

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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October 28, 2008

TO: Internal File

THRU: Wayne Western, Engineer, Team Lead *WtW*

FROM: Joe Helfrich, Biology, Cultural Resources and Land Use *JH*

RE: Bear Canyon Gob Vent Hole Facility, West Ridge Resources Inc., West Ridge Mine, C/007/0041, Task ID #3077

**SUMMARY:**

On October 22, 2008 the Division received an amendment from West Ridge Resources Inc. to drill a gob vent hole over panel # 8. It can be located on the Sunnyside 7.5 minuet quadrangle in Township 14 South Range 13 East, Sections 3 and 10. The project is intended to facilitate the uninterrupted mining and maximum recovery of the coal by lowering the percentage of methane gas in the mine. This memo will address the Biology, Cultural Resource and Land use sections of the regulations.

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**TECHNICAL ANALYSIS:**

**GENERAL CONTENTS**

**PERMIT APPLICATION FORMAT AND CONTENTS**

Regulatory Reference: 30 CFR 777.11; R645-301-120.

**Analysis:**

The applicant has submitted current, clear, or concise information for the review of the Biology, Archaeology and Land Use sections of the regulations.

**Findings:**

The information provided 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:**

For this gob hole ventilation project task # 3077, Senco-Phenix conducted a Class III survey. The results showed that there were no historic resources within the project area. The Division defined the "area of potential effect" as the proposed degas well and topsoil storage areas. The Division evaluated the survey information and made a finding of "*no historic properties affected*" for this project. There is current correspondence with SHPO, *concurrence*, for this project (10202008 Outgoing; ~10282008 Incoming).

**Findings:**

The information provided 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 resource information is provided for in chapter three and appendix 5-14 of the application. Additional references to the approved MRP are included. Quantitative data required to characterize the proposed sites was obtained on September 24, 2008. On October 27, 2008 Representatives from DOGM (Joe Helfrich), and Andalex Resources (Dave Shaver) met at the DOGM Salt Lake Office and concurred with Dr. Collins findings that due to the similarity of vegetative communities, (Douglas Fir/Maple) at Bear and C Canyons reference area data from C Canyon could be used to determine final reclamation success, see page 3-1a of the application. A threatened, endangered and sensitive plant survey was conducted at the proposed site location. The sensitive plant species canyon sweet vetch, (*Hedysarum occidentale. Var. canone*), was identified at the site. Seeds were collected for re establishing the population on the topsoil stockpile and for the reclamation seed mix.

### Findings:

The information provided in the application 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:

Fish and Wildlife resource information is provided for in chapter three and attachment 4 of the application. The information includes a description of the wildlife and habitat found in the proposed site location, a 2008 raptor survey, a reference to the current T&E wildlife species lists included in the MRP and reclamation practices designed to promote wildlife habitat.

#### *Ungulates*

The text in the application indicates that there is elk, deer and antelope habitat within the

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gob vent hole project area, but that the habitat is not designated as critical or crucial.

*Fish or other aquatics*

There are no known fisheries close to the GOB hole site.

*Migratory Birds, Game Birds, and Raptors*

There are raptor nests within the permit and adjacent areas. The results of the 2008 survey, appendix 3-2B show that there are no raptor nests within ½ mile of the proposed gob hole location.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL/PLANT SPECIES

Appendix 3-4B includes a description of the T& E wildlife species for the area included in the proposed gob vent hole application. According to the T & E evaluation performed by Dr. Pat Collins from Mt. Nebo Scientific there are no T & E wildlife species present in the area to be disturbed.

*Mexican Spotted Owl (MSO)*

EIS provided documentation stating that the models and other criteria do not indicate that there is suitable habitat for MSO within the proposed gob vent hole area.

*Plants*

The MRP provides a letter from Patrick Collins stating that there are no federally listed T&E plant species within or near the proposed gob vent hole, Appendix 3-13, as noted in his survey of the proposed gob vent hole area.

**Findings:**

The information provided 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:**

The land use resource information is provided for in chapter 4 of the application. It includes a description of the land use at and adjacent to the proposed drill site locations, that being grazing, wildlife, open range, hunting and private use.

**Findings:**

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

**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**

There are archeological maps showing known resource locations within the permit area. These maps are located at the Division's office in Salt Lake in the Confidential File section of the library. There are no known cultural resources located within the proposed disturbed area.

**Vegetation Reference Area Maps**

The reference area map for the gob vent hole project, map 3-1 is included in the map section of appendix 15-4 of the application.

**Findings:**

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

**OPERATION PLAN**

**PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES**

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

**Analysis:**

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The Permittee's survey performed by Senco-Phenix has identified no parks or historic resources that mining operations may adversely affect.

**Findings:**

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

**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**

Section 333.300 of the MRP describes mitigation and protection measures for wildlife and vegetation that will be employed during the drilling activity.

*Ungulates*

The Division, in consultation with DWR, does not consider that traffic or construction will impact the ungulates during the gob vent hole project.

*Fish or other aquatics*

There are no fisheries or other aquatic habitat located in the proposed disturbed area.

*Migratory Birds, Game Birds, and Raptors*

There are no nests within a 0.5-mile buffer zone of gob vent hole site.

**Endangered and Threatened Species**

The application includes the results of a plant TE survey for the 2008 GOB project and a listing for Carbon County. According to the research and analysis performed by Mt. Nebo Scientific there are no known federally listed threatened and endangered plant and wildlife species within the proposed drill site locations. The Division will coordinate with the USFWS and Permittee to prevent taking if any known reports show that there are TE species within the area.

### *Colorado River Fish*

The text in the application indicates that there will be no water consumption associated with the development of the proposed gob vent hole.

### **Bald and Golden Eagles**

According to the 2008 raptor survey there are no known bald or golden eagle nests within a 0.5-mile of the proposed gob vent hole drilling area.

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

According to the vegetation study there are no known wetlands within the in the proposed gob vent hole drilling area.

### **Findings:**

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

## **VEGETATION**

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

### **Analysis:**

Chapter three of the MRP describes mitigation and protection measures for wildlife and vegetation that will be employed during the drilling activity. Additional protection measures are described in the MRP, section 333.300.

### **Findings:**

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

## **RECLAMATION PLAN**

## **GENERAL REQUIREMENTS**

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Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

**Analysis:**

The application includes a two-phase revegetation plan for the drill sites. First, the redistribution of topsoil and seeding, and second, well plugging and distribution of remaining topsoil.

**Findings:**

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

**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:**

The reclamation seed mix will be comprised of species indigenous to the area and capable of supporting the postmining land use for grazing and wildlife. The seed mix is included in chapter three of the application.

**Findings:**

The information provided in the application is adequate to meet the requirements of this 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:**

The application includes enhancement and protection measures during the reclamation phase of operations. For the gob vent hole project, enhancement measures include the application of a seed mix that is suitable for wildlife habitat. Additional protection measures are included in the MRP.

**Findings:**

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

**REVEGETATION**

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

**Analysis:**

**Revegetation: General Requirements**

For the gob vent hole project, the Permittee plans to use seed and apply mulch. The seed mix and time table for reclamation are included in Chapter 3, Appendix 5-14, attachment 13, tables 3-1 and 3-2. The applicant will use the "reference area method" for measuring the standard of success. The applicant has agreed to utilize the proposed standards for success for the reference area established by Mount Nebo Scientific, page 3-1a and Appendix 3-1A.

**Revegetation: Timing**

The applicant has proposed to initiate reclamation during the first favorable planting season, usually fall.

**Findings:**

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

**RECOMMENDATIONS:**

The application is recommended for approval.

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