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State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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March 28, 2001

TO: Internal File

FROM: Mike J. Sufлита, Project Lead *mt*

RE: Utah Power and Light Tract, Canyon Fuel Company, LLC., Skyline Mine,  
C/007/005-IB00B-1

**SUMMARY:**

On July 26, 2000 the Division received a proposal from Canyon Fuel Corp. to add 459 acres to the permit area for Skyline Mine. The new tract is located on privately owned property south of the existing permit area. The coal is owned by Utah Power & Light and would be mined through a lease agreement between the two parties because Skyline Mine has the most reasonable access to the coal. Deficiencies in the proposal were identified in a TA dated October 26, 2000. Skyline's response to that TA was received by the Division on February 21, 2001. This Technical Memo is a response to the latest submittal and there are some minor deficiencies.

**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

**Analysis:**

**Ground-water and Surface-water Monitoring**

The submittal is to amend the Mining and Reclamation Plan to add 459 acres at the southern end of the current permit area, adjacent to and east of Electric Lake. The additional

TECHNICAL MEMO

acreage is in the lower James Creek drainage and constitutes about 30% of the total drainage area. The upper James Creek drainage is contained in the current permit and constitutes about 70 % of the total drainage area. About 33% of the 459 acres drains directly into Electric Lake.

As required, the ground water and surface water rights that are in the area are shown on Dwg.23-5-1-1, Surface Water Rights on and Adjacent to Skyline Property and Dwg. 23-5-2-1, Ground Water Rights on and Adjacent to the Skyline Property. A check of the Utah State Water Rights Internet pages showed that the rights shown were complete and accurate.

The water monitoring plan was revised to include two new springs. One is designated 2-413 and is located on the northeast corner of the new area. It was selected, "because of its proximity to the Connelville Fault, mining activity, and accessibility." The other is designated 3-290 and is located across Electric Lake about half-way up an unnamed drainage near the Sanpete and Emery County line. It was, "selected because it is located in an area where mining will not occur for some time and can be used as an undisturbed site for comparison to 2-413." These will be monitored for field and laboratory parameters the same as other springs in the MRP. Past water data for the springs from 1997 to 1999 is included in the submittal as part of Attachment to Appendix Volume A-1, UP&L Tract. This is the baseline water monitoring for the UP&L Tract.

One new well, W2-1 (W98-2-1) is also included in the MRP to monitor water levels in the well. The well is about 1,500 feet east of Electric Lake on a ridge at the south end of the UP&L Tract. Past water level data for the well from 1998 to the present is included in the submittal as part of Attachment to Appendix Volume A-1, UP&L Tract.

The water monitoring plan also included three new stream monitoring points as follows: CS-16, at the mouth of Swens Canyon, CS-17 at the mouth of Little Swens Canyon, and CS-18, at the mouth of Boulger Creek. These will all provide important baseline stream data for future development of the Flat Canyon Tract when that lease is mined. They also impact the UP&L Tract in that they provide baseline data for comparison to monitoring in James Canyon and Burnout Canyon. Both of these drainages are being undermined as part of the UP&L Tract mine plan. The field measurements and laboratory measurements for these springs will be the same as all other monitoring points in the MRP.

Other new water monitoring points in the plan are F-9 and F-10, two flumes to monitor flow and field parameters in James Canyon. F-9 is located at the Forest Service boundary about a half mile up from the mouth of the canyon and was previously established by an agreement between the Operator and the Forest Service. F-10 is located at the mouth of James. Flows at the two flumes will be monitored monthly. Past water level data for flume F-9 from 1993 to 1999 is included in the submittal as part of Attachment to Appendix Volume A-1, UP&L Tract.

The Utah Department of Wildlife Resources (DWR) expressed concerns of inadequate monitoring in an August 10, 2000 letter to the Division. Subsequently, on August 23, 2000, a

meeting was held to discuss this issue. Attendees included personnel from Skyline Mine, DOGM, and DWR. The outcome was a series of monitoring requirements that were believed to adequately protect James Creek. Included were new flow monitoring stations near the mouth of James and Boulger Creek, and invertebrate studies and fish population surveys in both streams. The meeting minutes were agreed to by all parties and the described monitoring program is included in the MRP as described above. The monitoring of fish populations and macroinvertebrate studies are contained in the Fish and Wildlife Resource Information section of this MRP. On September 7, 2000 all of the above agencies made a joint field trip to understand the field conditions. On October 5, 2000 the DWR sent another letter to DOGM indicating that, with these in place, "Skyline Mine can proceed with the permitting process for the undermining of James Canyon Creek area."

There is one item in the agreed monitoring plan that is NOT included in the MRP. There was to be a flow monitoring station at the mouth of Burnout Creek. Although Dwg. 2.3.6-1, Location of Hydrologic Monitoring Stations shows a flume, F-5, at that location, the flume is NOT included in the tables that enumerate the monitoring points. This flume needs to be added to the MRP monitoring plan. Also included on Dwg. 2.3.6-1 are additional flumes F-1 through F-4 and F-6 through F-8. These are located in upper Burnout Canyon and tributaries to Upper Huntington Creek. These are not part of the MRP and it's confusing why they are on the map locating water monitoring stations. Discussions with the operator indicate they are part of a Forest Service water monitoring commitment and are unrelated to the DOGM water monitoring plan. This should be explained in the MRP text and also in a footnote on Dwg. 2.3.6-1.

Since the coal is owned by Utah Power & Light, Inc.(UP&L), there is a lease agreement between them and Skyline Mine. That agreement is included in the submittal. That includes a provision to restrict mining to not occur within a buffer zone described as follows: "that area determined by a 22 degree draw angle from the bottom of the Coal seam being mined plus 25 ft. (measured horizontally) from the high water mark of Electric Lake, which is defined as an elevation of 8,575 feet above mean sea level." It appears that provision is being honored. See Dwg. 3.1.8-3, Mine 3 Level 2, Mine Plan Including UP&L Tract.

The Lower O Conner seam is to be mined in the UP&L Tract. However, mining has already been completed in another seam under Burnout Creek. The subsidence in that drainage will be the cumulative effect of mining both seams. Overburden in the Burnout and James Creek drainages varies from about 650 feet in the creek bottom to 1,200 feet at the ridge tops. The Lower O Conner B coal seam thickness is about 15 feet in the area. It is not clear from either the mine maps in this submittal OR the mine maps in the current MRP on file in the Divisions library just where the previous mining is located in the Burnout Creek area. The mine maps in the MRP are dated 1993. Current and correct information is needed for proper evaluation of the total subsidence in the area. While the mine maps are included in the Annual Report, the MRP itself needs to reflect correct mined out conditions. The mine maps in the MRP need to be updated.

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TECHNICAL MEMO

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**Findings:**

In its present form the submittal does not meet minimum regulatory requirements. Accordingly, the permittee must address those deficiencies as found within this Technical Memo and provide the following, prior to approval, in accordance with the requirements of:

**R645-301-730, 1)** Include flume F-5, at the mouth of Burnout Canyon in the water monitoring plan and an explanation of the unused flume sites in the MRP and on the water monitoring map. **2)** Provide current and correct mine maps of the already mined out areas.

**RECOMMENDATION**

The submittal should not be approved in its present form.

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