

#4208  
K

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

---

January 2, 2013

TO: Internal File

THRU: Priscilla Burton, Lead *PB m 805*

FROM: Ingrid Campbell, Environmental Scientist III *IGC*

RE: North Lease Permit Modification, Canyon Fuel Company, Skyline Mine, Permit # C/007/0005, Task ID #4208

**SUMMARY:**

On May 2, 2012, the Division received an application to extend the Skyline Mine North Lease area approximately 770.52 acres per the extension of the BLM coal Lease UTU-67939. The Division considers the application a significant revision to the Permit. The Division found the application to be administratively complete on June 15, 2012. The Division sent a list of deficiencies related to the North Lease Permit Modification to the permittee on August 28, 2012. Canyon Fuel Company (CFC) sent the Division a response to deficiencies on November 16, 2012.

This application is recommended for approval.

---

TECHNICAL MEMO

---

**TECHNICAL ANALYSIS:**

**ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

**HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.12; R645-301-411.

**Analysis:**

No surface disturbance is anticipated as a result of this application. Subsidence caused by underground mining would have a minimal affect on most historical resources. However, buildings or structures could be impacted. The application does not include historic or cultural resource reports. However, the Skyline M&RP contains several previous studies that include portions of the expansion area.

The AERC Project 1282 (EFX-91-1) located in the confidential volume 2 of the MRP contains a 10 acre sample unit in the southwest quarter of section 26 (T12SR6E). The unit contained no historic or cultural resource activity or isolated artifacts.

AERC Project 1470 (CSEC-95-1) is a cultural resource evaluation of seismic line corridors including a 1.78 mile seismic line along granger ridge in sections 25 and 26 of T12SR6E. The class III intensive inventory of this seismic line included a 20 to 40 meter wide corridor dependent on ground cover visibility and topography. A file search was also conducted. No prehistoric or cultural resources or isolated artifacts were discovered.

**Findings:**

The information contained in the Mining and Reclamation Plan is considered adequate to meet the Historic and Cultural Resource regulations.

**VEGETATION RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.19; R645-301-320.

**Analysis:**

The applicant included a paragraph regarding the vegetation of the North Lease expansion area on page 2-61d of section 2.7. Dr. Patrick Collins of Mt. Nebo Scientific conducted an evaluation of the vegetation in the expansion area and determined that it was not significantly different from the vegetation in the North Lease Area. Map 2.7.1-1a shows the general vegetation types of the north lease expansion area. Subsidence should not directly impact vegetation. No surface disturbance is planned for the expansion area. Habitat for threatened or endangered plant species is not present in the expansion area, according to Dr. Patrick Collins in the 2012 Review of TES species in the expansion area (located in Appendix A-2). Therefore, the Division does not require site specific information on vegetation in accordance with R645-301-321.100.

**Findings:**

The information provided in the application is adequate to meet the Vegetation Information Regulations (R645-301-321).

**FISH AND WILDLIFE RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 784.21; R645-301-322.

**Analysis:**

Dr. Patrick Collins of Mt. Nebo Scientific reviewed the list of federally threatened, endangered and sensitive species and their potential habitat within the north lease expansion area. Dr. Collins listed several sensitive species as possible residents in the North Lease expansion area (explained in detail under the protection of sensitive species section of this memo). In accordance with R645-301-322, site specific resource information is required by the Division because the site may include species protected by as a sensitive species in the State of Utah.

For the North lease area, the MRP states the following on page 2-104i of section 2.9: Surveys to determine the presence of the Northern Goshawk and the Northern Three-toed Woodpecker will be conducted in the North Lease area in Spring 2005, prior to any longwall mining being conducted. Details of the timing of the surveys and methods to be used are outlined in Appendix A-2, Biological Studies in the Winter Quarters Canyon Creek and Woods Canyon Creek - A Study Plan. In the event either or both of the birds are located, the Permittee commits to implementing suitable protection method, in consultation with the appropriate regulatory agencies (DOGMA, USFS, DWR, etc.).

---

**TECHNICAL MEMO**

---

**Findings:**

The information is considered adequate to meet the fish and wildlife regulations.

**LAND-USE RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.22; R645-301-411.

**Analysis:**

A map and supporting narrative of the current uses of the north lease expansion area is included in the application. Map 2.12.1-1 shows the location of the grazing allotments and Table 2.12.1-1 shows the sheep allotments and dates for each grazing area.

The North lease area and the North lease expansion area consist of 7 sheep grazing allotments within the Manti La Sal National Forest. The Granger Ridge grazing allotment located in the North Lease Expansion area is used between July 1 and September 30 each year.

**Findings:**

The information provided in the application meets the requirements of the Land Use Regulations (R645-301-411).

**OPERATION PLAN**

**FISH AND WILDLIFE INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

**Analysis:**

**Sensitive, Endangered and Threatened Species**

During the 2011 raptor survey, a newly established goshawk nest was identified within the North lease expansion area. Page 2-111b of section 2.9 states that the nest will be monitored in future annual surveys in advance of mining in the North Lease area.

Dr. Patrick Collins of Mt. Nebo Scientific conducted a review of the Threatened, Endangered and Candidate Species in Sanpete and Carbon Counties of Utah. Habitat for most

**TECHNICAL MEMO**

---

listed species does not exist in the expansion area. However, Dr. Collins listed several sensitive species as potential residents of the expansion area. These species are listed below:

- Canada Lynx may be present in the area, but it is highly unlikely. Furthermore, subsidence in the area should not negatively impact the Canada Lynx.
- Boreal Toad habitat could potentially exist in isolated springs and wetlands in the expansion area. A survey for Boreal Toads was conducted in the North Lease Winter Quarters area in 2005. No Toads were found. A survey for toads in the expansion area has not been completed.
- Townsends western Big Eared Bat could exist in the expansion area if there are unknown caves or rock crevices in the area. A survey for the bat has not been conducted.
- Spotted Bat could also exist in the expansion area if there are unknown caves or rock crevices in the area. A survey for the bat has not been conducted.
- The Three Toed Woodpecker could nest within the expansion area especially in the abundant beetle killed pine. A survey was conducted in the North Lease area in 2005. A survey for the woodpecker in the expansion area has not been conducted. Dr. Collins suggests that the woodpecker could be impacted in subsidence causes the downing of beetle killed pines.
- Columbia Spotted Frog could exist in the expansion area on isolated wetlands or springs. A survey for the spotted frog was conducted on the North Lease Expansion Area in 2005 and no frogs were identified. A survey for the spotted frog in the expansion area has not occurred.

As a response to the Division's deficiency for surveying the species listed above, CFC contracted Western Land Services, Inc in November 2012 to conduct a habitat assessment for western toad, Columbia spotted frog, townsend's big eared bat, spotted bat, and the three-toed woodpecker. The following conclusions were made:

- Columbia spotted frog and the spotted bat species do not have suitable habitat within the project area. Surveys are, therefore, not recommended for these species.
- Springs S25-32 and S26-1 and upper wife Creek and the East Fork of Andrew Dairy Creek should be surveyed for presence of western toad.

---

**TECHNICAL MEMO**

---

- Three toed woodpecker habitat exists in the upper extents of Wife and Andrew Dairy Canyons, on slopes with northern aspects and coniferous cover. Inventories for three-toed woodpeckers should coincide with the annual raptor surveys in areas of suitable habitat which have potential for subsidence.
- Researchers conducting annual raptor surveys should document the location of any shafts, adits or other openings which could support roosting bats. These openings must be evaluated for roosting potential and utilization by bats.

Page 2-99 of section 2.9 states that the Western Toad and the Three-toed woodpecker will need to be surveyed one year prior to undermining the North lease expansion area. This commitment has been included in the Division's list of commitments and will be followed up on in the 2013 annual report.

### **Bald and Golden Eagles**

Canyon Fuel Company currently employs Mace Crane of Western Land Services to conduct raptor surveys. The Division has met with Mr. Crane several times to discuss the location and timing of raptor surveys. Mr. Crane also communicates with the Forest Service to coordinate surveys and share data. Mr. Crane conducts surveys in areas that will be subsidized as well as any areas near planned surface disturbance. Prior to mining in the North lease expansion area, Mr. Crane will conduct a raptor survey of the area.

### **Wetlands and Habitats of Unusually High Value for Fish and Wildlife**

Limited wetlands, riparian habitat or habitat of unusually high value for fish and wildlife exist within the North Lease Expansion area. No perennial streams will be undermined. Habitats that will be undermined should not be significantly impacted. However, as Dr. Collins indicates in the threatened, endangered and sensitive species report, subsidence caused downing of beetle killed trees could impact three toed wood peckers if they are present in the area.

### **Findings:**

The information provided is considered adequate to meet the fish and wildlife protection regulations.

## RECLAMATION PLAN

### POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

#### Analysis:

A map and supporting narrative of the current uses of the north lease expansion area is included in the application. Map 2.12.1-1 shows the location of the grazing allotments and Table 2.12.1-1 shows the sheep allotments and dates for each grazing area.

The North lease area and the North lease expansion area consist of 7 sheep grazing allotments within the Manti La Sal National Forest. The Granger Ridge grazing allotment located in the North Lease Expansion area is used between July 1 and September 30 each year.

The postmining land use will be the same as the premining land use. No surface disturbance is anticipated.

#### Findings:

The information provided is considered adequate to meet the regulatory requirements for the Land Use section of the regulations.

### PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

#### Analysis:

No surface disturbance is anticipated from undermining the North Lease Area. Some impacts could occur from subsidence. The Division has requested that the operator survey the area for sensitive species that may be present. These surveys will occur one year prior to undermining as stated on page 2-99 of section 2.9. If sensitive species do occur in the north lease expansion area, the operator, the Division and appropriate wildlife agencies will develop a protection and mitigation plan for the species and its habitat. Non-sensitive species and their habitat will most likely not be impacted from underground mining.

---

**TECHNICAL MEMO**

---

**Findings:**

The information provided is considered adequate to meet the Protection and Enhancement section of the regulations.

**RECOMMENDATIONS:**

This application is recommended for approval.

O:\007005.SKY\WG4208\WG4208IC.doc