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*orig mine file  
cc R Daniels  
DEN*



United States Department of the Interior  
OFFICE OF SURFACE MINING  
Reclamation and Enforcement  
BROOKS TOWERS  
1020 15TH STREET  
DENVER, COLORADO 80202

DEC 26 1984

RECEIVED  
DEC 27 1984

Mr. Chris Shingleton  
Utah Power and Light Company  
P.O. Box 899  
Salt Lake City, Utah 84110

*ACT/015/018  
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DIVISION  
OIL, GAS & MINING

Dear Mr. Shingleton:

The Office of Surface Mining (OSM), Western Technical Center has received both verbal and written comments from the Utah Divisions of Oil, Gas, and Mining (UDOGM) and Wildlife Resources (UDWR) concerning deficiencies in the permit application for the Deer Creek Mine in Emery County. We have subsequently held clarification meetings with both you and State personnel regarding the deficiency issues.

Listed in this letter is a compilation of remaining deficiencies in the permit application based upon Utah Power and Light Company's previous responses, and concerns identified by the State regulatory authorities.

The following four issues represent deficiencies for which we must have an adequate response before a favorable decision can be made. The schedule for the permitting decision requires that your complete response to these issues be received no later than January 14, 1985. If an adequate response is not received by that date, OSM will proceed with the decision. Any facility or activity not authorized under a permit issued as a result of this decision will then be in violation. The four issues requiring adequate responses for a favorable decision are:

1. The Meetinghouse leases (U-06039, SL-051221, and U-024317) intersect the rest of the Deer Creek permit area at only one corner point. There is no permit area corridor around proposed transportation lines between the Meetinghouse leases and the rest of the Deer Creek permit area. All areas proposed to be affected by the underground coal mining activities must be included in the permit area. UMC 784.11 requires a full description of those mining operations included in the mine plan area for the life of the mine.

If the applicant elects not to provide the required level of detail and corridor information at this time, the leases must be deleted from the permit area.

2. OSM has not yet received a sufficient reply to deficiency number 1 from our August 17, 1984, letter. The deficiency concerns the mine access road from the coal pile area turnout west of the Huntington Plant, to its end at the Deer Creek facilities area. OSM has responded to a September 20, 1984, letter from the Emery County Board of Commissioners asking for clarification of the County's commitments relative to the reclamation requirements of UMC 817.166. However, as stated in our August 17, 1984, letter, regardless of the resolution to the reclamation issue, UMC 700.5 requires that the road be included in the permit area as part of the current permit application package. Otherwise, the road will not be permitted and enforcement action will be required.

3. Deficiency number 13 in our letter of August 17, 1984, noted that the hydrologic calculations for the existing culverts on Deer Creek and Elk Canyon Creek are incorrect. Your September 19, 1984, response indicated that the design is under review and will be submitted when complete. OSM must now have the revised culvert design and calculations to complete the decision document.

4. The Emery Water Users Association has several domestic wells situated in Rilda Canyon between the Meetinghouse leases and the rest of the Deer Creek permit area. There is no comprehensive discussion in the permit application package concerning these wells and the potential for impact as a result of mining. This discussion must be included as required by UMC 786.19(c), 817.41, and PL 95-87 Sec. 508(a)(13).

The following composite deficiencies from both State and Federal agencies will be made conditions of the permit, requiring a complete response within 30 days of permit issuance unless an adequate response is received before the permit is issued:

1. OSM agrees that the Utah Power and Light design proposal for the reconstructed stream channel is the best practical method of channel reclamation given the unique constraints involved. However, in terms of demonstrating adequate design safeguards in lieu of the requirements of UMC 817.72(d), the applicant should include the following design factors:

a. Increase the thickness of the proposed clay liner to insure stability of the channel relative to possible ground-shifting and erosion over the long term.

b. Add adequately designed energy dissipators to both Deer Creek inlets.

2. In order to comply with the requirements of UMC 817.124 and 817.126(a), as part of each annual subsidence report, the operator must include a discussion quantifying any significant subsidence events which may have occurred as well as the subsequent impacts. Together with the discussion of significant subsidence events, the applicant must include a detailed discussion of the proposed mitigation.

3. The water replacement issue (deficiency number 4 of our August 17, 1984 letter) has yet to be resolved through the ongoing appeals process. The Utah Power and Light response will be required once the appeal is resolved.

4. The Utah Power and Light response to deficiency number 4 of our September 28, 1984, letter discusses the applicant's proposal to monitor springs on a monthly basis during July through September. Sampling outside of these months is not possible due to the inaccessibility of the sample sites during cold weather months. OSM understands that year round sampling is not possible. However, in order to establish and maintain recession curve data for the area springs, under the requirements of UMC 817.52(b)(1)(iii), at least three samples must be obtained at each spring during each calendar year. Given the inaccessibility of the springs during cold weather months, the applicant's proposal to sample only when the springs can be accessed is acceptable. However, given that some of the target springs may have a very short flow period (one to two months) during each year, the applicant must commit to sampling as often during the seasonal life of the spring as necessary to obtain a minimum of three samples yearly at each sample point. The sample dates should be spread out over the active flow period of each spring as much as is practical. Although, in the extreme case of a spring that is expected to flow for only 30 days in a year, that spring should be accessed and sampled at least three times during its 30 day annual flow period.

5. The Utah Power and Light response to deficiency number 5 of our September 28, 1984, letter concerning maintenance of the hydrologic balance relative to "guzzlers," does not resolve the issue. To address the requirements of UMC 817.41(a) and (b), please discuss the alternatives to use of the guzzlers if the guzzlers are shown to be inadequate.

6. The Utah Power and Light response to deficiency number 6 of our September 28, 1984, letter concerning spring sampling techniques did not commit to including measuring techniques used for each spring sample point as the deficiency asked. For example, a table showing spring location and measured flow should also include a column for the measuring technique (pipe and gallon bucket, or V-notch weir, etc.). Please provide this information commitment to comply with the requirements of UMC 817.52(b)(1)(i).

7. The permit application package must include previously collected borehole water data and a proposal and commitment to systematically collect and analyze additional borehole data with particular emphasis towards delineating the Star Point-Blackhawk aquifer system and identifying other localized aquifers, if encountered. Acquisition and analyses of these data will allow refinement and reassessment of the probable hydrologic consequences of mining required by UMC 784.14 during subsequent permit renewal reviews. For example, cumulative dewatering impacts (life-of-mine and beyond) to ground water divides, piezometric surfaces, recharge of the Star Point-Blackhawk aquifer system and base flow recharge to perennial streams may be more realistically evaluated and the need for mitigative measures addressed, if necessary.

As part of this aquifer data collection plan, two to three of the monitor wells should be established in baseline areas of the permit area, away from past mined and active mining areas. These background wells will establish the conditions of any ground-water or aquifer system prior to the influence of mining.

All wells must be drilled to the Mancos Formation to insure that the Starpoint member has been fully penetrated.

8. The Utah Power and Light response to deficiency number 6 of our August 17, 1984 letter committed to collecting water quantity data weekly at the gauge locations on Grimes Wash and Deer Creek until the base flow is derived. This commitment is sufficient so long as it can be continued through all months of the year to establish base flow. However, since the applicant has already noted that spring sampling is impossible in the cold weather months, it is unlikely that weekly sampling of the stream gauges can be accomplished throughout the year. Continuous monitoring devices would allow the operator to collect continuous data through the cold months and remove the recorded data in the spring. This data will comply with the requirements of UMC 817.52(a)(2) and (b)(1)(i).

9. Sediment pond design drawings on Plate 3-16, Section C, do not reflect the as-built conditions for the pond drain pipe as required by UMC 784.23. The as-built drain has a vertical section with an oil skimmer attached. Section C does not indicate any vertical section to the drain whatsoever. Please correct this apparent discrepancy.

10. Although OSM has received revised Plate 2-20 for the Wilberg permit, which includes both Deer and Elk habitat maps, plate 2-19 for the Deer Creek permit application shows only Mule Deer habitat. Apparently the Elk habitat map which was to be included in the Plate 2-19 set, was omitted.

The following comments represent additional State agency concerns for which the Division of Oil, Gas and Mining may require an adequate response before a State permit is issued.

1. The perennial status of Whetstone Creek, Meetinghouse Creek, Left Fork of Rilda Creek and Right Fork of Rilda Creek cannot be ascertained until the applicant has provided information required by UMC 783.16 in the Deer Creek permit application.

2. Buffer zones designed to restrict subsidence by utilizing room and pillar mining methods with the retention of pillars have been proposed for the protection of Left Fork of Rilda Canyon, Right Fork of Rilda Canyon and the Huntington powerline corridor. Detailed barrier pillar design information must be presented in the permit application for the purpose of determining the extent of mining induced subsidence and whether these areas will sustain material damage as per UMC 817.126. Listed below are additional data necessary to achieve the above determination.

1. Pillar strength and safety factor values.
2. Angle of draw calculation.
3. Calculations utilized to derive pillar dimensions.
4. Anticipated rate of pillar collapse.
5. A map (or maps) that delineates pillar locations, haulageways and cross-cuts and the attendant surface projection of buffer zone boundaries.

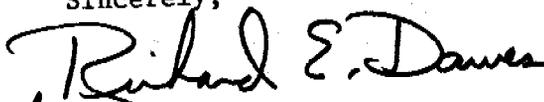
Sequences of longwall mining and associated subsidence are described for Deer Creek. Inasmuch as the applicant has proposed to subside areas beneath and adjacent to this perennial stream, approval for mining requires a regulatory authority determination as described under UMC 817.126. The applicant must submit detailed subsurface information allowing the regulatory authority to determine whether material damage will occur to this perennial stream. Moreover, should data provided under UMC 783.16 result in perennial stream designations for Whetstone and Meetinghouse Creeks, then accordingly, the regulatory authority will be obligated under UMC 817.126 to conduct additional subsidence buffer zone determinations.

3. Information given in the permit application package indicates the Castlegate Sandstone does not overlie projected workings (room and pillar longwall) in the Rilda Canyon area of the Deer Creek Mine. This area is characterized by moderate to steep slopes and variable overburden thicknesses. The above factors suggest that, for this area, unplanned subsidence is more likely to occur and, therefore, the surface is at higher risk to experience material damage. Additional data and justification must be provided to allow the regulatory authority to determine that the applicant is in compliance with UMC 817.121(a) and UMC 817.97(a). Moreover, the applicant must provide a commitment to mitigate potential damage to critically valued raptor nesting habitat that may be impacted by subsidence as required by UMC 817.97(d)(4).

4. Wildlife habitat narrative on page 2-139 of the permit application package should define Scott's (1977) ranking values of 1 and 2, as critical and high-priority respectively. This should be clearly noted on Table II as well.
5. The Mule Deer map (plate 2-19) should identify high-priority valued summer range, as well as the high priority and critical valued winter range.
6. The paragraph concerning raptors on page 2-143 of the permit application package seems abbreviated, since only one sentence constitutes the entire discussion in the raptors section. At a minimum, the discussion should reference and summarize the raptors discussed in Table I.
7. The applicant's assessment in the permit application package of habitats and use areas utilized by the Utah mountain kingsnake and Utah milksnake are inconsistent with current state of the science and the UDWR perspective. The Division provided the applicant with the appropriate data concerning these two high interest species on March 2, 1981. Disturbed areas at all three mines represent lost habitat for the milksnake. Disturbed areas at the Deer Creek Mine represent lost habitat for the kingsnake.
8. The permit application package is incorrect concerning salamanders. The appropriate data concerning their habitats and use areas was provided to the applicant on March 2, 1981. Disturbed area at the Deer Creek Mine represents lost habitat.
9. Some references cited in the permit application package in the wildlife discussion are not listed in the bibliography (Dalton, 1977; USDI Bureau of Reclamation, 1976; Rawley and Bailey, 1972; and Brown et. al, 1958).
10. Ruffed and Blue grouse are each found on the permit area. The permit application package suggests that they are primarily found in other areas of Utah. This needs to be corrected. Again, suitable data was provided to the applicant March 2, 1981.

OSM is now entering the final weeks of the schedule to produce a decision document on the Deer Creek Mine. Your timely response to the issues identified in this letter will enable OSM to produce a complete decision document within the confines of that schedule. During the week of January 14, 1985, OSM will begin finalizing the Deer Creek permit decision. Any facility or activity not authorized under a permit issued as a result of this decision will be considered in violation. As described in this letter, many of the noted deficiencies may affect the issuance of a State permit as well. If you have any questions please call either Louis Hamm or Walter Swain at (303) 844-3806.

Sincerely,



*for* Allen D. Klein  
Administrator  
Western Technical Center

cc: Robert Hagen, OSM Albuquerque Field Office  
Dianne Nielson, DOGM  
Mary Boucek, DOGM