

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

September 8, 2009

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TO: Internal File

THRU: Daron Haddock, Permit Supervisor *DARH*

FROM: Ingrid Wieser, Environmental Scientist II, Lead *iw*

RE: Permit Change to Include Lease Modification, West Ridge Resources Inc, West Ridge Mine, C/007/0041 and Task ID # 3368

SUMMARY:

On May 14, 2009, West Ridge Resources sent the Division an application for a permit change. The change involved including a new portion of Lease UTU-78562 to the permit boundary. The new area consists of 602.91 acres in sections 34 and 35 of T 13S R 13E. All activity in this area will be underground with no surface disturbances predicted other than subsidence.

On July 13, 2009 following deficiencies were identified by the Division in accordance with:

R645-301-140 and R645-301-320: Vegetation information needs to be included over the entire permit area as shown on Map 3-1.

R645-301-113: Please update the violation information located in Appendix 1-2

R645-301-130: Please provide all technical information including the date the information was gathered for the cultural resource file search and other surveys.

R645-301-140: Map 1-0 should be updated to reflect the current acreage value of the permit area listed at the bottom of the map.

Map 3-1 needs to include vegetation communities over the entire permit area.

R645-301-411: Please clarify the eligibility of site 42CB-317 for listing in the National Register of Historic Sites. The site is located in a potential subsidence zone and may be eligible according to the file search performed by Senco-Phenix.

R645-301-320: Include and incorporate the baseline infrared photographs of the old and proposed new permit area mentioned on page 3-8 of the MRP.

The permittee responded on August 20, 2009. This memo will address the permittee's response to deficiencies. No deficiencies remain. This amendment is recommended for approval.

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TECHNICAL ANALYSIS:

GENERAL CONTENTS

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

The West Ridge Mining and reclamation plan includes the following information in accordance with R645-301-113:

- A statement that the company has not had a federal or state permit to conduct coal mining and reclamation operations suspended or revoked in the five years preceding the date of submission and has not forfeited any performance bond or security.
- A listing of violations received by the applicant is in appendix 1-2.

The violations listed in Appendix 1-2 are not up to date and the permittee was sent the following deficiency: **R645-301-113**: Please update the violation information located in Appendix 1-2.

The Permittee responded by submitting an updated violation information section in appendix 1-2. This section is now up to date.

Findings:

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

Most technical reports submitted with the amendment application include the names of persons or organizations that collected and analyzed the data, dates of collection and analysis of the data and descriptions of the methodology used to collect and analyze the data.

The archaeological report submitted with the amendment does not list the dates of data collection. The Division sent the following deficiency to the permittee:

R645-301-130: Please provide all technical information particularly regarding the cultural resource report including the date the report was prepared and the names of researchers responsible.

The permittee responded to the deficiency by submitting the entire archeology report, which included names of researchers and dates of research.

Findings:

The information provided in this section is considered adequate to meet the minimum regulatory requirements for this section.

MAPS AND PLANS

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

Analysis:

The following maps were updated to include the modified permit boundary.

- Map 1-0 Permit Map: The acreage of the permit area listed at the bottom has not been updated.
- Map 1-1 Location Map
- Map 2-1 Regional Soil Map: The soil information is shown over the entire updated permit area
- Map 3-1: General Vegetation Communities: The vegetation community information does not cover the entire updated permit area.
- Map 3-4 A: Wildlife Map-Raptor Survey: This map needs to be marked "Confidential" and moved to the confidential binder.
- Map 3-4B Wildlife Map-Deer Range: The Critical Summer, winter high priority and critical winter ranges for deer are depicted over the entire updated permit area.

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- Map 3-4C Wildlife Map-Elk Range: The high value year long, winter high value and substantial winter range have been depicted over the entire updated permit area.
- Map 3-4D Wildlife Map- Antelope Range: The high value year long antelope range is shown; none exists on the updated permit area.
- Map 4-1 Existing Land use:
- Map 4-2 Archeology Map: This map depicts the modified lease boundary and the archeology survey boundaries. This map needs to be moved to the confidential binder.
- Map 5-2 Surface Ownership Map
- Map 5-3 Subsurface Ownership Map
- Map 5-4A Mining Projections: This map includes mining projects planned for the new lease area.
- Map 5-4B Mining Projections (Extended Reserves):
- Map 5-7 Subsidence Map
- Map 6-1 Regional Geology Map
- Map 6-2 Coal Seam Structure Map
- Map 6-3 Lower sunnyside Coal seam isopach map
- Map 7-3 Water Rights
- Map 7-5 Seep/Spring survey map
- Map 7-6 Hydrological Monitoring Map (Historical Monitoring locations.
- Map 7-7 Operational Monitoring Locations

The Division sent the permittee the following deficiency: **R645-301-140**: Map 1-0 should be updated to reflect the current acreage value of the permit area listed at the bottom of the map. Map 3-1 needs to include vegetation communities over the entire permit area.

The Permittee responded to the deficiency by submitting updated maps 1-0 and 3-1. Map 1-0 now lists the correct acreage value of the permit area. Map 3-1 includes vegetative communities over the entire permit area.

Findings:

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

ENVIRONMENTAL RESOURCE INFORMATION

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

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

Analysis:

The permittee included in the lease modification application a file search and list of intensive cultural resource surveys pertaining to the west ridge mine permit area. The file search was conducted online at the Utah Division of State History website at the Prive River Field Office BLM by Senco-Phenix Archeological Consultants. No date is listed as to when this file search occurred and this deficiency is addressed under reporting of technical data. Studies examined by Senco-Phenix revealed that "significant prehistoric archeological sites are most likely to be found in areas with permanent water within Pinyon-Juniper vegetation zones.

One cultural resource survey took place in a portion of the expansion area. This survey was conducted in 1984 by Nickens and Associates and is mapped on Map 4-2. The survey area is located on the NE $\frac{1}{4}$ of Section 34 and the N $\frac{1}{2}$ Section 35. No cultural resources were located.

Other cultural resource surveys were also listed in the permit area and only one had a potential eligible site. In 1981, a survey was performed by the USHS in a portion of section 1. One site was located and was not considered eligible. According to the current file search by Senco-Phenix, the "site should be considered eligible pending re-examination". This site is located in a potential subsidence zone above a panel that is proposed to be mined in 2011. The eligibility of this site needs to be clarified.

The Division sent the following deficiency to the permittee: **R645-301-411**: Please clarify the eligibility of site 42CB-317 for listing in the National Register of Historic Sites. The site is located in a potential subsidence zone and may be eligible according to the file search performed by Senco-Phenix.

Division biologist Ingrid Wieser spoke with archeologist John Senulis by phone regarding this deficiency. Mr. Senulis explained that site 42CB-317 is located over a panel that the BLM has not given the permittee approval to mine yet due to its proximity to Grassy trail reservoir. The permittee must submit an application to the Division before undermining this site. At that time, the Division will request an official eligibility description and, if eligible, a protection/ mitigation plan for the historic site. This information was conveyed to Dave Shaver of West Ridge Resources.

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Findings:

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

VEGETATION RESOURCE INFORMATION

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

Analysis:

No vegetation information has been updated or changed as a result of this amendment. Vegetation information is required over the entire permit area including the lease expansion area. Appendix 3-1 includes a report on the plant communities of the west ridge mine project area completed in 1997. This report included a survey of the vegetation that was planned to be disturbed as well as the associated reference area. Appendix 3-1A includes a report of the vegetation of an additional Douglas/Fir Maple community reference area. Vegetation communities were mapped on Map 3-1 using color aerial photos identifying six communities. This map does not include vegetation communities over the entire permit area.

Riparian areas exist in Whitmore Canyon and other drainages within the expansion area. These areas are considered high value habitat for fish and wildlife. A riparian vegetation inventory was conducted in Whitmore Canyon in 2003 and is located in Appendix 3-12.

No surface disturbances will occur in the new expansion area. Therefore, the only potential harm to vegetation would occur as a result of subsidence. The subsidence mitigation measures section begins on page 3-7 of the MRP. West Ridge Resources has committed to conducting infrared photography in areas of potential subsidence as a means of collecting baseline information with regard to vegetation. The photography will continue once every five years to document change in vegetation during mining. The baseline photos are not located in the MRP and possibly do not exist.

The following deficiency was sent to the Permittee by the Division: **R645-301-320:** Include and incorporate the baseline infrared photographs of the old and proposed new permit area mentioned on page 3-8 of the MRP.

Division Biologist, Ingrid Wieser, and Dave Shaver of West Ridge Resources discussed the infrared photographs. No baseline photos of the permit area were ever collected as a result of an oversight by the company and the Division. Requiring the company to provide aerial photos now is a waste of resources because no baseline data exists. The Division advised the permittee

to omit the commitment from the M&RP. Mr. Shaver submitted updated pages to be incorporated that omitted this commitment.

Findings:

The information provided is considered adequate to meet the minimum regulatory requirements for this section.

RECOMMENDATIONS:

This amendment is recommended for approval.