

0016



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 8, 1988

TO: John Whitehead, Permit Supervisor
FROM: Richard V. Smith, Geologist *RVS*
RE: East Mountain Subsidence Monitoring Program, Utah Power & Light Company

Summary

Utah Power & Light Company (UP&L) has monitored subsidence since 1981 by photogramatic and conventional surveys. Review of the annual reports submitted for the years 1981-1987 indicates approximately 16 areas have undergone measurable vertical movement.

Five subsided areas were initially identified in the 1981 report and have been monitored, except for the Beehive 8th West, annually. Ten areas have been added to the monitoring program since 1984. Several areas have been sporadically dropped from the monitoring program (see attachment).

The 1987 Subsidence Monitoring Report proposes to terminate or conduct less frequent monitoring in six areas. The operator states that the reason for reducing the monitoring frequency in these areas is because previously collected data suggest the ground surface has stabilized. The operator independently terminated conventional surveying above the Deer Creek 5th - 8th East and Wilberg 5th - 7th/10th - 13th Right panels in 1987. This area encompassed the U.S. Bureau of Mines (USBM) study area. USBM terminated their conventional surveying in 1985 and UP&L conducted a conventional survey during 1986.

Page 2
John Whitehead
July 8, 1988

The 1987 Subsidence Monitoring Report was received at the Division on June 29, 1988.

Special Conditions #5 and #6 attached to the approved permit for the Wilberg/Cottonwood Mine indicate the operator is committed to submitting the Annual Subsidence Monitoring Report within six months of data collection (#5) and providing a plan for continuing conventional subsidence monitoring in the U.S. Bureau of Mines Study area (#6). A search of Division and OSM files (personal communication Marcia Sneed, OSM Denver) did not locate a submittal of the above-noted plan by UP&L.

Recommendations

1. Inform the operator that Division concurrence should be sought, in the form of an Subsidence Monitoring Amendment, for reducing monitoring frequency in areas that data suggest are stabilized.
2. Inform the operator that the Annual Subsidence Report must be submitted in a more timely fashion or otherwise, Division enforcement action will be initiated.
3. Issue a NOV for noncompliance with Special Condition #6 of the approved Wilberg/Cottonwood Mine permit.

RVS/as
9206R/42-43

COMPILATION OF EAST MOUNTAIN SUBSIDENCE MONITORING

MINE/AREA	MAXIMUM MEASURED SUBSIDENCE (ft)						
	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
DC; 9th W	7	12	16	23	25	25	28
DC; 1st N	2	2.5	3	3	15	15	15
B : 8th W	3	3	5	5			
B+D; 4th - 5th W	1.7	2.5	2	3	5	5	4.5
W ; 2nd W					4.2		3.5
DC; 4th - 6th E	2.6	5	5				
LD; 1st N		2	4	4	4	4	4
W ; 1st - 2nd W			2.5	3	4.2	5	
DC; 5th - 8th E				11	13	12	12
DC; 2nd - 5th R				5	7.7	7	7
DC; 2nd - 5th L				4	5.5	5	5.5
B : 2nd N					5.7	6	6
DC; AN-AS						3	
W ; 2nd L						0	0
DB; Southern areas						3	2
DC; C+D N							3
C ; 6th - 7th E							5.7

9206R/41