



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter  
Governor

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Executive Director

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355 West North Temple  
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Salt Lake City, Utah 84180-1203  
801-538-5340

November 25, 1988

Mr. David R. Smaldone, Director  
Permitting, Compliance & Services  
Utah Power and Light Company  
Mining Division  
1407 West North Temple  
Salt Lake City, Utah 84110

Dear Mr. Smaldone:

Re: Remaining Deficiencies, Mid-Term Review, Utah Power and Light Company, Deer Creek Mine, ACT/015/018, Folder #2, Emery County, Utah

The Division has completed review of Utah Power and Light Company's Mid-Term Review submittal received October 31, 1988. The plans were reviewed by Tom Munson and Pamela Grubaugh-Littig of the Division's technical staff. As outlined in the attached memo from Tom Munson, all items have been adequately addressed with the exception of the water monitoring plan. The concerns raised by the Office of Surface Mining regarding disturbed area drainages have been addressed satisfactorily by the most recent submittal.

Please resolve the deficiency as outlined in the attached memo by December 23, 1988. If you have any questions, please call Tom Munson or me.

Sincerely,

John Whitehead  
Permit Supervisor/  
Reclamation Hydrologist

djh  
cc: Robert Hagen, OSM  
T. Munson  
AT7/89



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November 23, 1988

TO: John Whitehead, Permit Supervisor

FROM: Tom Munson, Reclamation Hydrologist *TM*

RE: Mid-Term Review, Utah Power and Light Company, Deer Creek Mine, ACT/015/018, Folder #2, Emery County, Utah

## Synopsis

The response to the Division's Mid-Term review was received on October 31, 1988. This memo addresses the adequacy of the operator's response.

## Analysis

### UMC 817.43 Diversions - (TM)

The operator has provided calculations which document the capacity of the system to carry the 10-year, 24-hour storm event. The disturbed drainage system is shown on Figure 2 (PS 202E) and has over 20 inlets to collect and transfer flow to the sediment pond. All ditches and culverts prove adequate to pass their design flows as calculated in the various appendices presented by the operator.

### UMC 817.52 Hydrologic Monitoring - (TM)

The Hydrologic Monitoring Program presented adequately describes the stations, parameters sampled, frequency of sampling, and reporting requirements. The text on pages 4-37.1 and 4-37.2 needs some editing to eliminate inappropriate statements which do not agree with the monitoring program.

## Recommendation

The operator revise pages 4-37.1 and 4-37.2 as shown in the attached edited copy to provide a clear and concise document.

djh  
Attachments  
AT5/55

UMC 784.14 - RECLAMATION PLAN: PROTECTION OF HYDROLOGIC  
BALANCE

The following is a summary of the hydrologic monitoring schedule that will be utilized for the Deer Creek, Cottonwood/Wilberg and Des-Bee-Dove Mines. The area in general encompasses East Mountain. The hydrologic monitoring schedule includes current mine workings, subsided areas and areas where mining is projected during the next five years.

~~Spring 79-32 will not be monitored in 1988 or hence because flows have not changed during the previous five years of monitoring.~~

Regarding in-mine monitoring, Utah Power & Light Company, in accordance with its established hydrologic monitoring program collects data regarding groundwater inflow at each established location on a quarterly basis. Because conditions and access in <sup>each</sup> ~~the~~ mine are ever changing, many of the sites that were specified in the PAP to be monitored are now inaccessible. Because of this and the likelihood that areas that are currently monitored will, at some point in the life of the mine, become inaccessible to monitoring, it is important that our in-mine monitoring be flexible to adapt to these changing conditions. Therefore, UP&L commits to monitoring all water inflows exceeding 5 GPM flow in long-term development entries at their point of entrance to the mine until, 1) they become inaccessible, 2) they become unfeasible to monitor with a permanently

installed collection devise, or 3) it is mutually agreed by the Division and UP&L that monitoring of the location is not needed. ~~This monitoring shall include both quantity and quality (baseline for one quarter and operational thereafter).~~ When conditions, as stated above, make a location inaccessible or unfeasible to monitor, UP&L shall notify the Division in writing to request deletion of the monitoring site. UP&L shall also notify the Division as new monitoring sites are added to the program. The current in-mine monitoring locations are shown on Maps 2-10 "Blind Canyon and Cottonwood In-Mine Water Monitoring Locations" Drawing No. CE-10533-DR dated 9/4/86, and ~~by~~ Map 2-10B "Hiawatha Coal Seam In-Mine Water Monitoring Locations" Drawing No. CE-10532-WB dated 9/4/86. These maps will be updated with the submittal of the "1989 Annual Hydrologic Monitoring Report" to be submitted during the first quarter 1989.

*DEER CREEK*

The total discharge from the mine shall be monitored on a monthly basis. Where feasible the quantity of water pumped from individual sumps or areas of the mine will be recorded separately and summed for total discharge.

UP&L shall also establish three water monitoring drill holes which penetrate down into the Starpoint Sandstone in the area of 3rd North and First West mains. These holes shall be monitored for water levels, <sup>and quality if obtainable</sup> on a quarterly basis until they become inaccessible or it is mutually agreed between UP&L and the Division to discontinue monitoring.