



0005

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

December 18, 1985

CERTIFIED RETURN RECEIPT REQUESTED
(P402 457 272)

Mr. D. L. Bryner, Vice President
Utah Power & Light Company
P. O. Box 899
Salt Lake City, Utah 84110

Dear Mr. Bryner:

RE: Revised Final Permit, Deer Creek Mine, ACT/015/018, #2 and #4, Emery County, Utah

Please find enclosed two copies of the final state permit for the Deer Creek Mine. This permit reflects wording changes to Stipulations 817.41-(1)-TM and 817.52-(1)-TM as previously contained in my November 4, 1985 correspondence to you. These wording changes were requested by Chris Shingleton and Roger Fry in a meeting with Division staff on Tuesday, December 3, 1985.

Appended to the actual permit is an addendum to the Office of Surface Mining Technical Analysis which provides the rationale for the additional stipulations the state is adding to the federal special conditions. Please examine the additional stipulations and sign both copies of the attached permit, ACT/015/018, 12/85, on page 5 of that document. Upon signing, please keep one copy of the permit for your records and return one copy Certified Return Receipt Requested to the Division at your earliest convenience.

A signed and executed performance bond for the Deer Creek Mine has been received by the Division in the amount of \$1,224,000.00 (1989 dollars) payable to the state of Utah. Therefore, upon your signature of the permit, it will become valid and enforceable.

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Mr. D. L. Bryner, Vice President
ACT/015/018
December 18, 1985

Thank you for your cooperation on this matter. Should you have any questions, please feel free to contact the Division.

Best regards,



Dianne R. Nielson
Director

JJW/btb
Enclosures
cc: Allen Klein
Robert Hagen
Lowell Braxton
Joe Helfrich
John Whitehead
9294R-32 & 33

FEDERAL
(February 1985)

Permit Number ACT/015/018 , 12/85

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

This permit, ACT/015/018, which incorporates the Office of Surface Mining (OSM) Permit UT-0016, 10/85, is issued for the state of Utah by the Utah Division of Oil, Gas and Mining (DOGGM) to:

Utah Power & Light Company
P. O. Box 899
Salt Lake City, Utah 84110

for the Deer Creek Mine. Utah Power & Light Company is the lessee of federal coal leases SL-064607-064621, SL-064900, U-1358, SL-070645, U-02292, U-08492, U-084924, U-083066, U-040151, U-044025, U-014275, U-024319, U-47979, and the lessee/owner of certain fee-owned parcels in Township 17 South, Range 7 East, SLBM: Section 10, SE1/4; Section 11, W1/2 W1/2, NE1/4 NW1/4; Section 14, W1/2 NW1/4, SW1/4 west of Deer Creek Fault; Section 15, SE1/4; Section 22, NE1/4. Also: Beginning at the SE corner of NE1/4 SE1/4 Section 25, Township 17 South, Range 6 East, SLM, thence N 160 rods, W 116 rods to center line of Cottonwood Creek; thence southerly along center line of said creek to a point 84 rods W of the beginning; thence E 84 rods to the beginning. The permit is not valid until a performance bond is filed with the DOGM in the amount of \$1,224,000.00, payable to the state of Utah, Division of Oil, Gas and Mining and OSM, and the DOGM has received a copy of this permit signed and dated by the permittee.

- Sec. 1 STATUTES AND REGULATIONS - This permit is issued pursuant to the Utah Coal Mining and Reclamation Act of 1979, Utah Code Annotated (UCA) 40-10-1 et seq, hereafter referred to as UCMRA.
- Sec. 2 The permittee is authorized to conduct surface coal mining and reclamation operations on the following described lands (as shown on ownership map) within the permit area at the Deer Creek Mine situated in the state of Utah, Emery County, and located:

Federal Lands:

Township 16 South, Range 7 East, SLBM
Sec. 27: SW1/4
Sec. 28: SE1/4, E1/2 SW1/4
Sec. 33: E1/2, E1/2 W1/2, SW1/4 SW1/4
Sec. 34: W1/2, SE1/4, S1/2 NE1/4

Township 17 South, Range 7 East, SLBM

Sec. 2: S1/2, Lots 1-7 and 10-12
Sec. 3: W1/2, W1/2 NE1/4, NE1/4 NE1/4, S1/2 SE1/4
Secs. 4 through 10: All
Sec. 11: N1/2 NW1/4, W1/2 SW1/4, approximately
Sec. 14: W1/2 W1/2, approximately
Secs. 15 through 22: All
Sec. 27: N1/2 N1/2, SE1/4 NE1/4, approximately
Sec. 28: N1/2 N1/2
Sec. 29: N1/2 N1/2
Sec. 30: N1/2 N1/2, SW1/4 NE1/4, S1/2 NW1/4, NW1/4
SW1/4, N1/2 SW1/4 approximately

Township 17 South, Range 6 East, SLBM

Sec. 1: E1/2, E1/2 W1/2
Sec. 12: E1/2, E1/2 W1/2
Sec. 13: E1/2, E1/2 W1/2
Sec. 24: E1/2, E1/2 W1/2
Sec. 25: N1/2 NE1/4

Fee Lands:

Township 17 South, Range 7 East, SLBM

Sec. 10: SE1/4
Sec. 11: W1/2 W1/2, NE1/4 NW1/4
Sec. 14: W1/2 NW1/4, SW1/4 West of Deer Creek Fault
Sec. 15: SE1/4
Sec. 22: NE1/4

Also:

Beginning at the SE corner of NE1/4 SE1/4 Section 25, Township 17 South, Range 6 East, SLM, thence North 160 rods, West 116 rods to center line of Cottonwood Creek; thence Southerly along center line of said creek to a point 84 rods West of the beginning; thence East 84 rods to the beginning

This legal description is for the permit boundary of the Deer Creek Mine. The permittee is authorized to conduct surface and reclamation operations connected with mining on the foregoing described property subject to the conditions of the leases, the approved mining plan, and OSM permit UT-0016, 10/85, issued October 28, 1985, including all conditions and all other applicable conditions, laws and regulations.

- Sec. 3 This permit is issued for a term of five (5) years commencing on the date the permit is signed by the permittee, except that this permit will terminate if the permittee has not begun the surface coal mining and reclamation operations covered herein within three (3) years of the date of issuance.
- Sec. 4 The permit rights may not be transferred, assigned or sold without the approval of the Director, DOGM. Request for transfer, assignment or sale of permit rights must be done in accordance with applicable regulations including but not limited to 30 CFR 740.13(e) and UMC 788.17-.19.
- Sec. 5 The permittee shall allow the authorized representative of the DOGM, including but not limited to inspectors, and representatives of the Office of Surface Mining, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:
- A. have the rights of entry provided for in 30 CFR 840.12, UMC 840.12, 30 CFR 842.13 and UMC 842.13; and,
 - B. be accompanied by private persons for the purpose of conducting an inspection in accordance with UMC 842.12 and 30 CFR 842, when the inspection is in response to an alleged violation reported by the private person.
- Sec. 6 The permittee shall conduct surface coal mining and reclamation operations only on those lands specifically designated as within the permit area on the maps submitted in the mining plan and permit application and approved for the term of the permit and which are subject to the performance bond.
- Sec. 7 The permittee shall minimize any adverse impact to the environment or public health and safety including but not limited to:
- A. accelerated monitoring to determine the nature and extent of noncompliance and the results of the noncompliance;
 - B. immediate implementation of measures necessary to comply; and
 - C. warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.

- Sec. 8 The permittee shall dispose of solids, sludge, filter backwash or pollutants in the course of treatment or control of waters or emissions to the air in the manner required by the approved Utah State Program and the Federal Lands Program which prevents violation of any applicable state or federal law.
- Sec. 9 The lessee shall conduct its operations:
- A. in accordance with the terms of the permit to prevent significant, imminent environmental harm to the health and safety of the public; and
 - B. utilizing methods specified as conditions of the permit by DOGM and OSM in approving alternative methods of compliance with the performance standards of the Act, the approved Utah State Program and the Federal Lands Program.
- Sec. 10 The permittee shall provide the names, addresses and telephone numbers of persons responsible for operations under the permit to whom notices and orders are to be delivered.
- Sec. 11 The permittee shall comply with the provisions of the Water Pollution Control Act (33 USC 1151 et seq,) and the Clean Air Act (42 USC 7401 et seq), UCA 26-11-1 et seq, and UCA 26-13-1 et seq.
- Sec. 12 Upon expiration, this permit may be renewed for areas within the boundaries of the existing permit in accordance with the Act, the approved Utah State Program and the Federal Lands Program.
- Sec. 13 If during the course of mining operations, previously unidentified cultural resources are discovered, the applicant shall ensure that the site(s) is not disturbed and shall notify the state Regulatory Authority (RA). The state RA, after coordination with OSM, shall inform the operator of necessary actions required.
- Sec. 14 APPEALS - The lessee shall have the right to appeal: (a) under 30 CFR 775 from actions or decisions of any official of OSM; (b) under 43 CFR 3000.4 from an action or decision of any official of the Bureau of Land Management; (c) under 30 CFR 290 from an action, order or decision of any official of the Minerals Management Service; or (d) under

APPROVED AS TO FORM:

By: Bertram W. Roberts
Assistant Attorney General

Date: December 12, 1955

0532R

ATTACHMENT A

STIPULATIONS DOCUMENTS

Utah Power & Light Company
Deer Creek Mine
ACT/015/018, Emery County, Utah

December 18, 1985

Stipulation 817.41-(1)-TM

Within 30 days of permit approval:

1. The applicant shall commit to sampling the baseline parameters as given in Appendix I for a one year period. Streams shall be sampled twice, once each at low and high flow for one year. Other monitoring stations shall be sampled once. Of the springs currently sampled by Utah Power & Light Company (UP&L) within or adjacent to their permit area, only the 13 springs designated for regression analysis in the applicant's hydrologic monitoring plan must incorporate the parameters from Appendix I. All data shall be incorporated into the Annual Hydrologic Monitoring Report for 1986.

Stipulations 817.50-(1, 2,)-TM

Within 30 days of permit approval:

1. The applicant shall sample postmining discharges for the parameters shown in Appendix II on an annual basis until bond release. Sampling will assess if discharges are in compliance with the effluent standards of UMC 817.42 and all other applicable state and federal regulations. The applicant must commit to provide treatment, if necessary, of any discharges to achieve compliance with applicable effluent standards during the period of discharge.
2. The applicant shall provide an analysis of potential postmining discharge impacts to surface drainages including mitigation measures where indicated.

Stipulations 817.52-(1)-TM

Within 30 days of permit approval:

1. The applicant shall commit to incorporating the parameters listed in Appendix II into the operational and postmining hydrologic monitoring program. Of the springs currently sampled by UP&L within or adjacent to their permit area, only the 13 springs designated for regression analysis in the applicant's hydrologic monitoring plan must incorporate the parameters from Appendix II.

Stipulation 817.124-(1, 2, 3)-RVS

1. The applicant shall, within 30 days of permit approval, commit to restoring areas impacted by subsidence caused surface cracks or other subsidence features such as escarpments (not to include naturally occurring escarpments which are not a result of mining) which are of a size or nature that could, in the Division's determination, either injure or kill grazing livestock. Restoration shall include recontouring of the affected land surface including measures to prevent rilling, and revegetation in accordance with the approved permanent revegetation plan in the MRP. Restoration shall be undertaken after annual subsidence survey data indicate that the surface has stabilized but in all cases restoration and revegetation shall be completed prior to bond release.
2. The applicant shall, within 30 days of permit approval, commit to compensate surface owners, except for land owned by the applicant, for lands which cannot be safely grazed due to hazards caused by surface effects of subsidence, with land (in close proximity) of comparable size and grazing capacity to be used for grazing until restoration of the damaged land is achieved
3. The applicant shall, within 30 days of permit approval, commit to compensate at a fair market value owners of livestock which are injured or killed as a direct result of surface hazards caused by subsidence.

APPENDIX I

	Meetinghouse Creek	Deer Creek	In-Mine Flows	Springs (13)	Mine Water Discharge
<u>Field Measurements</u>					
pH	X	X	X	X	X
Specific Conductivity (umhos/cm)	X	X	X	X	X
Temperature (C°)	X				
Dissolved Oxygen (ppm) (perennial streams only)	X	X			
<u>Laboratory Measurements</u>					
Total Settleable Solids	X	X			X
Total Suspended Solids	X				
Total Dissolved Solids	X				
Total Hardness (as CaCO ₃)	X	X	X		X
Acidity (CaCO ₃)	X	X			
Aluminum (Al)	X	X	X	X	X
Arsenic (As)	X	X	X	X	X
Barium (Ba)	X	X	X	X	X
Boron (B)	X	X	X	X	X
Carbonate (CO ₃ ⁻²)	X	X	X	X	X
Bicarbonate (HCO ₃ ⁻)	X	X	X		X
Caesium (Cs)	X	X	X	X	X
Calcium (Ca)	X	X			X
Chloride (Cl ⁻)	X	X			
Chromium (Cr)	X	X	X	X	X
Copper (Cu)	X	X	X	X	X
Fluoride (F ⁻)	X	X	X		X
Dissolved Iron (Fe)	X	X	X		X
Total Iron (Fe)	X	X			
Lead (Pb)	X	X	X	X	X
Magnesium (Mg)	X	X	X		X
Total Manganese (Mn)	X		X	X	
Mercury (Hg)	X	X	X	X	X
Molybdenum (Mo)	X	X	X	X	X
Nickel (Ni)	X	X	X	X	X
Nitrogen: Ammonia (NH ₃)	X	X	X	X	X

	Meetinghouse Creek	Deer Creek	In-Mine Flows	Springs (13)	Mine Water Discharge
Nitrite (NO ₂)	X	X	X	X	X
Nitrate (NO ₃ ⁻)	X	X	X	X	X
Potassium (K)	X	X			X
Phosphate (PO ₄ ⁻³)	X	X	X	X	X
Selenium (Se)	X	X	X	X	X
Sodium (Na)	X	X			X
Sulfate (SO ₄ ⁻²)	X	X			
Sulfide (S ⁻)	X	X	X	X	X
Zinc (Zn)	X	X	X	X	X
Oil and Grease	X	X			
Cation-Anion Balance	X	X			

APPENDIX II

	Meetinghouse Creek	Deer Creek	In-Mine Flows	Springs (13)	Mine Water Discharge
<u>Field Measurements</u>					
pH	X	X	X	X	X
Specific Conductivity (umhos/cm)	X	X	X	X	X
Temperature (C ^o)	X				
Dissolved Oxygen (ppm) (perennial streams only)	X				
<u>Laboratory Measurements</u>					
Total Settleable Solids	X	X			
Total Suspended Solids	X				
Total Dissolved Solids	X				
Total Hardness (as CaCO ₃)	X	X	X	X	X
Acidity (CaCO ₃) Carbonate	X	X			
(CO ₃ ⁻²)	X	X	X	X	X
Bicarbonate (HCO ₃ ⁻)	X	X	X		X
Calcium (Ca)	X	X			X
Chloride (Cl ⁻)	X	X	X		
Dissolved Iron (Fe)	X	X	X		X
Total Iron (Fe)	X	X			X
Magnesium (Mg)	X	X			X
Total Manganese (Mn)	X		X	X	
Potassium (K)	X	X			X
Sodium (Na)	X	X			X
Sulfate (SO ₄ ⁻²)	X	X			
Oil and Grease	X	X			
Cation-Anion Balance	X	X			

ADDENDUM TO THE OFFICE OF SURFACE MINING
TECHNICAL ANALYSIS

Utah Power & Light Company
Deer Creek Mine
ACT/015/018, Emery County, Utah

December 18, 1985

UMC 817.41 Hydrologic Balance: General Requirements - TM

Existing Environment and Applicant's Proposal

The applicant reported baseline water quality and quantity data in the 1978 Annual Hydrologic Monitoring Reports. Since 1978, the applicant has operationally monitored a reduced list of water quality parameters for streams, springs, mine in-flows and mine discharges.

Compliance

Data available in the 1978 Annual Hydrologic Monitoring Report and subsequent reports are inadequate to fully characterize and thereby, assess changes in water quality.

The applicant will be in compliance when the following stipulation is met.

Stipulation 817.41-(1)-TM

Within 30 days of permit approval:

1. The applicant shall commit to sampling the baseline parameters as given in Appendix I for a one year period. Streams shall be sampled twice, once each at low and high flow for one year. Other monitoring stations shall be sampled once. Of the springs currently sampled by Utah Power & Light Company (UP&L) within or adjacent to their permit area, only the 13 springs designated for regression analysis in the applicant's hydrologic monitoring plan must incorporate the parameters from Appendix I. All data shall be incorporated into the Annual Hydrologic Monitoring Report for 1986.

UMC 817.50 Hydrologic Balance: Underground Mine Entry and Access Discharges - RVS and TM

Existing Environment and Applicant's Proposal

Meetinghouse Portal is the lowest of the Deer Creek Mine portals. Permanent portal sealing will incorporate a four-inch diameter drain pipe through the portal. The applicant states that the drain pipe will accommodate flows of 300 gallons per minute (gpm) and will be buried below the frost line for less than 100 feet to the natural surface drainage (MRP, page 4-34).

The applicant commits to monitoring the quality of discharges until bond release (MRP, page 4-34).

Compliance

The applicant indicates mine waters will discharge from Meetinghouse Portal following mining and commits to monitoring discharges until bond release. However, the applicant has not specified either the frequency or parameters to be monitored.

The applicant has not provided a discussion of the postmining discharge impacts to surface drainages including water quality and quantity, channel stability and riparian habitat.

The applicant will be in compliance when the following stipulations are met.

Stipulations 817.50-(1, 2,)-TM

Within 30 days of permit approval:

1. The applicant shall sample postmining discharges for the parameters shown in Appendix II on an annual basis until bond release. Sampling will assess if discharges are in compliance with the effluent standards of UMC 817.42 and all other applicable state and federal regulations. The applicant must commit to provide treatment, if necessary, of any discharges to achieve compliance with applicable effluent standards during the period of discharge.
2. The applicant shall provide an analysis of potential postmining discharge impacts to surface drainages including mitigation measures where indicated.

UMC 817.52 Hydrologic Balance: Surface and Ground Water Monitoring - TM and RVS

Existing Environment and Applicant's Proposal

Surface Water

The applicant currently monitors Deer Creek above and below the mine. A water sampling schedule was established during 1981 that includes collection of water quality samples (grab type) and quantity measurements. These data are collected on a monthly basis during the first and second week of each month throughout the duration of the runoff season. Monitoring data are incorporated into the Annual Hydrologic Monitoring Reports (MRP, page 2-85).

Ground Water

The applicant currently monitors springs and in-mine flows for water quality and quantity. All springs identified on East Mountain are sampled once a year, four springs are sampled twice a year and 13 springs are sampled three times a year (Hydrologic Monitoring Report for 1984, page 27).

In-mine flows are sampled quarterly (MRP, page 2-78) and borehole water levels are measured quarterly (Hydrologic Monitoring Report for 1984, page 55).

Mine water discharge is sampled monthly for quantity and quality (Hydrologic Monitoring Report for 1984, page 51).

Compliance

Surface Water and Ground Water

The hydrologic monitoring plan submitted by the applicant does not and will not derive adequate data to characterize water quality. Moreover, the sampling frequency for perennial streams is inadequate to accurately record water quantity and quality of discharges from the permit area.

The applicant will be in compliance when the following stipulations are met.

Stipulations 817.52-(1)-TM

Within 30 days of permit approval:

1. The applicant shall commit to incorporating the parameters listed in Appendix II into the operational and postmining hydrologic monitoring program. Of the springs currently sampled by UP&L within or adjacent to their permit area, only the 13 springs designated for regression analysis in the applicant's hydrologic monitoring plan must incorporate the parameters from Appendix II.

UMC 817.124 Subsidence Control: Surface Owner Protection - RVS

Existing Environment and Applicant's Proposal

Tension cracks related to subsidence occur within and adjacent to the permit area (Utah Power & Light Company, Subsidence Monitoring Program, Annual Report for 1984, Figure 10, page 7 and Figure 5). Predicted maximum subsidence for portions of the mine workings exceed eight feet and observed subsidence is greater than 23 feet (Subsidence Monitoring Program, Annual Report for 1984, page 15). The applicant indicates surface tension cracks have not affected land-use (Subsidence Monitoring Program, Annual Report for 1984, page 17).

Compliance

Vertical movement and associated upward propagation of tension cracks to the surface have reduced the reasonably foreseeable use of surface lands within and adjacent to the permit area. Specifically, certain areas characterized by surface tension cracks pose a potential hazard to livestock grazing. The applicant has not provided a mitigation plan that addresses surface owner compensation and restoration of surface lands affected by subsidence as required by UMC 817.124

The applicant will be in compliance when the following stipulations are met.

If other subsidence caused effects occur in the future, although unforeseen at present, the applicant will need to address specific mitigation measures on a case-by-case basis in accordance with applicable regulations.

Stipulation 817.124-(1, 2, 3)-RVS

1. The applicant shall, within 30 days of permit approval, commit to restoring areas impacted by subsidence caused surface cracks or other subsidence features such as escarpments (not to include naturally occurring escarpments which are not a result of mining) which are of a size or nature that could, in the Division's determination, either injure or kill grazing livestock. Restoration shall include recontouring of the affected land surface including measures to prevent rilling, and revegetation in accordance with the approved permanent revegetation plan in the MRP. Restoration shall be undertaken after annual subsidence survey data indicate that the surface has stabilized but in all cases restoration and revegetation shall be completed prior to bond release.
2. The applicant shall, within 30 days of permit approval, commit to compensate surface owners, except for land owned by the applicant, for lands which cannot be safely grazed due to hazards caused by surface effects of subsidence, with land (in close proximity) of comparable size and grazing capacity to be used for grazing until restoration of the damaged land is achieved
3. The applicant shall, within 30 days of permit approval, commit to compensate at a fair market value owners of livestock which are injured or killed as a direct result of surface hazards caused by subsidence.