the date of the proposed assessments, due to the length of the abatement period.

Within fifteen (15) days of your receipt of this letter, you or your agent may make a written appeal to the Board of Oil, Gas and Mining. To do so, you must have escrowed the assessed civil penalties with the Division within a maximum of 30 days of receipt of this letter, but in all cases prior to the Board Hearing. Failure to comply with this requirement will result in a waiver of your right of further recourse.

If no timely appeal is made, these assessed civil penalties must be tendered within thirty (30) days of your receipt of this letter. Please remit payment to the Division and mail % Jan Brown at the address listed above.

Thank you for your cooperation.

Sincerely,



Barbara W. Roberts  
Assessment Conference Officer

re

cc: Donna Griffin, OSM Albuquerque Field Office  
9099Q



WORKSHEET FOR FINAL ASSESSMENT OF PENALTIES  
 UTAH DIVISION OF OIL, GAS AND MINING

COMPANY/MINE Utah Fuel/Skyline

NOV # N85-2-19-2

PERMIT # ACT/007/005

VIOLATION 1 of 2

Nature of violation: Failure to comply with terms and conditions of permit

Date of termination: 09/16/85

	<u>Proposed Assessment</u>	<u>Final Assessment</u>
(1) History/Prev. Vio.	<u>1</u>	<u>--</u>
(2) Seriousness		
(a) Probability of Occurrence	<u>          </u>	<u>          </u>
Extent of Damage	<u>          </u>	<u>          </u>
(b) Hindrance to Enforcement	<u>2</u>	<u>--</u>
(3) Negligence	<u>5</u>	<u>--</u>
(4) Good Faith	<u>0</u>	<u>          </u>
TOTAL	<u>8</u>	<u>--</u>
TOTAL ASSESSED FINE		\$ <u>--</u>

3. Narrative:  
 (Brief explanation for any changes made in assignment of points and any additional information that was available after the proposed assessment.)

*Barbara W. Roberts*

Assessment Date 2/13/86 Assessment Officer Barbara W. Roberts

Violation vacated as a result of Division action in verbally extending the two-week installation period prior to the issuance of the violation.

WORKSHEET FOR FINAL ASSESSMENT OF PENALTIES  
UTAH DIVISION OF OIL, GAS AND MINING

COMPANY/MINE Utah Fuel/Skyline

NOV # N85-2-19-2

PERMIT # ACT/007/005

VIOLATION 2 of 2

Nature of violation: Failure to conduct operations in accordance with permit; conducting operations without a permit

Date of termination: \_\_\_\_\_

	<u>Proposed Assessment</u>	<u>Final Assessment</u>
(1) History/Prev. Vio.	<u>1</u>	<u>--</u>
(2) Seriousness		
(a) Probability of Occurrence	_____	_____
Extent of Damage	_____	_____
(b) Hindrance to Enforcement	<u>13</u>	<u>--</u>
(3) Negligence	<u>2</u>	<u>--</u>
(4) Good Faith	<u>0</u>	_____
TOTAL	<u>16</u>	<u>--</u>
TOTAL ASSESSED FINE		\$ <u>--</u>

3. Narrative:  
(Brief explanation for any changes made in assignment of points and any additional information that was available after the proposed assessment.)

*Barbara W. Roberts*

Assessment Date 2/13/86 Assessment Officer Barbara W. Roberts  
Violation vacated. See attached opinion.

### CONFERENCE OFFICER OPINION

COMPANY/MINE: Utah Fuel/Skyline  
VIOLATION #: N85-2-19-2 (2 of 2)  
CONFERENCE DATE: January 15, 1986  
DETERMINATION: Violation Vacated

Violation #N85-2-19-2 (2 of 2) was issued as a result of the inspector's determination that the operator had failed to notify the Division of Oil, Gas and Mining ("DOGM" or "Division") and receive clearance to bypass the sediment pond with the mine water discharge. Utah Fuel Company ("Utah Fuel" or "Operator") was cited for "failure to conduct operations in accordance with the permit" and "conducting operations without a permit." The violation is vacated for the reason that Utah Fuel was operating in compliance with its DOGM permit as well as its NPDES permit.

### DISCUSSION

As a condition of the NPDES permit, issued by the Department of Health ("DOH"), Utah Fuel may, for the purpose of cleaning out the sediment pond, bypass the pond with the mine water discharge without notice or permission from DOH so long as the effluent limitations are met. The limitations were not exceeded.

The rules applicable to this issue are UMC 784.14(b)(1) and (2), 817.42(a)(1) and (b) and 817.50(b). (Rules attached hereto). First, UMC 784.14(b)(1) and (2), addressing the permitting requirements, specifies that the operator must submit a plan for control and treatment of mine water discharge in accordance with the 817 rules. Without separate permitting standards, the technical standards found in UMC 817.42 and 817.50 must provide the direction for mine water discharge.

In order to comply with UMC 817.42(a)(1), the operator must pass "any discharge of water from underground workings... which does not meet the effluent limitations" through a sedimentation pond (emphasis added). Since the operator determined prior to discharge that effluent limitations were not exceeded, UMC 817.42(a)(1) has not been violated.

its NPDES permit and, therefore, its DOGM permit, no violation of the Division's rules has occurred. Therefore, violation #N85-2-10-2 (2 of 2) is vacated.

DATED this 7 day of March, 1986.

  
\_\_\_\_\_  
BARBARA W. ROBERTS  
Conference Officer

WORKSHEET FOR FINAL ASSESSMENT OF PENALTIES  
UTAH DIVISION OF OIL, GAS AND MINING

COMPANY/MINE Utah Fuel/Skyline

NOV # N85-2-16-2

PERMIT # ACT/007/005

VIOLATION 1 of 2

Nature of violation: Failure to post mine identification sign.

Date of termination: \_\_\_\_\_

	<u>Proposed Assessment</u>	<u>Final Assessment</u>
(1) History/Prev. Vio.	<u>1</u>	<u>1</u>
(2) Seriousness		
(a) Probability of Occurrence	_____	_____
Extent of Damage	_____	_____
(b) Hindrance to Enforcement	<u>17</u>	<u>3</u>
(3) Negligence	<u>16</u>	<u>3</u>
(4) Good Faith	<u>-20</u>	<u>-20</u>
TOTAL	<u>14</u>	<u>0</u>
	TOTAL ASSESSED FINE	\$ <u>0</u>

3. Narrative:

(Brief explanation for any changes made in assignment of points and any additional information that was available after the proposed assessment.)



Assessment Date 2/13/86 Assessment Officer Barbara W. Roberts

Civil penalty vacated. Operator was in violation of U.C.A. §40-10-19(4) and UMC 817.11(c). There was, however, an MSHA sign with substantially the same information except for the DOGM permit number. The new sign, which had been on order, had been received by the operator a few days prior to issuance of the violation. Points assessed for negligence and hindrance were assessed far in excess of what was warranted.

WORKSHEET FOR FINAL ASSESSMENT OF PENALTIES  
UTAH DIVISION OF OIL, GAS AND MINING

COMPANY/MINE Utah Fuel/Skyline

NOV # N85-2-16-2

PERMIT # ACT/007/005

VIOLATION 2 of 2

Nature of violation: Failure to divert surface runoff away from fill.

Date of termination: \_\_\_\_\_

	<u>Proposed Assessment</u>	<u>Final Assessment</u>
(1) History/Prev. Vio.	<u>1</u>	<u>--</u>
(2) Seriousness		
(a) Probability of Occurrence	<u>2</u>	<u>--</u>
Extent of Damage	<u>3</u>	<u>--</u>
(b) Hindrance to Enforcement	<u>          </u>	<u>          </u>
(3) Negligence	<u>3</u>	<u>--</u>
(4) Good Faith	<u>0</u>	<u>--</u>
TOTAL	<u>9</u>	<u>--</u>
	TOTAL ASSESSED FINE	\$ <u>--</u>

3. Narrative:  
(Brief explanation for any changes made in assignment of points and any additional information that was available after the proposed assessment.)

*Barbara W Roberts*

Assessment Date 2/13/86      Assessment Officer Barbara W. Roberts

Violation vacated. Operator constructed fill site and operated in accordance with the approved permit.

WORKSHEET FOR FINAL ASSESSMENT OF PENALTIES  
 UTAH DIVISION OF OIL, GAS AND MINING

COMPANY/MINE Utah Fuel/Skyline

NOV # N85-2-18-2

PERMIT # ACT/007/005

VIOLATION 2 of 2

Nature of violation: Failure to comply with permit;  
conducting operations without a permit.

Date of termination: \_\_\_\_\_

	<u>Proposed Assessment</u>	<u>Final Assessment</u>
(1) History/Prev. Vio.	<u>1</u>	<u>--</u>
(2) Seriousness		
(a) Probability of Occurrence	_____	_____
Extent of Damage	_____	_____
(b) Hindrance to Enforcement	<u>15</u>	<u>--</u>
(3) Negligence	<u>3</u>	<u>--</u>
(4) Good Faith	<u>0</u>	<u>--</u>
TOTAL	<u>19</u>	<u>--</u>
TOTAL ASSESSED FINE		\$ <u>--</u>

3. Narrative:  
 (Brief explanation for any changes made in assignment of points and any additional information that was available after the proposed assessment.)

*Barbara W. Roberts*

Assessment Date 2/13/86 Assessment Officer Barbara W. Roberts

Violation vacated as a result of Division verbal acknowledgement that conditions had been met by operator and Division verbal approval to proceed with hauling activities.



*Jule*

THE ATTORNEY GENERAL  
STATE OF UTAH

DAVID L. WILKINSON  
ATTORNEY GENERAL

March 13, 1986

PAUL M. TINKER  
DEPUTY ATTORNEY GENERAL

DALLIN W. JENSEN  
Solicitor General

WILLIAM T. EVANS, CHIEF  
Human Resources Division

DONALD S. COLEMAN, CHIEF  
Physical Resources Division

STEPHEN G. SCHWENDIMAN, CHIEF  
Tax & Business Regulation Division

EARL F. DORRIS, CHIEF  
Governmental Affairs Division

PAUL M. WARNER, CHIEF  
Litigation Division

Glen Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P.O. Box 719  
Helper, Utah 84526

Dear Glen:

Enclosed is an addendum to the March 7, 1986 finalized assessment for N85-2-19-2, 2 of 2. I inadvertently failed to attach the text of the rules that I had cited in the opinion for that violation. I had initially thought to avoid causing the reader the effort of searching for the various rules, but, of course, I did not achieve that purpose. I would now, however, like to add the text for future convenience.

I hope that I have not created confusion due to this oversight.

Sincerely,

*Barbara*

BARBARA W. ROBERTS  
Conference Officer

BWR/cwc

Enclosure

## RULES

### UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance

\*\*\*

(b) The description shall include-

(1) A plan for the control, in accordance with UMC 817, of surface and ground water drainage into, through, and out of the proposed mine plan area;

(2) A plan for the treatment, where required under Subchapter K of this Chapter and the regulatory program, and surface and ground water drainage from the area to be affected by the proposed activities, and proposed quantitative limits on pollutants in discharges subject to UMC 817.42, according to the more stringent of the following:

- (i) Subchapter K of this Chapter and the regulatory program; or
- (ii) Other applicable State and Federal laws.

### 817.42 Hydrologic Balance: Water Quality Standards and Effluent Limitations

(a)(1) All surface drainage from the disturbed area, including disturbed areas that have been graded, seeded, or planted, shall be passed through a sedimentation pond, a series of sedimentation ponds, or a treatment facility before leaving the permit area. Any discharge of water from underground workings to surface waters which does not meet the effluent limitations of this Section shall also be passed through a sedimentation pond, a series of sedimentation ponds, or a treatment facility before leaving the permit area.

\*\*\*

(b) Discharges of water from areas disturbed by underground mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR Part 434.

**UMC 817.50 Hydrologic Balance: Underground Mine Entry and Access Discharges**

\*\*\*

(b) Gravity discharge of water from an underground mine, other than a drift mine subject to Paragraph (c) of this Section, may be allowed by the Division, if it is demonstrated that-

(1)(i) The discharge, without treatment, satisfies the water effluent limitations of UMC 817.42 and all applicable State and Federal water quality standards; and

(ii) That discharge will result in changes in the prevailing hydrologic balance that are minimal and approved postmining land uses will not be adversely affected; or,

(2)(i) The discharge is conveyed to a treatment facility in the permit area in accordance with Section UMC 817.42(a);

(ii) All water from underground mine discharged from the treatment facility meets the effluent limitations of Section UMC 817.42 and all other applicable State and Federal statutes and regulations; and

(iii) Consistent maintenance of the treatment facility will occur throughout the anticipated period of gravity discharge.

## RULES

### UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance

\*\*\*

(b) The description shall include-

(1) A plan for the control, in accordance with UMC 817, of surface and ground water drainage into, through, and out of the proposed mine plan area;

(2) A plan for the treatment, where required under Subchapter K of this Chapter and the regulatory program, and surface and ground water drainage from the area to be affected by the proposed activities, and proposed quantitative limits on pollutants in discharges subject to UMC 817.42, according to the more stringent of the following:

(i) Subchapter K of this Chapter and the regulatory program; or

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**UMC 817.50 Hydrologic Balance: Underground Mine Entry and Access Discharges**

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(2)(i) The discharge is conveyed to a treatment facility in the permit area in accordance with Section UMC 817.42(a);

(ii) All water from underground mine discharged from the treatment facility meets the effluent limitations of Section UMC 817.42 and all other applicable State and Federal statutes and regulations; and

(iii) Consistent maintenance of the treatment facility will occur throughout the anticipated period of gravity discharge.

## RULES

### UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance

\*\*\*

(b) The description shall include-

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(2) A plan for the treatment, where required under Subchapter K of this Chapter and the regulatory program, and surface and ground water drainage from the area to be affected by the proposed activities, and proposed quantitative limits on pollutants in discharges subject to UMC 817.42, according to the more stringent of the following:

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**UMC 817.50 Hydrologic Balance: Underground Mine Entry and Access Discharges**

\*\*\*

(b) Gravity discharge of water from an underground mine, other than a drift mine subject to Paragraph (c) of this Section, may be allowed by the Division, if it is demonstrated that-

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(ii) That discharge will result in changes in the prevailing hydrologic balance that are minimal and approved postmining land uses will not be adversely affected; or,

(2)(i) The discharge is conveyed to a treatment facility in the permit area in accordance with Section UMC 817.42(a);

(ii) All water from underground mine discharged from the treatment facility meets the effluent limitations of Section UMC 817.42 and all other applicable State and Federal statutes and regulations; and

(iii) Consistent maintenance of the treatment facility will occur throughout the anticipated period of gravity discharge.



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 9, 1986

Mr. Keith Zobell  
Environmental Engineer  
Utah Fuel Company  
P.O. Box 719  
Helper, Utah 84526

Dear Mr. Zobell:

Re: Approval of MRP Amendment, Subsidence Monitoring, Skyline Mine, Utah Fuel Company, ACT/007/005-(86B), Folder #3, 4 and 10, Carbon County, Utah

The Division has completed a review of U.S. Fuels Company's May 12, 1986 proposal to develop and implement a new subsidence monitoring program using the photogrammetric method.

Your proposal is technically complete and satisfactory. The Division hereby grants its approval to implement the program. We have no further questions at this time and apologise for the unforeseen delay in responding to your request.

Sincerely.

A handwritten signature in black ink that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: R. Christensen  
A. Klein  
L. Braxton  
D. Darby  
0873R-24



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

November 6, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
P402 459 411

Mr. Glen A. Zumwalt  
Vice President/General Manager  
Utah Fuel Company  
P.O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt

Re: Final Approval, MRP Amendment, Minor Modification to Permanent  
Open Coal Storage Area, Skyline Mine, Utah Fuel Company  
ACT/007/005-86E, Folder #4, Emery County, Utah

The Division has completed its review of Utah Fuel Company's October 24, 1986 submittal concerning drainage control modifications at the North Coal Storage Area. The proposed plans are acceptable and approval is hereby granted by the Division to proceed with implementation.

Thank you for your cooperation in this matter. Please contact me or Dave Cline should you have any questions.

Sincerely,

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

Review Chronology:

A. Operator Submittals  
1. 10/24/86

DOGM Responses  
1. 11/4/86

DMW:jvb  
cc: Allen Klein  
Lowell Braxton  
Sue Linner  
0851R-48

No comments,  
4 x 2  
No comments  
D.C.

Needs approval  
letter drafted

MRP REVISION/NOV TRACKING FORM  
(Revised: 9/25/85)

Type of Proposal:  COAL  NONCOAL

Exploration \_\_\_\_\_  
NOV/CO Abatement, NOV # \_\_\_\_\_, Abatement Deadline \_\_\_\_\_  
MRP Revision \_\_\_\_\_  
 MRP Amendment \_\_\_\_\_  
MR-1 Application (non-coal) \_\_\_\_\_ Issuing Inspector \_\_\_\_\_

Title of Proposal: Minor Modification to Permanent Open Coal Storage Area

Company name: Utah Fuel Co. Project/ Mine Name: Skylark Mine

File # (PRO/ACT): 007/005- # New Acres (Fed/State/Fee): 1 1  
(CEP/EXP/INA) 866 Disturbed

Assigned Reviewers:	Review Time (hrs):	OTHER AGENCIES: (# of copies & date)
(Hydrology) <u>Dave Cline</u>	_____	OSM <u>8</u>
(Wildlife/Veg.) <u>Lynn R.</u>	_____	USFS _____
(Engineering) _____	_____	BLM _____
(Soils) _____	_____	Health <u>1</u>
(Geology) _____	_____	History _____
		H2O Rts _____
		Wildlife _____
		USFWS _____

DATES: (a) Initial Plan Received 10/24/86  
Tech Review Due 11/7/86  
Tech Review Complete \_\_\_\_\_  
DOGM Response Sent \_\_\_\_\_

- |  |   |
|--|---|
| (b) Operator Resubmission _____<br>Tech Review Due _____<br>Tech Review Complete _____<br>DOGM Response Sent _____ | (e) Optr. Resubmission _____<br>Tech Review Due _____<br>Tech Review Complete _____<br>DOGM Response Sent _____ |
| (c) Operator Resubmission _____<br>Tech Review Due _____<br>Tech Review Complete _____<br>DOGM Response Sent _____ | (f) Optr. Resubmission _____<br>Tech Review Due _____<br>DOGM Response Sent _____                               |
| (d) Operator Resubmission _____<br>Tech Review Due _____<br>Tech Review Complete _____<br>DOGM Response Sent _____ | (g) Cond'l. Approval _____<br>Stipulations Due _____<br>Stips Received _____<br>Final Approval _____            |
|  | (h) MR-9 Received _____<br>MR-9 Acknowledged _____  |

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

NOTE (INSPECTORS): Please attach a copy of the NOV issued to the abatement plan when received from the operator.

NOTE (REVIEWERS): Please prepare review comments in a format referencing the appropriate regulation or statute.



**Utah Fuel  
Company**

P.O. Box 719  
Helper, Utah 84526  
(801) 637-7925 or  
Salt Lake (801) 566-7111

**RECEIVED**  
OCT 24 1986

Subsidiary of  
Coastal States  
Energy Company

**DIVISION OF  
OIL, GAS & MINING**

October 23, 1986

Lowell P. Braxton  
Mined Land Reclamation Administrator  
Division of Oil, Gas & Mining  
355 W. North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Re: Minor Modification for Permanent Open Coal Storage

Dear <sup>Lowell</sup>~~Mr. Braxton~~:

Enclosed are 14 copies of information for a minor modification to our approved M&RP for our permanent open coal storage.

In the approved plan it shows in Drawing 3-6A and describes on page 38, sec. 3.2 a drainage ditch along the north and south sides of the North Coal Storage area. In the text it also states, "It is not planned for the pile to encroach onto the adjacent cut slopes." Our plan is to store up to approximately 75,000 tons of coal in the North Coal Storage area.

We have been storing coal in the North Storage area on an "as needed" basis since it has been approved. Our experience is showing that we cannot logically put 75,000 tons of coal in this area without a great deal of work and expense. The problem deals with maintaining a drainage ditch on the north and south sides of the pile. In order to maintain the ditches, the top of the pile narrows rapidly so that it becomes difficult to drive trucks on top of the pile and still have room to turn them around.

We are requesting to modify our approved M&RP and eliminate the ditches on the north and south sides of the North Coal Storage area. An eighteen inch culvert would be placed along the back of the slope on the south side of the pile. This pipe will carry any runoff that is generated on the west end of the pile.

Numerous attempts have been made to revegetate the cut slopes on the north and south sides of the North Storage area. We have had some success on the upper reaches of the slopes; however, the bottom 1/2 to 2/3 of the slope have basically remained unvegetated. We feel the wise and prudent thing to do is to wait until final reclamation when these slopes will be softened and revegetation can be successful. We realize that we will have

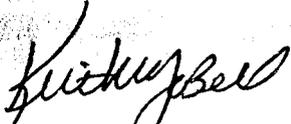
Page Two

to keep the addition bonding until final reclamation. We will not put coal on slopes where there is established vegetation. We have enclosed pictures showing these slopes.

We are not proposing any additional coal storage at this time.

We will appreciate your prompt review and approval of this modification so that we can accomplish the work yet this fall and better utilize the North storage this winter.

Sincerely,



for Glen A. Zumwalt  
Vice President/General Manager

GAZ:KZ:lm

Enclosure

CRUSHED COAL STORAGE

RECEIVED  
OCT 24 1986

DIVISION OF  
OIL, GAS & MINING

During the initial stage of the mining operations, the permanent coal storage facilities will not have been completed. After completed analysis, it has been determined that the construction of permanent facilities should be delayed to the fourth year of production. Initial storage will consist of a temporary ground storage area. Front-end loaders will be utilized to convey coal to the train loading facility. The temporary ground storage will have an expected life of about three years. During this period, the mine production will increase from 437,000 tons per year to 2,301,000 tons per year. It is anticipated that the temporary storage area could range in capacity from 10,000 tons to 20,000 tons depending upon train shipments. Presently, the train shipments are not envisioned as unit trains, but will consist of shipments of 10 to 50 cars.

The permanent coal storage facility will initially consist of two 15,000-ton-capacity concrete silos, with construction of two additional 15,000-ton-capacity silos at a later date as additional storage capacity is needed. The bottom of each silo will be furnished with seven vibrating feeders (four at a constant discharge rate of 750 tons/hr; three at a variable controlled rate of 100 to 500 tons/hr). These feeders will deliver carried loads to an 84-inch-wide conveyor transporting coal to the train loading system.

\*Two ground storage areas have been established (location shown on Map 3-6a). They will be used on an as-needed basis. The south storage area will hold approximately 37,500 tons and the north storage area will hold

REPLACES	TEXT
Section 3.2 Pg. 3-28 Date 12/20/84	Section 3.2 Pg. 38 Date 10/23/86

\*Denotes change or additions

approximately 75,000 tons. Actual capacity will depend upon such factors as height, compaction, fill slope and safe working practices. It is planned for the pile to encroach onto the adjacent cut slopes that are too steep for revegetation. At the end of Life of Mine the coal will be removed from the slopes. The slopes will then be backfilled to soften the slope angle and then be revegetated along with the rest of the minesite. Volumes will be consistent with and in compliance with PSD regulations. Drainage will be provided and will direct run-off water into the established surface drainage system (see map 3-6a).

### 3.2.5 Mine Surface Facilities - General Layout

The proposed location of the major surface facilities components are shown on Map 3-7 (Drawing 101-C). These mining facilities consist of a coal storage and railroad loadout area located adjacent to highway 96 and the mine portal facilities located approximately 2.5 miles from the loadout area at the head of Eccles Canyon.

The mine surface facilities have been arranged on three different bench elevations, as shown on Map 3-8 (Drawing 102-C). This arrangement provides optimal utilization of the existing topography while maintaining required areas for storage of materials, operations, and access to the mine portals. The Applicant will attempt to maintain the partial retention visual quality objective during mine operations. If possible, facility shapes, sizes, amounts, etc. will be subordinate to the characteristic surrounding landscape as viewed from middle ground. Colors of the structures and facilities will complement earth tones where practical. The upper level bench, at an elevation of 8,700 feet,

(Continued on pg. 3-39)

REPLACES	TEXT
Section 3.2 Pg. 3-38a Date 12/20/84	Section 3.2 Pg. 3-38a Date 10/23/86

\*Denotes change or additions



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

January 15, 1986

Mr. Glen A. Zumwalt  
Vice President/General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

RE: Review of Operator Response to Conditional Approval for  
Removal and Disposal of Sediments from Sedimentation Pond,  
Skyline Mine, ACT/007/005, 3 & 4, Carbon County, Utah

The Division has completed the review of Utah Fuel Company's November 18, 1985 response to the Division's deficiency letter of October 18, 1985 concerning the plan referenced above. The Division's concerns will be adequately addressed provided the following recommendation(s) are found acceptable by Utah Fuel. Please refer to the attached technical review memo for the specific recommendations and conditions.

Please provide a written response accepting Condition #1 and ten (10) additional copies of the complete set of plans in a format allowing direct insertion into the approved MRP's currently on file with the regulatory agencies by January 28, 1986. Thank you for your continued cooperation and patience in completing this permitting activity. Please contact me or Rick Summers should any questions or concerns remain.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

cc: Allen D. Klein  
Lowell Braxton  
Rick Summers  
8992R-36

David Lof  
Susan Linner

December 23, 1985

TO: Technical File

FROM: Rick P. Summers. Reclamation Hydrologist *RS*

RE: Response to Division 11/18/85 Deficiency Letter Concerning Disposal of Sediment From Sedimentation Pond, Skyline Mine, ACT/007/005.

Summary:

Skyline Mine's response to the above referenced letter dated 11/18/85 was reviewed. The response addresses the design of diversion ditch BC-12 located beneath the conveyor at the Skyline loadout. Designs for a relocated diversion were required due to the disposal of sediment from the pond at the original diversion location. Although the submittal contained a significant number of errors, sufficient information was available to perform a technical analysis. Based upon that analysis, it was shown that the diversion has been oversized relative to the capacity to convey the runoff from a 10 yr-24 hr precipitation event (capacity for a 100 yr-24 hr event exists). Design velocities were calculated to be approximately 5.5 fps for a 50 yr-24 hr design flow. A channel lining of 4 inch riprap would be required to insure stability at this velocity.

Recommendations:

Diversion BC-12 routes disturbed area drainage to an existing sedimentation pond at the loadout. Combined with consideration of the length of the diversion (350 ft.), it is my recommendation that the diversion should be given final approval with the following condition:

Condition #1: The applicant must install a channel lining of four (4) inch material in diversion BC-12 prior to July 15, 1986. The Division may waive this requirement following inspection of the diversion by Division Hydrologists following the snowmelt period. Selective placement of material may be approved in lieu of lining the entire reach following the above inspection. Additionally, smaller material may be used if a demonstration of reduced velocities (increased Manning's n value) is submitted and approved by the Division.

cc: Lowell P. Braxton  
Sue Linner  
Wayne Hedberg  
Tom Wright

0317R-69

Project: Skyline mine, Designs for Diversion BC-12  
 DATE: 12-18-85

Reviewer: Rick Summers, Reclamation Hydrologist

I. PEAK FLOW VALUE ASSUMPTIONS

	<u>Skyline</u>	<u>DOGMA</u>	<u>Comments</u>
Area (Ac)	2.0	2.7	Reference: sheets 2 and 3 (maps)
Hydraulic Length	$TA^2$	1,320'	2) Not applicable: applicant submitted Rational Method
Slope	$TA$	5.68%	
CN	$TA$	90	
Time Conc.	6.3 min	.196 hrs. (11.7 min)	
Pyr-24hr ppt.	Discrepancy in	2.4 <sup>2)</sup>	3) Clear Creek Station Records.
50yr-24hr ppt.	$TRP$	3.2	
100yr-24hr ppt.	3.6	3.6	

II. PEAK FLOW RESULTS

	<u>Skyline</u>	<u>DOGMA</u>
$Q_{10-24}$	Not Calc.	3.7 cfs.
$Q_{50-24}$	Not Calc.	5.44 cfs.
$Q_{100-24}$	5.8 cfs	6.32 cfs.

### III. Channel Capacity and Velocity Calculations

for  $Q = 5.8$  cfs: (50 yr. 24 hr event)

Minimum slope: Capacity Design

Available Depth 1.2' - 0.3 freeboard = 0.90 ft.

Cross-sectional Area:  $(4.61 \text{ in}^2) (1" / 0.64 \text{ ft}^2)$  (exhibit 2)  
 $= 2.95 \text{ ft}^2$

$n = 0.023$

Slope min = 2.5%

reference: Map, sheet 2.

Wetted Perimeter:  $(7.2 \text{ in}) (1" / 0.8 \text{ ft})$   
 $= 5.76 \text{ ft}$ .

reference: exhibit 2

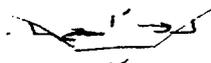
#### Results

	<u>DDGM</u>	<u>Skyline</u>
Slope	2.5%	2.5%
Depth	0.9'	0.9'
Area	2.95 ft <sup>2</sup>	2.84 ft <sup>2</sup>
Wp	5.76'	6.5'
Hydr. Radius	0.512	0.437
n-value	0.023	0.023
Velocity	6.55 fps	2.25 fps ← error. <sup>2)</sup>
Q capacity	19.339 cfs.	5.97 ✓

2) It appears applicant left Area out of the computation of discharge.

Solution: Find Depth and Velocity for  $Q = 5.8$  cfs

1) Rough check: assume trapezoidal channel



$Q$	$D$	$A'$	$P$	$S$	$V$
5.8 cfs	0.526	1.27	3.831	.025	4.809
3.7	0.424	0.87	3.28	.025	4.236
3.7	0.383	0.75	3.06	.038	4.941

2) Check Exhibit 3 (cross-section).

	Depth	Area	Wet P.	Slope	Velocity	Q
	0.6	1.83 ft <sup>2</sup>	4.48	0.025	5.64	10.3
	0.5	1.40	3.68	0.025	5.37	7.5
USE this. →	0.4	1.06	2.80	0.025	5.36	5.62
	0.3	< 0.59 >	2.24	0.038	< 5.19 >	< 3.06 >
↙	0.4	1.06	2.80	0.038	6.61	7.01

so,

@ 0.4' depth, Q = 5.7 to 7.0 cfs depending on slope

Velocity = 5.36 to 6.61 fps

assume 5.5 fps velocity for all sections.

3) Riprap sizing:

@ 5.5 fps, channel lining must be 4" material



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Dee C. Hansen, Executive Director  
Dianne R. Nielson, Ph.D., Division Director

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

February 13, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
(P592 431 327)

Mr. Glen A. Zumwalt  
Vice President and General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

**FILE COPY**

Dear Mr. Zumwalt:

RE: Operator Response to Conditional Approval for Removal and Disposal of Sediments from Sedimentation Pond, Skyline Mine, ACT/007/005, #3 and #4, Carbon County, Utah

The Division has received Utah Fuel Company's letter dated January 21, 1986 which was provided in response to our January 15, 1986 letter concerning the plans referenced above.

Your letter discusses Notice of Violation (NOV) N85-2-16-2, #2 of 2, which was issued by the Division's Inspection and Enforcement (I. & E.) staff. It is stated that the NOV addresses the same area of concern as outlined in our January 15 letter. The area of contention is the diversion ditch which is located beneath the BC-12 conveyor at the Skyline Mine site. In your January 21 letter, you stated that Utah Fuel Company would not respond to the Division's January 15 letter until the hearing officer had made a ruling on the proceedings of the Assessment Conference for NOV N85-2-16-2, which was held on January 15, 1986.

Apparently there is some confusion regarding this issue. Our January 15, 1986 letter is a continuation of the ongoing technical review of the company's previous proposal which addressed the removal and disposal of sediments from the sedimentation pond. The subject NOV which was issued by

Page 2  
Mr. Glen A. Zumwalt  
ACT/007/005  
February 13, 1986

by I. & E. is an entirely separate matter. It has no bearing on the condition outlined in our January 15 letter. Both issues, the NOV and our January 15 letter, must be addressed individually by the operator.

Regardless of the Assessment Officer's ruling on the validity of the NOV, the operator will still need to provide a response to Condition #1 of our January 15 letter. Adequate erosion control measures will need to be provided for those sections of the diversion ditch where runoff velocities may contribute to excessive erosion.

We encourage Utah Fuel Company to please provide a response to our January 15 letter by February 20, 1986. Should questions or concerns remain, please contact us at your earliest convenience.

Sincerely,



D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

btb  
cc: Allen Klein  
Lowell Braxton  
Joe Helfrich  
Rick Summers  
Tom Wright  
8992R-48 & 49



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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May 27, 1986

CERTIFIED RETURN RECEIPT REQUESTED  
(P402 458 366)

Mr. Glen A. Zumwalt  
V.P. & General Manager  
Utah Fuel Company  
P.O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

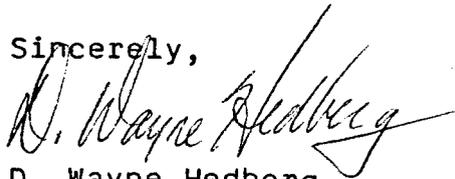
Re: Conditional Approval of MRP Amendment, Request for Change  
in Aquatic Monitoring Program, Skyline Mine, ACT/007/005,  
File #4, Carbon County, Utah

The Division has completed its review of Utah Fuel Company's request to amend the approved Aquatic Monitoring Program at the Skyline Mine (received April 28, 1986). The plans are adequate for issuance of conditional approval with the following stipulation.

One condition remains which must be resolved before the plans can be finalized. The Division concurs with the request to delete invertebrate monitoring from the program. However, as submitted, replacement page 4-63 does not fit into the plan. In 1980 this page was replaced with pages 4-63 and 4-63a. Please revise section 4.18 (page 4-63) to fit more closely with the current approved plans.

If possible, please provide (14) copies of the revised text and page numbers by June 16, 1986. Thank you for your cooperation in completing this permitting action. Please call me or Lynn Kunzler of the technical staff should you have any questions or concerns.

Sincerely,

  
D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

dwh

cc: A. Klein            L. Braxton  
      L. Kunzler        S. Linner  
8992R-61



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

July 7, 1986

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

Dear Mr. Geer:

RE: Final Approved Plans, MRP Amendment, Request for Change in Aquatic Monitoring Program, Utah Fuel Company, Skyline Mine, ACT/007/005, File #4, Carbon County, Utah

Enclosed is (1) copy of Utah Fuel Company's approved plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: Sue Linner  
0341R-54



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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July 7, 1986

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

Dear Mr. Klein:

RE: Final Approved Plans, MRP Amendment, Request for Change in  
Aquatic Monitoring Program, Utah Fuel Company, Skyline  
Mine, ACT/007/005, File #4, Carbon County, Utah

Enclosed are (8) copies of Utah Fuel Company's approved plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: Sue Linner  
0341R-52



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

July 7, 1986

Mr. Dennis Dalley, Assistant Director  
Utah Department of Health  
Division of Environmental Health  
P. O. Box 45500  
Salt Lake City, Utah 84145-0500

Dear Mr. Dalley:

RE: Final Approved Plans, MRP Amendment, Request for Change in  
Aquatic Monitoring Program, Utah Fuel Company, Skyline  
Mine, ACT/007/005, File #4, Carbon County, Utah

Enclosed is (1) copy of Utah Fuel Company's approved plans for a MRP Amendment for their Skyline Mine in Carbon County, Utah. This material is for your review, information and files.

If you have any questions or need additional information, please contact me or Susan Linner, Permit Supervisor, at (801) 538-5340.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: Sue Linner  
0341R-53



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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July 28, 1986

Mr. Glen A. Zumwalt  
Vice President/General Manager  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

Dear Mr. Zumwalt:

Re: MRP Amendment, Underground Mine Plan Modification, Skyline Mine, ACT/007/005, Folder No. 3 & 4, Carbon County, Utah

The Division has reviewed Skyline's proposal (December 28, 1986) for a minor mine plan modification along 1 right 1 west to avert unfavorable roof and rib conditions.

We find that these minor underground changes should not cause any adverse impacts, and have no further comments or concerns. Please accept our apologies for the delay in providing our response. Thank you for keeping our office informed of changing conditions and mine status.

Sincerely,

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

DWD:jvb  
cc: L. P. Braxton  
D. Darby  
S. Linner  
0005R-38



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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August 14, 1986

Mr. Keith Zobell  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

Dear Mr. <sup>Keith</sup>Zobell:

Re: Skyline Mine, ACT/007/005, File #4, Carbon County, Utah

On August 13 and 14, we discussed the Utah Department of Transportation's (DOT's) request to Skyline to withdraw approximately 1,500 gallons per hour of water from the sedimentation pond immediately below the Skyline Mine. This withdrawal would be for a period of approximately 4 days. In reviewing the ramifications to effluent from the sedimentation pond, the Division assumed that 240,000 gallons per day of mine water is presently being discharged into the sedimentation pond. This equates to approximately 170 gallons per minute. The requested DOT water use amounts to approximately 50,000 gallons over a four-day period, or approximately 5 hours of mine discharge. The Division feels that no degradation of effluent from the sedimentation pond will result from DOT's withdrawal of this volume of water, and therefore authorizes Skyline to allow DOT to use this water, should it be necessary.

We would request that when water is being withdrawn from the pond, the suction head for water pickup should be kept well off the bottom of the pond and away from the pond banks to reduce turbidity into the water truck. We are assuming that this is a once-only request from DOT and that all DOT needs for water withdrawal will end approximately August 22, 1986.

Sincerely,

A handwritten signature in cursive script, appearing to read "Lowell P. Braxton".

Lowell P. Braxton  
Administrator

djh  
cc: S. Linner  
J. Helfrich  
0799R/53



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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

September 9, 1986

Mr. Keith Zobell  
Environmental Engineer  
Utah Fuel Company  
P.O. Box 719  
Helper, Utah 84526

Dear Mr. Zobell:

Re: Approval of MRP Amendment, Subsidence Monitoring, Skyline Mine, Utah Fuel Company, ACT/007/005-(86B), Folder #3, 4 and 10, Carbon County, Utah

The Division has completed a review of U.S. Fuels Company's May 12, 1986 proposal to develop and implement a new subsidence monitoring program using the photogrammetric method.

Your proposal is technically complete and satisfactory. The Division hereby grants its approval to implement the program. We have no further questions at this time and apologise for the unforeseen delay in responding to your request.

Sincerely.

A handwritten signature in cursive script that reads "D. Wayne Hedberg".

D. Wayne Hedberg  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: R. Christensen  
A. Klein  
L. Braxton  
D. Darby  
0873R-24



STATE OF UTAH  
NATURAL RESOURCES  
Oil, Gas & Mining

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

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September 9, 1986

Mr. Glen A. Zumwalt  
Utah Fuel Company  
P. O. Box 719  
Helper, Utah 84526

FILE COPY

Dear <sup>Glen</sup> Mr. Zumwalt:

Re: Approval to Suspend Annual Vegetation Monitoring Skyline Mine, ACT/007/005, Folder No. 3 & 4, Carbon County, Utah

The Division has reviewed your August 7, 1986 letter requesting that the annual vegetation monitoring be suspended and that a "study plan" (test plot program) be developed to determine the type of revegetation to be under taken for non-vegetated areas. The Division is in agreement with this proposal and will look forward to reviewing the proposed study plan to be submitted by October 1, 1986.

The plan to install a fiber blanket in the North Fork emergency overflow channel is also approved. As discussed between Mr. Keith Zobell of Utah Fuel Company and Lynn Kunzler of the Division, the approved interim seed mix will be used for the necessary seeding inconjunction with installation of the fiber blanket.

The Division appreciates your concern and willingness to address these reclamation concerns.

Sincerely,

A handwritten signature in cursive script, appearing to read 'L. P. Braxton'.

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

LK:jvb  
cc: S. Linner  
D. Lof  
0028R-49