



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

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

February 14, 1994

Mr. Bill Stringer
Bureau of Land Management
Moab District Office
82 Dogwood Avenue
Moab, Utah 84532

Re: Request for Review of Subsidence Calculations, Federal Lease Addition, Castle Valley Ridge Lease UTU-64263, Star Point Mine, Cyprus Plateau Mining Corporation, ACT/007/006, Folder #2, Carbon County, Utah

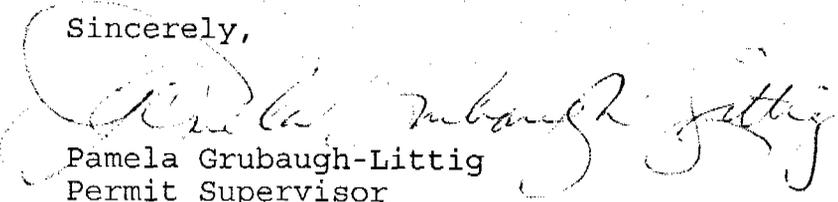
Dear Mr. Stringer:

Enclosed please find a letter to Mr. Lowell P. Braxton from Mr. George Morris, Forest Supervisor, Manti-LaSal, dated January 20, 1994, regarding Forest Service concerns related to the Castle Valley Ridge Lease Addition. A meeting was held on February 2, 1994 at the Forest Service offices with staff from Manti-LaSal Forest Service, the Division, and Cyprus Plateau Mining Corporation.

As a result of that meeting, the Forest Service requested a technical review of the subsidence calculations by the Bureau of Land Management, specifically page 2 of the January 20, 1994 letter, entitled "523. Mining Methods, Page 500-9 and 10 and 731.122. Protection of Surface Water Flow and Quantity, Page 700-90" (see attached).

This is a Division request for that review. If you have any questions, please call me or Jess Kelley.

Sincerely,


Pamela Grubaugh-Littig
Permit Supervisor

Enclosure

cc: Jess Kelley
Steve Falk, BLM, Price
Ben Grimes, Cyprus Plateau Mining Corporation

Pam - route # feb

United States
Department of
Agriculture

Forest
Service

Manti-La Sal
National Forest

599 West Price River Dr.
Price, Utah 84501

Reply to: 2820

Date: January 20, 1994

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 84180-1203

RECEIVED

ACT/007/006 # 2
JAN 24 1994
DIVISION OF
OIL, GAS & MINING
Copy PAM

RE: Addition of Federal Coal Lease UTU-64263, Star Point Mine, Cyprus-Plateau Mining Corporation, ACT/007/006, Carbon County, Utah

Dear Mr. Braxton:

We reviewed the updated information (10/13/93) on the proposed incidental boundary change (IBC) and addition of Federal Coal Lease UTU-64263 into the permit area included in your October 13, 1993 letter to George Morris, Forest Supervisor.

This letter contains comments on the addition of Federal Coal Lease UTU-64263. We have already consented to the IBC, therefore, comments below pertain to the addition of lands not already included in the IBC area.

Subsidence Monitoring Plan, Map 521.121q1

Additional monuments are needed north of the IBC area north and south of Little Park Creek to adequately measure the amount and extent of subsidence in the lease. Subsidence monitoring must be adequate to determine when subsidence in the tract is substantially complete. A determination that subsidence is substantially complete is necessary to qualify for lease relinquishment once mining is complete. In order to make such a determination, monuments would be needed along the center of the last panel to be mined, as well as at the center of the major blocks of panels.

Subsidence monuments are needed in the Little Park drainage area to measure the subsidence and angle-of-draw along the canyon slope and the Castle Valley Ridge Trail. Cyprus has proposed to locate monuments along the bottom of the drainage to demonstrate that subsidence of the channel does not occur. At least two lines of additional monuments perpendicular to the drainage would be needed to determine the extent of subsidence, the angle-of-draw, and how close subsidence progresses down the canyon slope toward the drainage.

Continuous monitoring and reporting of the angle-of-draw is critical to the protection of the stream channels. Adjustments to the subsidence protection plan would be required accordingly.

411.130. Existing Land Uses and Land-Use Classification

Little Park Trail Protection

On Page 400-3 it is proposed that measures for the protection of trail users include scheduling the mining in the winter season, or short-term closure of the trail during mining. After review, we have determined that closure of the trail would not be acceptable except in an emergency, due to the investments in trail improvement and growing interest in it's use.

It would be best to mine the first and possibly second panel north of Little Park Creek during the late fall and winter so that the majority of subsidence occurs over the winter season when the trail is not in use. We, however, recognize that there are many unpredictable variables that would influence the exact time of mining.

If the panels beneath the trail are mined such that cracks and rock topples from outcrops above the trail could occur during the recreation season, measures must be taken to protect potential trail users. An analysis of the potential for hazardous conditions to be created must be conducted and appropriate measures to protect trail users proposed to the surface management agency. The analysis would include a determination of the potential for cracks to occur and the potential size and rate of their development. It would also include a determination of the potential for rocks to be dislodged and the potential for them to reach the trail, considering the slope, size of rocks, distance to the trail, and available tree cover. If the analysis shows a significant potential for rocks to reach the trail, protection measures would be required prior to mining.

Measures for protection of trail users would include intensive monitoring of the cracks, rock outcrops and effectiveness of any protection devices during the period of high risk.

523. Mining Methods, Page 500-9 and 10 and 731.122. Protection of Surface Water Flow and Quantity, Page 700-90

The mine plan and subsidence protection proposal for the Little Park Canyon area was significantly changed in the updated materials. It is now proposed that an east-west trending main entry be driven parallel to and under the drainage. It is stated that the main was designed using the tributary load method to provide a safety factor of 2.04 for protection of the drainage from subsidence. Our concern is that the main entries remain stable through time following abandonment of the mine. One of the factors not considered in the engineering design is the potential for pillars to oxidize due to exposure to air or water, become weakened, and collapse over time causing uneven subsidence of the drainage.

This information needs to be reviewed by UDOGM and BLM mining engineers to determine if the mains are properly designed to prevent subsidence considering potential of oxidation of the pillars over time. Empirical data should be used as evidence that the main will remain stable.

731.200. Water MonitoringGround and Surface Water Monitoring Schedule Table 211.211a

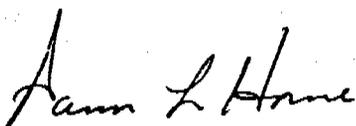
Monitoring of stream points needs to include October flow measurements, as long as weather permits. October flows are used as an indicator month to determine if flows are intermittent or perennial.

Hydrology, Page 700-82f

It is stated at the bottom of this page that it is common practice for CPMC to drill ahead of mining as known faults and fractures are approached using a small diameter horizontal drill rig to track geology and water occurrences. CPMC must commit to halting the advance of workings in the event that water under pressure is encountered along faults and to consult with UDOGM and the Forest Service in regard to continued mining into the fault area.

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

Sincerely,



for
GEORGE A. MORRIS
Forest Supervisor

cc:

D-3
C.Reed
Ben Grimes, CPMC
Roger Zortman, BLM Moab District