

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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July 7, 2006

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: Joe Helfrich, Team lead, Cultural resources, Biology

RE: Bear Canyon Lease Addition, Task No. 2526, Co-op Mining Company, Bear Canyon Mine, # C/015/0025

### **SUMMARY:**

On July 22, 2005 Co-op Mining Company submitted an amendment to add 60 acres to lease U-024316, 2,196 acres to lease U-61049, 1400 acres to lease U 46484, 1,108.27 acres to lease 61048 and 2,740 acres of private property to the current permit area. On May 21, 2006 Co-op Mining Company submitted a response to the deficiencies enumerated in the Divisions first technical review. The lease additions are extensions of existing leases for the Bear Canyon mine located in Huntington Canyon. This memo will include a review of the Cultural Resources and Biology sections of the regulations.

### **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:**

A cultural resource survey of the proposed lease addition area is provided for in the application as appendix 4F. This survey basically included the cliff faces and escarpments in sections 19 and 30 for the Wildhorse Ridge addition. According to Mr. Reynolds Sagebrush Consultants LLC has been contracted to conduct a survey for the Bear Canyon Lease addition areas. Upon completion the report will be included in the application. The survey should also

include coordination with and evidence of clearances by the SHPO, (State Historic Preservation Office).

**Findings:**

The information provided is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must provide the following in accordance with

**R645-301-411**, The archeological survey needs to be completed for the new lease additions as well. The survey should also include coordination with and evidence of clearances by the SHPO, (State Historic Preservation Office). [Jch]

**VEGETATION RESOURCE INFORMATION**

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

**Analysis:**

Vegetation resource information is included in chapter three of the approved Mining and Reclamation Plan, (MRP). Additional information regarding the Bear Canyon Lease Addition includes the redline strike out of paragraph one on page 3-2 05/15/2006 of the submittal received on May 22, 2006. Although plate 3-1 does not include the reference areas a plate with the reference areas defined should be included in the text and the existing text should remain as part of the MRP. The gold boundary lines and blue dashed boundary lines on plate 3-1 have been identified in the legend. The black jagged line has been removed. Plate 3-1 was ground truthed with the applicant on June 13, 14 and 27. The following deficiencies were noted:

- The scale of the symbols in the legend is too small to identify the vegetative communities outlined on the map. The scale in the legend needs to be accurately correlated with the vegetative communities plotted on plate 3-1.
- The lease boundaries for the addition need to be included on plate 3-1.
- The riparian communities associated with the springs and areas of flowing water need to be represented on plate 3-1.

**Findings:**

The information provided is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must provide the following in accordance with

**R645-301-320**, Additional information regarding the Bear Canyon Lease Addition includes the redline strike out of paragraph one on page 3-2 05/15/2006 of the submittal received on May 22, 2006. Although plate 3-1 does not include the reference areas a plate with the reference areas should be included in the text and the existing text should remain as part of the MRP. Plate 3-1 was ground truthed with the applicant on June 13, 14 and 27. The following deficiencies were noted:

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- The scale of the symbols in the legend is too small to identify the vegetative communities outlined on the map. The scale in the legend needs to be accurately correlated with the vegetative communities plotted on plate 3-1.
- The lease boundaries for the addition need to be included on plate 3-1.
- The riparian communities associated with the springs and areas of flowing water need to be represented on plate 3-1. [Jch]

## FISH AND WILDLIFE RESOURCE INFORMATION

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

### Analysis:

The application includes Appendix 3M-1, (Bat and Owl survey), Plate 3-2, (Deer habitat map), Plate 3-3, (Elk habitat), and text revisions to pages 3-IV, 3-2, 3-14, and 3-28 and 3-29. Plates 3-2 and 3-3 were ground truthed with the applicant on June 13, 14 and 27, 2006. The following deficiencies were noted:

Plates identifying habitat for Mountain Lion, Bobcat and Black Bear should also be included in the application.

The proposed lease area boundaries to be added to the current Bear Canyon permit boundary need to be identified on all plates depicting wildlife habitat.

### Findings:

The information submitted in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must submit the following information in accordance with:

**R645-301-322**, The proposed lease area boundaries to be added to the current Bear Canyon permit boundary need to be identified on all plates depicting wildlife habitat. . Plates 3-2 and 3-3 were ground truthed with the applicant on June 13, 14 and 27, 2006. The following deficiencies were noted:

- Plates identifying habitat for Mountain Lion, Bobcat and Black Bear should also be included in the application.
- The proposed lease area boundaries to be added to the current Bear Canyon permit boundary need to be identified on all plates depicting wildlife habitat. [Jch]

## MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

**Analysis:**

**Archeological Site Maps**

The application does not include archeological site maps for those acreages included in the lease addition.

**Cultural Resource Maps**

The application does not include Cultural Resource maps for those acreages included in the lease addition.

**Findings:**

The information submitted in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must submit the following information in accordance with:

**R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731,** The application needs to include Archeological Site maps and Cultural Resource maps for those acreages included in the lease addition. An archeological survey is required for the lease addition acreages. [Jch]

**PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES**

Regulatory Reference: 30 CFR784.17; R645-301-411.

**Analysis:**

The application does not include Cultural Resource maps for those acreages included in the lease addition

**Findings:**

The information submitted in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must submit the following information in accordance with:

**R645-301-411,** The application needs to include Cultural Resource maps for those acreages included in the lease addition or a finding from the Cultural resource inventory that there are no known historic sites of this type within the proposed lease additions. [Jch]

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## **FISH AND WILDLIFE INFORMATION**

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

### **Analysis:**

#### **Protection and Enhancement Plan**

The application does not include information that addresses this section of the regulations. Typically lease additions may be affected by subsidence associated with longwall mining. The application needs to include a protection and enhancement plan that addresses the possible impacts from subsidence to fish and wildlife. Page 3-38 05/15/2006 paragraph one provides for a commitment to reseed areas impacted by subsidence with a native seed mix. This may not be a required mitigation effort in some circumstances such as riparian species that have diminished as a result of flow patterns. The applicant needs to develop a mitigation and monitoring plan. The information in section R645 301.333 does not include a monitoring and mitigation plan for fish and wildlife from impacts due to subsidence.

#### **Endangered and Threatened Species**

The application includes a current list of Threatened and Endangered plant and wildlife species for the proposed lease addition areas as noted in paragraph two on page 3-28 05/15/2006 of the submittal received on May 22, 2006, but does not include a narrative about the existence of those species listed for the county, (Emery), where the lease additions are located.

The application also needs to include calculations that demonstrate the amount of water consumed from mining activities in acre-feet per year. This information is required for the Colorado Fish Recovery program to ensure compliance with the Endangered Species Act.

#### **Bald and Golden Eagles**

The application does not include information that addresses this section of the regulations. The application needs to include a current raptor survey for the lease addition areas and a discussion about the potential impacts to these birds from subsidence.

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

The application does not include information that addresses this section of the regulations. The application needs to include an evaluation of the status of Wetlands and Habitats of high value for Fish and Wildlife for the lease addition areas and a discussion about the potential impacts from subsidence.

### **Findings:**

The information submitted in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must submit the following information in accordance with:

**R645-301-322, -301-333, -301-342, -301-358.**

- The application needs to include a protection and enhancement plan that addresses the possible impacts from subsidence to fish and wildlife. Page 3-38 05/15/2006 paragraph one provides for a commitment to reseed areas impacted by subsidence with a native seed mix. This may not be a required mitigation effort in some circumstances such as riparian species that have diminished as a result of flow patterns. The applicant needs to develop a mitigation and monitoring plan. The information in section R645 301.333 does not include a monitoring and mitigation plan for fish and wildlife from impacts due to subsidence. [Jch]
- The application needs to include a discussion about the existence of those threatened and endangered species listed for the county, (Emery), where the lease additions are located. [Jch]
- The application needs to include a current raptor survey for the lease addition areas and a discussion about the potential impacts to these birds from subsidence. [Jch]
- The application needs to include an evaluation of the status of Wetlands and Habitats of high value for Fish and Wildlife for the lease addition areas and a discussion about the potential impacts to from subsidence. [Jch]

## VEGETATION

Regulatory Reference: R645-301-330, -301-331, -301-332.

### Analysis:

The applicant needs to develop a monitoring and mitigation plan with DOGM, DWR, and the Forest Service. The application needs to include a discussion about the potential impacts to vegetation from subsidence for the lease addition areas. Reseeding may not be the required mitigation in some circumstances.

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**Findings:**

The information submitted in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must submit the following information in accordance with:

**R645-301-330, -301-331, -301-332.** The application needs to include a discussion about the potential impacts to vegetation from subsidence for the lease addition areas. The applicant needs to develop a monitoring and mitigation plan with DOGM, DWR, and the Forest Service in the event subsidence monitoring denotes impacts to vegetation. [Jch]

**RECOMMENDATIONS:**

The application is not recommended for approval at this time.