

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

August 27, 2009

TO: Internal File

THRU: Steve Christensen, Lead *SKC*

FROM:  Joe Helfrich, Biology, Land Use, Cultural Resources

SUBJECT: Covol Prep Plant, Covol Technologies, Mine Name, C/007/0045 Task #3349

SUMMARY:

On January 15, 2008, the Division received an application from Covol Technologies Inc. to obtain a permit for a "**Dry Coal cleaning facility**". The application was determined to be "*Administratively Complete*" on March 14, 2008. On March 30, 2009 the Division received a response to the deficiencies noted in Director Baza's letter to Mr. Keith Thompson dated February 5, 2009. This memo will include a review of the Biology, Land Use and Cultural Resource sections of the application in accordance with the Utah coal rules, R645 ET sec.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

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

Analysis:

The information in the application has been formatted in accordance with the R645 Coal rules. The application is formatted by chapter that corresponds with the R645 Coal Rules. The information contained within the chapters of the application is also formatted in accordance with the Utah Coal Rules.

Findings:

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

REPORTING OF TECHNICAL DATA

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

Analysis:

The application includes information that meets the requirements of this section of the regulations.

Findings:

The information in the application is adequate to meet the requirements of this section of the regulations. The application includes the names of the individuals that collected and analyzed data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data.

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 map delineating the extent of the survey is included in chapter 4. The application also included a class one survey, (Literature search) for the permit and adjacent areas.

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:

The application includes a current list of Threatened and Endangered plant species for Carbon County. The application references information according to the Savage Coal Terminal M RP. That information is included in the application along with the names of individuals responsible for collecting the information. The application also includes a map and a vegetative survey of the permit and adjacent areas.

Findings:

The information 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.

TECHNICAL MEMO

Analysis:

The application includes a current list of Threatened and Endangered wildlife species for Carbon County. Page 3-3, Section 3.2.2 references Savage Services Corporation 1983 for information about fish and wildlife. That information is included in the application along with supporting data and maps and the names of the individuals responsible for acquiring the data and analyzing the information. The applicant has provided a commitment to conduct a burrowing owl survey in the Spring of 2010.

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:

Land Use information is provided for in chapter 4 of the application. According to the information in the Division's records and on page 4-1 of the application, the area was previously undisturbed even though it may have been zoned for industrial use as noted on the zoned land use map figure 4-1. Covol Technologies Inc. as a coal processing facility is currently using the land. The application includes a narrative that describes the current uses of the land by Covol Technologies.

Post Mining Land Use Information is included in Chapter 4, page 4-2, Section 4.1.2.1. After operations have been completed, the applicant intends to grade the site, stockpile topsoil and construct drainage controls. Except for grading to approximate original contour, topsoil stockpiling and the construction of drainage controls are not permitted at the conclusion of mining.

Findings:

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

ALLUVIAL VALLEY FLOORS

Regulatory Reference: 30 CFR 785.19; 30 CFR 822; R645-302-320.

Analysis:

Alluvial Valley Floor Determination

The application has been reviewed in accordance with the requirements of this section of the regulations. There are no AVF's within the permit or adjacent areas.

Findings:

The information 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:

- Monitoring and sampling locations, these maps are provided in chapter three,
- Vegetation reference area, the applicant has committed to establishing a reference area at the end of processing the refuse material as the adjacent property is private and may change at some point before the cessation of operations.
- Public parks and cultural or historic resources located within the permit and adjacent area. A map and text that includes a description of the area, noting that there are no public parks in the survey area is included in chapter 4.
- Facilities to be left at reclamation are described in chapter 5 of the application
- Plate 5-2, reclamation surface and subsurface manmade features is included in the application.
- The surface ownership map is included in chapter 5, figure 5-2.

Findings:

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

TECHNICAL MEMO

OPERATION PLAN

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

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

Analysis:

The applicant addressed this regulation. No public parks and/or historic places are located within the permit or adjacent area.

Findings:

The information in the application meets the requirements of this section of the regulations.

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

The application includes an air quality permit, (DAQUE#AN2952001-05), issued June 30, 2005 by the Division of Air Quality as appendix 4-1.

Findings:

The information 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

Page 3-12, Section 3.5.8 states, *"The plan is designed to minimize disturbances and adverse impacts on fish, wildlife and their related environments. Covol will periodically*

educate their employees about wildlife needs and their importance” The application includes a wildlife awareness plan that is designed to minimize disturbances, what wildlife needs are and how Covol will periodically educate their employees about wildlife needs and their importance.

Endangered and Threatened Species

Appendix 3-1 of the application includes a letter from the Division of Wildlife Resources, DWR, regarding species of concern. As noted in the letter and personal communication with Chris Wood, DRW habitat manager for the southeastern region, the information is not to be considered a substitute for on-the-ground biological surveys. The application needs to include a survey of the adjacent area for threatened and endangered species of plants and wildlife to ensure compliance with the Endangered Species Act.

The application is accompanied by the names of the individuals that collected and analyzed the data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data to support the following statement noted on page 3-12, Section 3.5.8.1 of the application; *There are no known endangered or threatened species within the permit area.*

Mining operations may affect the habitat of the following endangered fish species, *Colorado Pike minnow, Razor back sucker, Humpback chub and Boneytail chub*. The application includes calculations for water consumption expressed in acre-feet per year as required by the USFWS’s Colorado fish Recovery Program. Water consumption in excess of 100 acre feet per year will require a mitigation fee as determined by the FWS. The FWS is working in conjunction with the Division to streamline the consultation process. The Division will provide Covol with the results of the consultation upon completion of the Section 7 working agreement.

Bald and Golden Eagles

On page 3-19 of the Plan in Section 3.5.8.2, the application states, “No suitable bald or golden eagle habitat exists in the permit and adjacent are.” Appendix 3-1 of the Plan provides the biological survey of the permit and adjacent areas as prepared by Christopher T. Jensen of Canyon Environmental L.L.C.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

Appendix 3-1 of the application includes a letter from the Division of Wildlife Resources, DWR, regarding species of concern. It lists three sensitive species that occur within the general vicinity of the Covol facility, burrowing owl, bluehead sucker and white tailed prairie dog. The application includes a narrative that includes protection measures to be taken to avoid disturbances to habitats of high value for fish and wildlife, (burrowing owl, bluehead sucker and

TECHNICAL MEMO

white tailed prairie dog), and maps that show the habitat for these species in relation to the permit area boundary. Appendix A figure 3 includes habitat delineation for Mule Deer, Pronghorn Antelope, Burrowing owl and Bluehead sucker. The Division will conduct a field visit to ground truth the habitat delineations. The applicant has provided a commitment to conduct an occupancy survey for Burrowing Owls that is agreed upon by DWR and DOGM at the appropriate time during the calendar year 2010. The following language was suggested for revisions to paragraph 3 on page 3-5 of the application "In order to best determine the presence or absence of Burrowing owls in the habitat areas adjacent to the coal cleaning facility Covol Technologies will ensure that a qualified individual acting on behalf of the company will conduct a Burrowing owl survey during the appropriate time of calendar year 2010. A representative from Covol will consult with DWR and DOGM prior to conducting the survey to verify the appropriate time and protocol to be used to implement the survey.

The application is accompanied by the names of the individuals that collected and analyzed the data, the dates of collection, analysis of the data and a description of the methodology used to collect and analyze the data to support the following statement noted on page 3-12, Section 3.5.8.2 of the application: " *No wetland or riparian habitat exists in the permit or adjacent areas*".

Findings:

The information 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:

Page 3-4, Section 3.30 describes measures taken to disturb the smallest practicable area. No disturbance beyond the current fenced disturbed/permit area anticipated. A description of the plant communities found adjacent to the project area and a map delineating the vegetative communities including the riparian zone is included in Appendix 3-1 of the application. Associated maps are to appropriate scale. The trees, shrubs, forbs, and grasses listed on page 2 of Appendix 3-1 have been appropriately categorized.

Findings:

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

RECLAMATION PLAN

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 applicant has demonstrated that the disturbed area can be reclaimed prior to obtaining approval for an alternative post mining land use as required by **R645-301-413.100**. Chapter 3, page 3-1, paragraph 2, indicates that ***“Reclamation of the site will make it available for future industrial use rather than restoring the site to its undisturbed condition”***. Industrial use is a zoning classification and not necessarily an indicator of the land status prior to the applicant’s activities. According to the information in the Division’s records and on page 4-1 of the application, the area was previously undisturbed even though it may have been zoned for industrial use. That being the case the applicant is required to reclaim the disturbed area to its original condition.

According to the information in Chapter 4, page 4-2, Section 4.1.1.2, ***“No previous mining occurred in the permit area”***.

Additional post mining land use information is included in the October 15, 2008 submittal, Chapter 4, page 4-3, paragraph 1. The information identifies the post mining land use of the remaining portion of the disturbed area as “Industrial. Management did not require information on this section of the technical analysis.

These items were adequately addressed by the applicant:

Chapter one Appendix one page 10-5 includes a description of the type or types of uses the industrial site could be used for at the completion of mining activities.

TECHNICAL MEMO

A copy of the Wellington City agreement for reclamation of the site is included in Chapter one, Appendix 1-4 of the application.

Page 5-21 of the application includes a commitment to provide the following information at the end of mining:

- The entity responsible for the post mining land use.
- A written request from the entity identifying their needs for the property, and a right of entry agreement between Covol and the industrial site user if other than Covol.

Findings:

The information in the application is adequate to meet the requirements of this section of the regulations. Management revised this section of the technical analysis.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

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

Analysis:

This section of this document is addressed under the same heading in the *operation plan/fish and wildlife information* beginning on page 8 of this document.

Findings:

The findings are noted in the *operation plan/fish and wildlife information* section beginning on page 8 of this memo.

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

Page 3-5, Section 3.40 indicates, "*post-operation revegetation of the site is not anticipated*". The application has been revised to include a reclamation plan for the disturbed area.

Revegetation: Timing

Page 3-6, Section 3.4.1.1 includes a schedule for reclamation, late fall with a contingency plan.

Revegetation: Mulching and Other Soil Stabilizing Practices

Page 3-6, Section 3.4.1.2 indicates, "*no mulch will be applied*" this section of the application needs to be revised to include mulching or other soil stabilizing practices.

Revegetation: Standards For Success

Page 3-6, Section 3.4.1.2 indicates that "*revegetation success will be monitored visually*" this section of the application has been revised to include a reference area, a map showing the location of the reference area, a monitoring schedule during the reclamation liability period and a statistically valid sampling technique for measuring vegetation success in accordance with the vegetation guidelines, (R645-356.110 Appendix A of the Utah Coal Rules).

Findings:

The information in the application is adequate to meet the requirements of this section of the regulations. Management did not require information on this section of the technical analysis.

MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

Analysis:

TECHNICAL MEMO

The following maps are included in the application;

- Cultural resources: area covered by the literature search, and any cultural resources found. A map delineating the extent of the survey is included in chapter 4
- Monitoring and sampling locations, these maps are provided in chapter three,
- Vegetation reference area, the applicant has committed to establishing a reference area at the end of processing the refuse material as the adjacent property is private and may change at some point before the cessation of operations.
- Public parks and cultural or historic resources located within the permit and adjacent area. A map and text that includes a description of the area, noting that there are no public parks in the survey area is included in chapter 4.
- Facilities to be left at reclamation are described in chapter 5 of the application
- Plate 5-2, reclamation surface and subsurface manmade features is included in the application.
- The surface ownership map is included in chapter 5, figure 5-2.

The maps in their current configuration are prepared to the appropriate scale, a bit smaller but acceptable.

Findings:

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

OPERATIONS IN ALLUVIAL VALLEY FLOORS

Regulatory Reference: 30 CFR Sec. 822; R645-302-324.

Analysis:

The application has been reviewed in accordance with the requirements of this section of the regulations. There are no AVF's within the permit or adjacent areas.

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.

O:\007045.COV\FINAL\WG3349\files\jchrevised 3349.doc