



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

July 17, 1990

TO: Pamela Grubaugh-Littig, Permit Supervisor  
FROM: Jess Kelley, Reclamation Engineer *JK*  
RE: Subsidence Section of Annual Report, Utah Power and Light Company, Deer Creek Mine, ACT/015/018; Des-Bee-Dove Mine, ACT/015/017; and Cottonwood/Wilberg Mine, ACT/015/019, Folder #6, Emery County, Utah

## Synopsis

In May, 1990, the Division received from Utah Power and Light Company (UP&L) the 1989 Annual Report for the Deer Creek, Des-Bee-Dove, and Cottonwood/Wilberg Mines. This memorandum constitutes this writer's review of the subsidence section of the Annual Report and his findings concerning it.

## Analysis

The subsidence survey for the Deer Creek, Des-Bee-Dove and Cottonwood/Wilberg Mines is conducted yearly by UP&L. The survey consists of photogrammetric data from 15 designated areas and of observations made during helicopter reconnaissance flights over the surrounding areas. The areas from which subsidence data are gathered are shown in Figure 2 of the annual report.

The results of the subsidence survey are compiled individually for each area. For each area, a verbal account summarizes the photogrammetric data, the aerial observations, surface effects, hydrologic effects, and angle-of-draw calculations. A map then shows the underground workings in some detail. The photogrammetric data are then compiled in the form of a subsidence contour map which is of the same scale as the map of the underground workings so that each can be superimposed upon the other. Two vertical cross sections of the area, transverse to each other, then finish out the report for that area.

Page 2

Memo to P. Grubaugh-Littig  
ACT/015/017, ACT/015/018 and  
ACT/015/019 - Annual Report  
July 17, 1990

This writer is satisfied with the subsidence section of the annual report. It is complete, understandable, and in accordance with the subsidence monitoring plan set forth in the Permit Application Package.

**Recommendation**

It is recommended that the subsidence section of Utah Power and Light Company's 1989 Annual Report be approved by the Division.

JK/djh  
AT60/27-28



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801-538-5340

July 6, 1990

TO: Pamela Grubaugh-Littig, Permit Supervisor  
FROM: Susan White, Reclamation Biologist *SW*  
RE: **1989 Annual Vegetation Report, Utah Power and Light Company,  
Des-Bee-Dove Mine, ACT/015/017, Folder #2, Emery County, Utah**

6

## Analysis

Areas which have been seeded with the interim seed mixture were qualitatively monitored. These areas include the Beehive Substation, Bathhouse Slope, Material Yard Slope, Haul Road Bench and the Sediment Pond. All the sites were rated as having fair to good vegetative establishment, with the exception of the Haul Road Bench, which was rated as "improved."

A test plot was established on the Des-Bee-Dove Haul Road in October, 1989, with the cooperation of the DOGM. The various soil stabilizing treatments are outlined in the annual report.

## Recommendation

The annual report submitted is adequate.

djh  
AT63/24

**PACIFIC POWER • UTAH POWER**

324 South State  
P.O. Box 26128  
Salt Lake City, Utah 84126-0128



May 29, 1990

Ms. Pamela Grubaugh-Littig  
Permit Supervisor  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Re: **UTAH POWER & LIGHT COMPANY, HYDROLOGIC AND  
SUBSIDENCE MONITORING REPORT FOR 1989 -  
DEER CREEK ACT/015/018, COTTONWOOD/WILBERG  
ACT/015/019, DES-BEE-DOVE ACT/015/017** #6 #7

Dear Ms. Grubaugh-Littig:

Transmitted herewith for your reference and distribution are seven (7) copies each of Utah Power & Light Company's Hydrologic and Subsidence Monitoring Reports for 1989.

Should you have any questions please call me at 220-4612.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott M. Child".

Scott M. Child  
Senior Compliance and  
Land Status Analyst  
Fuel Resources

SMC:bb:6451  
Enclosure

cc: D. W. Jense  
V. Payne  
G. Davis

**utah**  
**power**  
& LIGHT COMPANY  
MINING DIVISION  
P.O. Box 310  
Huntington, Utah 84528

ACT/015/017  
#6

**RECEIVED**  
JAN 16 1990  
DIVISION OF  
OIL, GAS & MINING

January 11, 1990

Ms. Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Ms. Grubaugh-Littig:

Enclosed are the 1989 Quarterly Engineering Reports for the Sedimentation Structures at the Deer Creek, Wilberg and Des Bee Dove mines and the Cottonwood Exploration Site.

Sincerely,

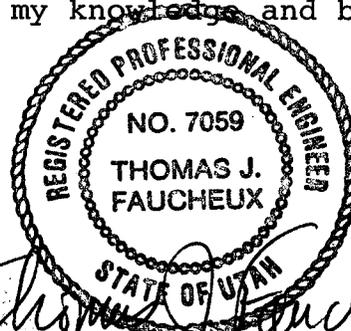


David Smaldone  
Director of Permitting,  
Compliance and Services

:do  
Enclosure

Engineers Statement:

I do hereby certify that these 1989 Quarterly Engineering Reports for the Sedimentation Structures for the Deer Creek, Des-Bee and Wilberg Mines and the Cottonwood Exploration Site are true and correct to the best of my knowledge and belief.



*Thomas J. Faucheux*  
Thomas J. Faucheux  
P.E. # 7059

*1-9-90*  
Date

QUARTERLY ENGINEERING REPORT

DES-BEE-DOVE

1989

This report is submitted as required by Federal and State regulations:

UMC 817.46 (t)  
UMC 817.49 (h)  
30 CFR 77.216-4  
30 CFR 817.49

Design Data:	Top of Dam Elevation	6775.00
	Toe of Dam Elevation	6756.00
	Spillway Crest Elevation	6771.80
	Total Storage Capacity	19.8 AC.Ft.
	Sediment Storage Capacity	2.0 AC.Ft.
	Control Points	0+00 - 6775.20
		0+85 - 6775.00
		1+25 - 6775.20
		1+65 - 6775.40

Operation Data:

	<u>Accumulated Sediment</u>	<u>Water Elevation</u>	<u>Control Point Elevation</u>
1st Quarter 3-24-89	0	6759.47	No Change
2nd Quarter	0	6757.47	No Change
3rd Quarter	0	6762.41	No Change
4th Quarter	Frozen	6762.17	No Change

Inspection:

Mining operations ceased on February 6, 1987. Due to this closure sediment and water accumulation has been minimal. The facility has been inspected quarterly for structural problems or related stability problems, none were detected.

A revised map of the impoundment (CM-10833-DS) was submitted to Utah Division of Oil, Gas and Mining in November 1989 to more accurately depict the as built conditions.

**utah**  
**power**  
& LIGHT COMPANY  
MINING DIVISION  
P.O. Box 310  
Huntington, Utah 84528

ACT/015/017  
#6

RECEIVED  
JAN 16 1990

Division of  
Oil, Gas & Mining

January 10, 1990

Ms. Pamela Grubaugh-Littig  
Permit Supervisor  
Utah Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Dear Ms. Grubaugh-Littig:

Enclosed for submittal are the 4th Quarter 1989 Engineering Reports for Deer Creek, Cottonwood/Wilberg and Des-Bee-Dove Waste Rock Disposal Sites. Please find also, the 4th Quarter 1989 Report of the Deer Creek Elk Canyon Storage Pad submittal.

Sincerely,



David Smaldone  
Director of Permitting,  
Compliance and Services

GD/do  
Enclosure

cc: File

COTTONWOOD/WILBERG/DES-BEE-DOVE  
ACT/015/019 AND ACT/015/017  
WASTE ROCK DISPOSAL SITE  
4TH QUARTER 1989

INTRODUCTION

The disposal area is located on an approved 16 acre right-of-way from the BLM located approximately two miles from the Cottonwood/Wilberg Mine site. This site serves both the Cottonwood/Wilberg and the Des-Bee-Dove Mines.

OPERATION

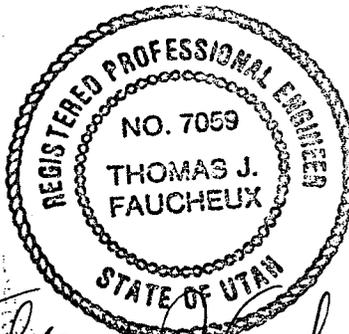
During the quarter, approximately 5200 cubic yards of material from the Cottonwood operation was dumped in the facility.

Leveling and compacting of the material placed at the site took place once during the quarter. Trash and extraneous material was removed during this operation.

Inspection of the facility for structural stability was done on December 28, 1989. Inspection of the operation of the facility was done on a continual basis.

CERTIFICATION

I do hereby certify that the Cottonwood/Wilberg waste rock site is being constructed according to sound engineering practice, the regulations governing its construction and the approved MRP and I do also certify that there was no evidence of instability, structural weakness or other hazardous conditions at the time of this inspection.



*Thomas J. Faucheux* 1-9-90  
\_\_\_\_\_  
THOMAS J. FAUCHEUX  
P.E. 7059