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# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter  
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 25, 1990

Mr. David R. Smaldone, Director  
Permitting, Compliance & Services  
Utah Power and Light Company  
Mining Division  
P. O. Box 26128  
Salt Lake City, Utah 84126-0128

Dear Mr. Smaldone:

Re: Review of Des-Bee-Dove Haul Road, Utah Power and Light Company, Des-Bee-Dove Mine, ACT/015/017, Folder #2, Emery County, Utah

Attached is a Technical Memorandum that reviews the above-referenced reclaimability of the Des-Bee-Dove Haul Road. The operator must commit to a literature search and a study of reclamation options and initiation of test plots for this site.

A time frame for this project and a work outline must be submitted to the Division by August 3, 1990.

Sincerely,

A handwritten signature in cursive script that reads "Pamela Grubaugh-Littig".

Pamela Grubaugh-Littig  
Permit Supervisor

djh

Attachment

cc: V. Payne, UP&L  
"A" Team, DOGM

AT



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July 12, 1990

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Tom Munson, Sr. Reclamation Hydrologist *TM*

RE: Haul Road Reclamation Meeting, Des-Bee-Dove Mine, Utah Power and Light Company, ACT/015/017, Folder #2, Emery County, Utah

## Synopsis

On July 12, 1990, Val Payne, Utah Power and Light Company's (UP&L) representative, met with Division personnel Susan White, Henry Sauer, Jesse Kelley, Jeff Emmons, and Tom Munson to discuss the reclamation of the Des-Bee-Dove Haul Road and the Initial Completeness Review for the Des-Bee-Dove Mine.

## Analysis

The meeting involved a lot of discussion regarding the reclamation of the Haul Road in terms of regrading slopes, future erosion control, revegetation success, and ongoing erosion control test plots.

The Division staff presented the operator with a list of topics and ideas which were intended to help him formulate a reclamation strategy. It was the general consensus of all people involved that we do not have enough technical information at this point in time to make an informed finding regarding reclamation success.

To satisfy questions regarding reclamation options raised in the Initial Completeness Review, and decide what the operator would be required to do. The operator was requested to follow the following review framework.

1. Literature search,
2. Study feasibility of reclamation options and initiate test plots/consultant review.

In addition to a commitment and a time frame for completion of all commitments regarding a reclamation plan, the operator was requested to formulate ideas based on present knowledge of reclamation of Mancos Shale and present them along with the Initial Completeness Review Response.

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Memo to P. Grubaugh-Littig  
ACT/015/017  
July 12, 1990

Based on the complexity of this issue and the lack of knowledge regarding reclamation of Mancos Shale, it was decided that gathering all information available and assessing the feasibility of implementation of new reclamation methods and techniques will be paramount to merely choosing an immediate course of action based on present knowledge.

**Recommendations**

The operator be required to maintain a strict time frame for review of data, studying feasibility of reclamation options, and implementation of test plots.

Another meeting of all parties concerned be held to better define reclamation strategy and to maintain a diligent and responsible effort to obtain a feasible reclamation plan.

djh  
cc: "A" Team  
AT46/34-35

The following outline are ideas of treatments to test for reclaiming the Haul Road through the Mancos shale. We realize there may not be an area large enough to test all these variables. UP&L and consultants may wish to select some or none of these treatments along with there own treatments to incorporate in a test plot.

### Test Plots

- I. Backfilling and Grading
  - A. Undulating, Conical Slopes
    - 1. shape
    - 2. distance
    - 3. orientation to aspect
    - 4. benching
  - B. Non-undulating topography
- II. Erosion control, mechanical
  - A. Matting, drainage or entire slope
    - 1. coconut matting
    - 2. excelsior
    - 3. geotextile
      - 1. check dams
  - B. Incorporating 4 to 5 tons/acre organic matter
  - C. Watering, developing crust
    - 1. number of applications
  - D. Rock Mulch
    - 1. ridge top
    - 2. entire slope
  - E. Compaction with pitting
- III. Vegetation Establishment
  - A. Seed
    - 1. native collections
  - B. Transplants
    - 1. grown from native collections
    - 2. transplanted from Waste Rock
  - C. Water
- IV. Determination of Success
  - A. Sediment Yield
  - B. Length and depth of gullies
  - C. Cover of vegetation