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STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

ACT/015/018-88B
File #2, #5

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 15, 1988

Mr. Ray Christensen, Manager
Permitting & Compliance
Utah Power and Light Company
Mining Division
P. O. Box 310
Huntington, Utah 84528

Dear Mr. Christensen:

Re: Review of PAP Amendment, Elk Canyon Storage Upgrade Utah Power and Light Company (UP&L), Deer Creek Mine, ACT/015/018-88B, Folder #2, Emery County, Utah

Division technical review staff members Pamela Grubaugh-Littig and Tom Munson have reviewed the above noted amendment request. There are several items which need clarification or additional information prior to Division approval. Please refer to the attached Technical Memorandums for the specifics of what is required.

You have requested that the Division grant approval for UP&L to construct the concrete headwall extensions for the two undisturbed inlet points in the Elk Canyon storage pad area. By copy of this letter, the Division approves installation of these headwall extensions, but reserves final approval on the remainder of the amendment request until the information requested on the attached memorandums is provided. In the event that the amendment is denied, the additional headwall extensions for the undisturbed inlets would only enhance function of those structures.

Please feel free to contact me or the review staff members should you have specific questions in preparing your response. Please have the complete and adequate response for this amendment request to the Division offices no later than May 13, 1988.

Sincerely,

John J. Whitehead
Permit Supervisor/
Reclamation Hydrologist

djh
Attachments
cc: R. Hagen J. Helfrich
T. Munson P. G.-Littig
0800R/69



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March 21, 1988

TO: John Whitehead, Permit Supervisor

FROM: Pamela Grubaugh-Littig, Reclamation Engineer *pal*

RE: Elk Canyon Storage Upgrade, Received March 10, 1988, Deer Creek Mine, Utah Power and Light Company, ACT/015/018-88B, Folder #2, Emery County, Utah

The Utah Power and Light Company (UP&L) submittal for the Elk Canyon storage site has several deficiencies:

UMC 817.71 (i) The applicant must commit to have the fill inspected for stability by a registered engineer or other qualified professional specialist experienced in the construction of earth and rockfill embankments, at least quarterly throughout construction, and during the following critical construction periods: (1) placement of underdrainage system, (2) installation of surface drainage systems, (3) placement and compaction of fill materials, and (4) revegetation. A certified report must be provided to the Division within two weeks after each inspection that the fill has been constructed as specified in the design approved by the Division.

UMC 817.72 (a) The applicant must submit a stability analysis demonstrating that the fill is designed to attain a long-term static safety factor of 1.5. The application mentioned that this analysis is forthcoming.

(b) A subdrain system for the fill should be constructed unless it can be demonstrated through approved "experimental practices" that a subdrain system is not needed.

UMC 784.13 (b)(2) Determination of bond amount - The reclamation cost estimate must reflect the cost for a third party to perform the reclamation. The total hours for the equipment and operator would total 16 hours, not 8 hours. The hourly costs should be based upon Rental Rate Bluebook rates or Means Costs.

djh
9075R/46



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March 30, 1988

TO: John Whitehead, Permit Supervisor
FROM: Tom Munson, Reclamation Hydrologist *TM*
RE: Elk Canyon Storage Pad and Upgrade, Utah Power and Light Company, Deer Creek Mine, ACT/015/018-88B, Folder #2, Emery County, Utah

History of Proposal

The operator's submittal dated March 10, 1988 proposes to construct a storage pad in the mouth of Elk Canyon. Several drainage concerns will need to be addressed.

Analysis

The operator does not address drainage along the road leading to the Tipple area. It is appropriate that the operator describe what kind of flows that may be expected from the 10-year, 24-hour storm event, and size a ditch that would convey drainage along the road to the Tipple area. The operator will also need to provide riprap protection for this ditch if erosive velocities are expected.

The second area of concern is the placement of the silt fence. The silt fence should be placed away from the toe of the fill in order to gain storage capacity behind the silt fence. In areas where the silt fence does not run parallel to the contour of the fill it may be necessary to use small check dams to check the velocity of the water running parallel to the silt fence to prevent undercutting of the toe of the fence. The operator has used silt fences successfully in other areas of the mine site. Therefore, it will not be necessary to request any other specifics on materials or design.

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Memo to J. Whitehead

ACT/015/018-88B

March 30, 1988

The reclamation plan for this area does not differ from what was approved in the original Deer Creek PAP and the pad, when reclaimed, will not encroach upon the reclaimed channel. Therefore, it is not necessary to comment on the reclamation plan.

Recommendations

1. The operator shall determine if the drainage travelling down the road will be erosive in nature and will consequently require erosion protection. A ditch will have to be designed and implemented along the access road to prevent erosion of the road surface. Designs and supporting calculations must be supplied for this ditch.
2. Installation of the silt fence should be coordinated at the time of installation with a Division Hydrologist to ensure adequate treatment of disturbed drainage.

djh

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