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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

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April 22, 1988

Mr. David Smaldone
Utah Power and Light Company
Mining Division
P. O. Box 899
Salt Lake City, Utah 84110

Dear Mr. Smaldone:

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

Attached are the Division (DOGM) comments for the Mid-Term Review of the Deer Creek permit. The comments are compiled as a result of Division review of the Deer Creek Permit Application Package (PAP) and from the site visit by Division staff on April 7, 1988.

After reviewing the comments, would you please assemble a complete response addressing each comment. This response must be received from Utah Power and Light Company (UP&L) by May 27, 1988.

Please feel free to contact me if you have any questions on this matter.

Sincerely,

John J. Whitehead
Permit Supervisor/
Reclamation Hydrologist

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Attachment(s)
1487R/1

MID-TERM REVIEW
UTAH POWER AND LIGHT COMPANY
DEER CREEK MINE
ACT/015/018

April 22, 1988

UMC 771.19 Compliance With Permits--(RVS)

The Division has no record, in either the PAP or files, of the operator committing to DOGM Stipulations 817.41-(1), 817.50-(1, 2), 817.52-(1) and 817.124-(1,2,3). The Division recommends that the operator formally commit to the above-identified stipulations by providing updated, as appropriate, text for insertion into the PAP.

USFS Stipulations for Meetinghouse Canyon Breakout Portals, 4/86

The Division recommends that the operator formally indicate acceptance of the above-identified USFS requirements by incorporating these stipulations into the PAP as an appendix.

UMC 782.13 Identification of Interests--(PGL)

(b) The operator should update the current legal information. The references to Emery Mining, for example, are obsolete and must be updated.

UMC 784.11 Operation Plan: General Requirements--(PGL/DD)

A narrative explaining the construction, modification, use, maintenance and removal of all of the facilities must be included in the PAP; i.e., all approved amendments should be included in the PAP with the necessary information.

The following issues were committed to in the applicant's approved PAP but have not been followed through, or need more definition in the PAP.

1. The operator proposed to revegetate all fill slopes on the mine facilities area for interim revegetation on page 4-16 of the PAP. On page 4-21 and 4-22, the applicant committed to monitor these revegetated areas yearly to determine their success. The results of the yearly monitoring periods were to be summarized and submitted to the Division as an annual report. These reports have not been submitted to the Division.
2. The operator sampled and analyzed fill slope materials to determine the materials' suitability as a "substitute topsoil", since soils were not salvaged during construction of the mine facilities. The analyses are provided on page 4-14 and 4-15, Table 1 and 2 of the PAP. The data show these materials were not analyzed for boron,

selenium, or acid-base potential and the SAR values were calculated incorrectly. Also, samples 663 and 664 have Ec values 8.0 mmhos/cm which indicate saline materials that may be difficult to revegetate if not properly managed. The slag material, sample 1106, used on the parking lot, is also suspect since this material had an Ec value of 7.0 mmhos/cm. Page 2-131 of the PAP states that these materials will be covered during backfilling and grading, but a sampling program was not provided to determine the extent of these suspect materials during backfilling.

The operator must submit a report which summarizes the results of the interim revegetation success on all fill slopes.

The operator must submit, for inclusion into the PAP, a sampling program to identify all acid and toxic-forming materials and to determine the extent of all suitable substitute topsoil material. This plan will be for sampling after mining and before reclamation. The sampling program shall take representative samples from each fill to be used as backfill and samples must be taken to depth. Each sample shall be analyzed at a minimum for pH, Ec, SAR, texture, percent saturation, percent organic carbon, total nitrogen, available phosphorus, boron, selenium, and all carboneous materials analyzed for acid-base potential also. A map should be derived from the sampling program which exhibits all sample locations, and delineate all acid and toxic-forming materials, including volumes and locations of all suitable materials to be used as substitute topsoil.

UMC 784.13 Reclamation Plan: General Requirements--(PGL)

(b)(2) All of the bond calculations for the approved amendments added since permit approval should be included in the bond estimate. If the updated bond amount is significant, then this new figure will need to be posted by UP&L.

UMC 784.14 Reclamation Plan: Protection of Hydrologic Balance--(TM)

UP&L must update the water monitoring plan to replace the current outdated materials in the PAP. This must include a current reflection of the in-mine monitoring activities.

As a part of the water monitoring update, UP&L must list all springs associated with subsidence areas (2, 4, 5, 6, 11, and 12) which could be potentially affected, and whether they are currently being monitored for water quality and quantity under UP&L water monitoring program.

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All surface facility plans and maps must be updated to accurately reflect the current facilities (i.e., culverts, sediment controls, etc.).

UMC 784.20 Subsidence Control Plan-(RVS)

The approved permit encompasses commitments to conduct annual subsidence surveys to detect ground movement and biannual visual inspections to identify surface manifestations of subsidence (Appendix X). The operator also commits to continuing the conventional ground surveys originally conducted by the USBM (Appendix X, page 6). Subsidence monitoring data are to be submitted annually in a report.

Review of the Annual Subsidence Report for 1986 (page 7), received July 22, 1987, indicates the operator intends to adjust the monitoring schedule to acquire ground movement data once every two years above the Deer Creek First North Area. See letter dated September 9, 1987, from John J. Whitehead to Raymond Christensen. To avoid enforcement action, the Division recommends the operator submit a request to amend the schedule in the approved Subsidence Monitoring Plan. The amendment request should demonstrate surface stability above the First North Area. The Division suggests the operator graphically represent vertical movement versus time to potentially derive an asymptotic curve that demonstrates ground stability.

The Division also notes that if the USBM cooperative program has been discontinued, then the portions of Appendix X describing the cooperative relationship and responsibilities are no longer pertinent and may be deleted from the PAP. However, if the operator intends to discontinue conventional ground surveys as conducted by the USBM, the Division will require submittal of an amendment request.

UMC 784.23 Operation Plan: Maps and Plans-(PGL)

(b) An updated surface facilities map must be submitted to reflect the mine site as it currently exists.

All appropriate mine sequence maps for the five-year mining plan must be updated for insertion into the PAP.

UMC 817.11 Signs and Markers-(PGL)

A letter dated August 31, 1978 from UP&L explained the signs and markers at the Deer Creek Mine. Information from this correspondence that describes signs and markers, including their location, must be incorporated into the PAP.

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UMC 817.59 Coal Recovery--(PGL)

UP&L must include the R²P² approval from the Bureau of Land Management in the PAP.

UMC 817.97 Protection of Fish, Wildlife, and Related Environmental Values--(BAS)

(a) The PAP states on page 4-51 that deer warning signs will be placed on the Deer Creek access road. Only one broken-down sign was observed. The operator must repair the sign and erect additional signs at deer crossings, if warranted by deer-vehicle accidents.

UMC 817.116 Revegetation: Standards for Success--(BAS)

(c)(2) The operator has neglected the following interim revegetation commitments: (1) shrub test plantings (page 4-21); (2) annual quantitative revegetation monitoring (page 4-21); and (3) annual reporting of revegetation work (page 4-22). These omissions must be corrected.

The operator must provide the Division with a report of interim revegetation work done to date. This report should include data on ground cover, species composition, and frequency. The report should discuss what has been learned about plant species and planting techniques which will benefit final reclamation efforts.

Future reports must be submitted annually as stated in the PAP.

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