

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

August 1, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: Joe Helfrich, Biologist, Team Co-lead

RE: State Lease Additions ML – 47711 and 49287, West Ridge Mine, C/007/0041 Task #2289, Outgoing File

SUMMARY:

On March 29, 2005 the Division received an application for a Significant Revision from West Ridge Resources Inc. The proposed revision is intended to add 1682.34 acres of the Penta Creek, Bureau of Land Management owned surface and SITLA coal leases ML 47711 and 49287 to the West Ridge mine. The addition of the state leases can be located on the 7.5minute Mount Bartles quadrangle map, ML 4711 includes the SW $\frac{1}{4}$ of section 36, T13S, R13E and all of section 2 T14S, R13E. ML 49287 includes all of section 3 and the W $\frac{1}{2}$ of the W $\frac{1}{2}$ of the NW $\frac{1}{4}$, the SW/SE $\frac{1}{4}$ and the SW $\frac{1}{4}$ of section 10; both are located in T14S, R13E. This permit change does not include any surface disturbance as it is intended to address the addition of the 1682.34 acres of SITLA coal to the current permit area. This memo will address the biology and land Cultural Resource sections of the regulations.

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TECHNICAL ANALYSIS:

GENERAL CONTENTS

MAPS AND PLANS

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

Analysis:

Maps for the Biology section of the application include Appendix 3-9A, the Mexican Spotted Owl Habitat, 3-1, the General Vegetation Communities map, 3-4A, the Raptor Survey map for 1997 and 1998, Appendix 3-2A includes a 2004 raptor survey of the proposed SITLA area, 3-4B Deer Range, 3-4C Elk Range, and 3-4D Antelope Range. Land use and Surface ownership maps are identified as maps 4-1 and 5-2. The proposed SITLA addition lies within the Grassy Trail Allotment and the Penta Creek/Magnificent Seven and The Bureau of Land Management are the surface owners. Map 4-2 includes an Archeological denotation and survey. The legend corresponds to the lines, circles, letters and numbers that appear on the map.

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.

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

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

Analysis:

The historic and archeological resource information is referenced in volume one chapter 4, pages 4-2 and 3 of the approved MRP. An order one survey or Summary of Archeological studies on the proposed West Ridge Project area are included in Appendix 4-2 of the application.

The literature search prepared by Senco Phenix indicates that no historic properties will be affected and no further cultural resource inventory is necessary prior to the lease expansion.

Findings:

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

VEGETATION RESOURCE INFORMATION

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

Analysis:

Vegetation communities located within the state leases are identified on map 3-1, (general vegetation communities). They include Douglas fir, Pinyon/Juniper, Sagebrush\Grass\Herbland, Aspen, and Mountain Brush. Riparian areas were identified in the following areas during the field visit on June 8th and 9th, 2005. Using map 3-1 as a reference, riparian vegetative communities were noted in Little Spring canyon, Spring canyon and Bear canyon. There was also an appreciable flow of water in each of the canyons. Refer to the hydrology sections of the TA for this application for information on the status of flow in the canyons. Map 3-1 has been updated to include the referenced riparian communities. Map 3-1 has also been updated to include the revised location of the Douglas Fir communities. As there is no surface disturbance associated with this permitting action the only potential impacts to the vegetative communities from mining activities would be those from subsidence.

Volume 1 chapter 3 Pages 3-7 and 8 of the approved MRP describe the protection plan for minimizing impacts to wildlife livestock and vegetation as a result of anticipated effects of subsidence. West Ridge Resources has committed to conducting infrared aerial photography every five years in areas of potential subsidence. The MRP also includes a current list of possible threatened, endangered and candidate plant and animal species identified in the U. S. Fish and Wildlife Service current listing for Carbon County.

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.

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Analysis:

The fish and wildlife resource information is described in chapter three of the MRP. Relevant information to this permit review includes:

- Appendix 3-9A containing a letter from the DWR and a map regarding the Mexican Spotted Owl,
- Appendix 3-2A, the 2004 Raptor Survey map,
- Map 3-4B Deer Range, map 3-4C Elk Range, map 3-4D Antelope Range and,
- Appendix 3-4A, is the current list of Threatened, Endangered, and candidate wildlife species for Carbon County.

The wildlife species located within the SITLA leases are identified on Maps 3-4B, C, D and Appendix 3-2A. As there is no surface disturbance associated with this permitting the only potential impacts to the wildlife species from mining activities would be those from subsidence. Chapter 3, pages 3-3, 3a, 3b, and 3c describe the protection and enhancement plan in areas where subsidence may impact the watersheds.

Findings:

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

LAND-USE RESOURCE INFORMATION

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

Analysis:

A description of the land use is provided for in section 4-1 of the approved MRP. A land use map, 4-1, is included in the application and is reviewed under the maps and plans section of this technical review.

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

Volume 1 chapter 3 Pages 3-7 and 8 of the approved MRP describe the protection plan for minimizing impacts to wildlife, livestock and vegetation as a result of the anticipated effects of subsidence. West Ridge Resources has committed to conducting infrared aerial photography every five years in areas of potential subsidence. The underground mining activities will be under approximately 2000' of cover with little or no subsidence anticipated. In areas where the cover may be as shallow as 325' West Ridge has committed to conducting a detailed vegetation survey prior to mining underneath the areas. After mining the areas will be monitored for any impacts resulting from subsidence. Damage will be repaired as described on page 3-3b of the MRP.

Endangered and Threatened Species

According to the information in the application and MRP there are no threatened or endangered plant or wildlife species in the SITLA lease areas. Sensitive species include Canyon Sweet Vetch and model generated breeding habitat for the Mexican Spotted Owl. Potential water depletions from mining operations may have an affect on endangered fish species identified in pertinent fish recovery programs. Volumes of water consumed in mining processes in excess of 100acre feet/year require mitigation with the U. S. Fish and Wildlife Service. Calculations of current water depletions from mining activities are provided for in Appendix 7-7 of the approved MRP. It is estimated the mine would use 21,804,600 gallons or about 67 acre-feet per year. This includes evaporation from ventilation, washdown, culinary uses, the longwall, continuous miner, and roof bolter. Above one hundred-acre feet per year, the Fish and Wildlife Service would require a mitigation fee.

Bald and Golden Eagles

Bald Eagles do not nest in the area but are typically inhabitants during migration. Included in the application is a current raptor survey, (2004), listed as Appendix 3-2A. According to the survey there are no Golden Eagle nests located in or within ½ mile of the SITLA lease areas. The underground mining activities will be under approximately 2000' of

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cover with little or no subsidence anticipated. As such impacts to raptors from mining would be negligible.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

Using map 3-1 as a reference, riparian vegetative communities were noted in Little Spring canyon, Spring canyon and Bear canyon. The riparian vegetative communities are considered critical and or high value wildlife habitat. West Ridge Resources has committed to conducting infrared aerial photography every five years to monitor the potential impacts from subsidence. There is no surface disturbance associated with this permitting action. The only effects to the riparian habitat would be those from subsidence. Overburden in the SITLA lease areas varies from less than 400' to greater than 2,000' of cover. The applicant has included a protection and enhancement plan for the critical and or high value wildlife habitat areas. The plan is included on pages 3-3, 3-3a, 3-3b, and 3-3c of chapter 3 of the MRP.

Findings:

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

VEGETATION

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

Analysis:

The vegetative communities are discussed in volume 1 chapter 3 page 3-2 of the approved MRP. Using map 3-1 as a reference, riparian vegetative communities were noted in Little Spring canyon, Spring canyon and Bear canyon. Map 3-1 includes the referenced riparian communities. Since no surface disturbance is anticipated by this permitting action the only effects on the riparian habitat would be those from subsidence. West Ridge Resources has committed to conducting infrared aerial photography every five years to monitor the potential impacts from subsidence. Any impacts to the vegetation communities due to subsidence would most likely be negligible as the mining activities will be under approximately 2000' of cover. Since the overburden in the SITLA lease areas varies from less than 400' to greater than 2,000' of cover the applicant has included a protection and enhancement plan for the critical and or high value wildlife habitat areas. The plan is included on pages 3-3, 3-3a, 3-3b, and 3-3c of chapter 3 of the MRP.

Findings:

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

RECOMMENDATIONS:

The application is recommended for approval.