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me file: ACT 007/005 #2
→ S. Linner

United States
Department of Agriculture

Forest Service

Manti-LaSal National Forest

599 West Price River Dr.
Price, Utah 84501

Reply to: 2820

Date: January 27, 1989

Lowell Braxton
State of Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-5340

RECEIVED
JAN 30 1989
DIV. OF
OIL, GAS & MINING

Dear Lowell:

RE: Five-Year Permit Renewal Update, Utah Fuel Company, Skyline Mine, ACT/007/005, Folder #2, Carbon County, Utah

We have reviewed the subject five-year permit renewal update and have the following comments:

1. Section 4.19.5, Reclamation of Diversions and Channels - Portal Area

   a. Utah Fuel Co. (UFCo.) has stated: "Reclamation will include removal or burial of the culverts, ..." There is not enough information presented here to determine where removal and where burial is proposed. In order to make a determination as to whether or not plugging and burial of the culvert would be acceptable, information on the depth of the culvert below the reclaimed land surface is needed. Brent Barney, Forest Service Civil Engineer, called UFCo. and requested a profile of the present culvert locations which would depict the depth of the culvert below the reclaimed ground surface. At the present time, not knowing the depth of the culverts, in-place burial of the entire length of culvert would not be acceptable due to the potential for (1) the stream channel to expose shallow culvert segments through erosion, (2) ground water piping through unplugged segments of the buried culverts and, (3) deterioration or crushing of the culverts over time which could cause ground subsidence over the culvert locations.

      Once we receive the requested information on culvert depth, we will further evaluate this question and respond to your office. The requested information will be sent to your office as soon as we receive it from UFCo. as discussed with Sue Linner on the telephone.

   b. Stream diversion and drainage profiles for the reclaimed channels should be added to the plan similar to Map 3-14 which was incorporated into the original Mine Plan. This graphically depicts the information presented in the Chapter 4 text.

2. Map 4.4.2-1A,

This map needs additional revisions. The proposed locations of the reclaimed stream channel segments and confluences have been revised and are acceptable. However, the reclaimed stream segment is not properly tied topographically to the undisturbed stream portions. There is no indication that the culvert inlet basins will be recontoured which creates uphill drainage segments.

The reclamation contour lines do not properly tie to the existing topography contour lines. There are several discrepancies which make it difficult to determine the final reclamation topography and stream gradient.

Map 4.4.2-1A was revised for this update but the cross-sections presented as Map 4.4.2-1B were not revised accordingly, therefore, the cross-sections are not correct and need to be revised.

3. Volume 5, Tab 18, Flow Calculations

The flow calculations have been revised and the methodology and peak flows appear to be adequate, however, the watershed areas are not shown on a topographic map. This makes it difficult to verify flow characteristics used in the calculations. It would be helpful if the watersheds were plotted onto a topographic map such as is presented on Map 3.2.8-3 which shows the watershed areas for the diversion ditches.

The riprap size determination for bank and sideslope protection of the reclaimed channels was not used for final riprap sizing. The riprap size determination for stream channel bottom protection was selected for both bottom and bank protection. As a result, the riprap sizes for bank protection are substantially larger than other methodology would lead to. The method used does not consider the fact that riprap which is larger than the normal stream channel depth will not be fully submerged, therefore, the weight of the riprap will not be reduced fully by buoyancy forces. The streambank riprap size should be revised.

4. Section 2.4.4 Monitoring Program

UFCo. has stated in paragraph 2 in this section that South Fork tributary station CS-15 will be monitored for flow only for one year beginning in the fall of 1988 for the purpose of monitoring the effects of subsidence on flow. Monitoring for only one year will not be sufficient to determine the effects of subsidence which might continue for several years. This station must be monitored seasonally as weather permits until it is determined that subsidence has ceased and that there is no more potential for impact to flow of the springs which provide water to this drainage.

There are several Forest Service comments from previous letters on the five-year renewal which have not been addressed by UFCo. or DOGM. Refer to our letters, dated December 17, 1986; September 11, 1987; February 10, 1988; and November 28, 1988. With the exception of updating the as built South Fork Breakout plans and

revision of the reclaimed stream channel locations, UFCo. has not contacted our office directly regarding resolution of these issues. The items which still need to be resolved are as follows:

December 17, 1988 Letter

Items 7, 10, 13, 14, 15, 17, 19, 20, 24, 27 and 28.

September 11, 1988 Letter

Items 2, 3, 4, 9, 10 and 11.

February 10, 1988 Letter

The new items discussed in this letter have been adequately addressed.

November 28, 1988 Letter

Items 1, 2, 3, and 4.

If you have any questions, please contact the Forest Supervisor's Office in Price, Utah.

Sincerely,

Ann L. Horne
for
GEORGE A. MORRIS
Forest Supervisor