

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 8, 2005

TO: Internal File

THRU: D. Wayne Hedberg Permit Supervisor

THRU: Steve Fluke Team Lead

FROM: Joe Helfrich, Biologist

RE: SITLA Muddy Tract Lease amendment, SUFCO Mine, C/041/0002 Task # 2354

SUMMARY:

On February 11, 2005 the Division received an application for the addition of the SITLA Muddy Tract to the mine's MRP. The Division reviewed the application and sent the technical analysis to the applicant on July 29, 2005. The Division received the applicant's response on October 11, 2005. The proposed amendment will add 2,134.19 acres to the Convulsion Canyon mine permit area. The SITLA lease addition, (ML 49443-OBA), can be located on the Accord Lakes, Emery West, Flagstaff, and Heliotrope 7.5-minute quadrangle maps, T21S, R5E, section 4, Lots 1, 2, 3, 4, S1/2S1/2, section 5, Lots 1, 2, 3, 4, S1/2S1/2, Section 7, Lots 2, 3, 4, S1/2NE1/4, SE1/4, Sections 8 and 9 All. The permit change will not include any surface disturbance as it is intended to address the addition of the state lease to the current permit. This memo will address the biology sections of the applicant's most recent submittal.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

Wildlife maps for the Biology section of the application include Plate 3-1, Plant Communities and Sampling areas, Plate 3-2, Elk Range, and Plate 3-3 Deer Range and Raptor Nests. The boundaries of the SITLA Muddy lease tract have been clearly identified on Plates 3-1, 2, and 3. Plate 3-1, (Plant Communities and Sampling areas of the SITLA Muddy Tract), was used to ground truth the vegetation communities. As there are many communities represented in such a small area on the map that it was very difficult to clearly identify the various communities in the field. The applicant has made a commitment in Chapter Three Section 3.2.1.1 to “upgrade and further improve the data displayed on plate 3-1 before the end of 2006”. The land use designations for big game on plate 4-1B generally coincide with those on plates 3-2 and 3-3 as noted the plates are intended to depict different information in the MRP.

Findings:

The information in the application is adequate to meet the requirements of this section of the regulations.

ENVIRONMENTAL RESOURCE INFORMATION

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

VEGETATION RESOURCE INFORMATION

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

Analysis:

Vegetation types specific to the Muddy lease tract are listed on plate 3-1, (Plant Communities and Sampling areas), of the application. The applicant has made a commitment in Chapter Three Section 3.2.1.1 to “upgrade and further improve the data displayed on plate 3-1 before the end of 2006”. The applicant has also committed to include a description of the vegetation types located within the proposed lease tract.

A discussion on the potential subsidence related impacts from mining is included in Chapter Three pages 3-44, 45, 45A, B and C. The application includes a list of possible threatened, endangered and candidate plant species identified in the U. S. Fish and Wildlife Service current listing. Table 3-1 on page 3-14 of the MRP provides a 2005 listing of the plant species. The application includes a reference to this table and the table has been updated to include the current 2005 plant listings.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

FISH AND WILDLIFE RESOURCE INFORMATION

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

Analysis:

The fish and wildlife information is provided for in chapter three of the application. Included are Appendix 3-11, Muddy Creek Technical Wildlife report, Plate 3-1, Plant Communities and Sampling areas, Plate 3-2, Elk Range, and Plate 3-3 Deer Range and Raptor Nests, Appendix 3-12, Mexican Spotted Owl Survey and table 3-2, Native Utah Wildlife Species of Special Interest. The application includes a description of the wildlife located within the proposed Muddy tract and a discussion for minimizing impacts to wildlife and livestock as a result of anticipated effects of subsidence. A current list of Threatened, Endangered, and candidate fish and wildlife species is included in the application in appendix 3-12, Table 10.

A current raptor survey is included in Appendix 3-4 of the SUFCO Mine MRP Confidential file. According to the information in the survey the raptor nests are located outside the areas of planned subsidence. The applicant has committed to developing a mitigation plan with the DWR and USFWS should a new nest have the potential of being disturbed by subsidence activities.

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Findings:

The information in the application is adequate to meet the requirements of this section of the regulations.

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:

Protection and Enhancement Plan

The application includes a description of the wildlife located within the proposed Muddy tract and a discussion for minimizing impacts to wildlife and livestock as a result of anticipated effects of subsidence. The discussion is included in Chapter 3, Section 3.3.3.3.

Endangered and Threatened Species

Pages 3-40 and 3-40A address potential water depletions from mining operations that may have an affect on endangered fish species identified in pertinent fish recovery programs. Calculations of current water depletions from mining activities are included. Volumes of water consumed in mining processes in excess of 100 acre feet/year require mitigation with the U. S. Fish and Wildlife Service. The water consumption from the mine results in a net gain of 5544.3 acre-feet per year net gain.

Bald and Golden Eagles

Appendix 3-11 of the application includes the status of Bald and Golden Eagles up to 2005. Bald Eagles do not nest in the area but are typically inhabitants during migration. According to the Cirrus report provided as appendix 3-11 five Bald Eagles have been seen along Cowboy creek during the fall migration of 2003. As noted in the Fish and Wildlife Resource Information section a current raptor survey has been included to update the status of Golden Eagles in the Muddy Tract lease area.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

The application includes a description of these areas including a discussion that addresses how impacts from subsidence during mining operations will be minimized. The information is provided for in Chapter Three pages 3-44, 45, 45A, B and C.

Findings:

The information in the application is adequate to meet the requirements of these sections of the regulations.

VEGETATION

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

Analysis:

The applicant has made a commitment in Chapter Three Section 3.2.1.1 to “upgrade and further improve the data displayed on plate 3-1 before the end of 2006”. The applicant has also committed to include a description of the vegetation types located within the proposed lease tract.

Findings:

The information provided is adequate to meet the requirements of this section of the regulations.

RECOMMENDATIONS:

The application for the proposed lease addition is recommended for approval.