

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 5, 2008

TO: Internal File

THRU: James D. Smith, Lead *JS Oct 30/09*

FROM: *Ww* Joe Helfrich, Ingrid Wieser Biology, Land Use, Cultural Resources

SUBJECT: Wildcat Loadout Expansion, Andalex Resources Inc., Wildcat Loadout, Permit # C/007/0033, Project #2966

SUMMARY:

On April 30th, 2008 the Division received an application from Andalex Resources Inc. to expand the Wildcat Loadout facility. The 18.09-acre expansion is intended to facilitate the stockpiling and shipping of additional coal volumes. The facility is located in Carbon County 3 miles west on the Consumers road and can be located on the Standardville 7.5 minuet quadrangle map, Township 13 South, Range 9 East, Section 33. The application includes a mitigation plan for the removal of coal fines as well a coal stockpile expansion plan. This memo will include a review of the Biology, Land Use and Cultural Resource sections of the application.

The application cannot be approved at this time. The Applicant must address the following deficiencies:

R645-301-140, the application needs to include a recent raptor survey and wildlife maps for high value habitat species, and crucial mule deer winter range.

R645-301-322,

- The application needs to include a recent raptor survey for the proposed 18.09 acre disturbance or confirmation from a qualified individual in raptor biology or closely related field that the 2006 survey data is accurate for the ½ mile buffer zone restriction and wildlife maps for high value habitat species” The results of the 2006 raptor survey are included in the, “Finding of No Significant Impact” document prepared by the BLM, (Appendix T) but it is only relevant to the coal fine clean up disturbance of 2.36 acres. The applicant has proposed an 18.09-acre disturbance for the expansion of the Wildcat Loadout facility.

TECHNICAL MEMO

- Page 3-10 includes a description of the wildlife. This information was excerpted from the BLM EA, Appendix T. The text in the EA, pages 14 and 15, tables 4.1 and 4.2 refer to 2.34 acres of disturbance, two ditches and a sediment pond, where as the application includes 18.09 acres of proposed disturbance. The application needs to be revised to include wildlife resource information for the additional proposed disturbance. The application also needs to include a current list of threatened and endangered wildlife species.

R645-301-411 Land Use resource information is included in volumes 1, chapter 4 of the application. It includes Fish and wildlife habitat and recreation lands and rangelands. Grazing and crucial deer winter uses have been the most intense uses of the permit and disturbed areas. There are inconsistencies in the application with the present, continued and post-mining land uses. Although one of the uses has historically been grazing the Environmental Assessment prepared by the BLM includes a stipulation that requires the new permit boundary to be fenced to prevent grazing and provide access to wildlife, Appendix B part A-12 BLM Right of Way Amendment # 5, Feb 5, 2007. Assuming that the new permit boundary will be fenced, grazing should be deleted from the application as a current or post mining land use.

R645-301-322, -301-333, -301-342, -301-358, Appendix F, page 93 of the wildlife resources information identifies the current permit area as critical valued deer and elk winter range. However page 13 of Appendix T, the EA document prepared by the BLM, includes the additional disturbance of 2.34 acres as "crucial deer winter range and specifies elk range as not being within the limits of the project area. The applicant needs to have an individual qualified in big game wildlife management clarify this inconsistency.

A list of threatened or endangered species should be included in the application. (Pg 92 of Appendix F refers to Appendix A- a list of threatened or endangered species. This needs to be included in the application). (Page 12 of Appendix T states that there is a Threatened and Endangered species habitat delineation, no such appendix can be found and it needs to be included in the application.)

The mitigation plan needs to be accompanied by an updated map including the location of the one to one mitigation area, 18.9 acres, associated with the 2008 modification plan.

R645-301-330: The applicant needs to describe how they intend to protect vegetation and minimize disturbances. There are numerous references to this information in various appendices, but a summarized plan needs to be included in this section. The mitigation plan needs to be accompanied by a map that includes the one to one acreage, 18.9 acres,

in the 2008 Modification plan as noted in the Fish and Wildlife section of the operation plan.

R645-301-412: The Permit Applicant needs to alter the current and post mining land use to describe where grazing will be excluded according to Appendix T.

R645-301-355: The Permit Applicant must demonstrate that Mulching and other Soil Stabilizing Practices will occur during reclamation on the entire area to be disturbed. The Permit Applicant needs to update the acreage of the disturbed area to be reclaimed.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

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

Analysis:

The information in the application is formatted in accordance with the Utah Coal rules as approved by the Division.

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 technical data is accompanied by the names of the individuals qualified in their field of expertise.

TECHNICAL MEMO

Findings:

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

MAPS AND PLANS

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

Analysis:

Maps for the amendment are included in the "*Map Volume*" and "*Confidential Binder*" of the application. They include "*Plate 9, Final Reclamation and Plate 29 Vegetation. Cultural Resource maps are located in the confidential binder along with the three surveys conducted for the proposed expansion.*" The application needs to include a recent raptor survey, wildlife maps for high value habitat species and a reference to the Cultural resource maps and their location.

Findings

The information included in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with **R645-301-140**, *the application needs to include a recent raptor survey and wildlife maps for high value habitat species, crucial mule deer winter range.*

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:

Historic and archaeological resource information is included in volumes 1, chapter 4, volume 2 and appendix T of the application. They include a cultural resource survey performed on the 85-acre tract by the BLM on November 4th and 5th, 1981. SHPO concurrence

was provided on the 10th of November, a 55-acre survey by Senco Phoenix on October 13 and 16, 2006 and a 15-acre survey by Senco Phoenix for the material storage area on October 11, 2006 and March 30th 2007.

Findings

The information 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 included in volume 1, chapter 3, the map volume and volume 2 appendix I, "*Baseline Description of Native Sagebrush/Grass Reference Area*" and appendix I supplement, "*Vegetation report Mt. Nebo Scientific*" of the application.

he initial reference area submitted in the 1988 MRP version will be impacted by the 2008 proposed loadout expansion plan. A new reference area has been selected to replace it. The loadout facility was built prior to SMCRA regulations and therefore existed on the site prior to selecting the original reference area, so both reference areas were chosen by approximating the pre-disturbed plant communities.

Three plant communities have been identified and delineated on Plate 29. These communities include: Sagebrush/ grass, pinyon/ juniper and sagebrush/ grass with scattered pinyon and juniper trees. Sagebrush/ grass community dominates the original permit site as well as the proposed expansion site. The reclaimed sagebrush/ grass community is intended to provide valuable habitat for the wildlife species mentioned in the MRP including Mule deer, Rocky mtn elk, and sage grouse.

Findings:

The information provided meets the minimum regulatory requirements for this section.

FISH AND WILDLIFE RESOURCE INFORMATION

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

Analysis:

TECHNICAL MEMO

Fish and Wildlife resource information is included in volumes 1, chapter 3 and volume 2 of the application. As noted in the maps and plans section, *the application needs to include a recent raptor survey for the proposed 18.09 acre disturbance or confirmation from a qualified individual in raptor biology or closely related field that the 2006 survey data is accurate for the ½ mile buffer zone restriction and wildlife maps for high value habitat species* The results of the 2006 raptor survey are included in the, "Finding of No Significant Impact" document prepared by the BLM, (Appendix T) but they are only relevant to the coal fine clean up disturbance of 2.36 acres. The applicant has proposed an 18.09-acre disturbance for the expansion of the Wildcat Loadout facility. Page 3-10 includes a description of the wildlife. This information was excerpted from the BLM EA, Appendix T. The text the EA, pages 14 and 15, tables 4.1 and 4.2 refer to 2.34 acres of disturbance, two ditches and a sediment pond, where as the application includes 18.09 acres of disturbance. The application needs to be revised to include wildlife resource information for the additional proposed disturbance. The application also needs to include a current list of threatened and endangered wildlife species.

Findings:

The information included in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with **R645-301-322**,

- *The application needs to include a recent raptor survey for the proposed 18.09 acre disturbance or confirmation from a qualified individual in raptor biology or closely related field that the 2006 survey data is accurate for the ½ mile buffer zone restriction and wildlife maps for high value habitat species" The results of the 2006 raptor survey are included in the, "Finding of No Significant Impact" document prepared by the BLM, (Appendix T) but it is only relevant to the coal fine clean up disturbance of 2.36 acres. The applicant has proposed an 18.09-acre disturbance for the expansion of the Wildcat Loadout facility.*
- *Page 3-10 includes a description of the wildlife. This information was excerpted from the BLM EA, Appendix T. The text in the EA, pages 14 and 15, tables 4.1 and 4.2 refer to 2.34 acres of disturbance, two ditches and a sediment pond, where as the application includes 18.09 acres of proposed disturbance. The application needs to be revised to include wildlife resource information for the additional proposed disturbance. The application also needs to include a current list of threatened and endangered wildlife species.*

LAND-USE RESOURCE INFORMATION

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

Analysis:

Land Use resource information is included in volumes 1, chapter 4 of the application. It includes Fish and wildlife habitat and recreation lands and rangelands. Grazing and crucial deer winter uses have been the most intense uses of the permit and disturbed areas. There are inconsistencies in the application with the present, continued and post-mining land uses. Although one of the uses has historically been grazing the Environmental Assessment prepared by the BLM includes a stipulation that requires the new permit boundary to be fenced to prevent grazing and provide access to wildlife, Appendix B part A-12 BLM Right of Way Amendment # 5, Feb 5, 2007. Assuming that the new permit boundary will be fenced, grazing should be deleted from the application as a current or post mining land use.

Findings:

The information included in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with;

R645-301-411 Land Use resource information is included in volumes 1, chapter 4 of the application. It includes Fish and wildlife habitat and recreation lands and rangelands. Grazing and crucial deer winter uses have been the most intense uses of the permit and disturbed areas. There are inconsistencies in the application with the present, continued and post-mining land uses. Although one of the uses has historically been grazing the Environmental Assessment prepared by the BLM includes a stipulation that requires the new permit boundary to be fenced to prevent grazing and provide access to wildlife, Appendix B part A-12 BLM Right of Way Amendment # 5, Feb 5, 2007. Assuming that the new permit boundary will be fenced, grazing should be deleted from the application as a current or post mining land use.

OPERATION PLAN

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

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

TECHNICAL MEMO

Analysis:

According to the archaeological surveys there were no public parks or historic places within the acreage surveyed.

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:

The application includes a reference to Appendices E and F, Wildlife Enhancement Project and Wildlife Resources Information. Appendix F, page 93 of the wildlife resources information identifies the current permit area as critical valued deer and elk winter range. However page 13 of Appendix T, the EA document prepared by the BLM, includes the additional disturbance of 2.34 acres as "crucial deer winter range and specifies elk range as not being within the limits of the project area. The applicant needs to have an individual qualified in big game wildlife management clarify this inconsistency.

Protection and Enhancement Plan

Protective measures are described in Appendix E and F. Mitigation is required as a stipulation of BLM ROW. The Permittee intends to mitigate adjacent critical winter range in a one to one ratio with disturbed critical winter range acres in the permit site. The Permittee intends to minimize the disturbance area and expand the sagebrush/ grass community during reclamation to provide valuable habitat for grazing mammals and sage- grouse. This will include removal of encroaching pinyon or juniper trees. This mitigation plan needs to be accompanied by a map similar to the map located on the last page of appendix E, but needs to include the location of the mitigation acreage, 18.9 acres, associated with the 2008 modification plan.

Endangered and Threatened Species

As listed under R645-301-322 above, the application needs to include a current list of threatened or endangered species in and adjacent to the project area. Appendix F, "Wildlife Resources Information", refers to an Appendix A, which should describe

individual species of wildlife and vegetation that are considered protected or of high interest; however, Appendix A of which Appendix F refers to does not exist.

Bald and Golden Eagles

Described in Appendix E and F of the application, the Permittee intends to minimize the disturbance to raptor habitat. No known eagle aerie territories are located within or adjacent to the project site. However, as listed above in section R645-301-322, a recent raptor survey of the entire proposed 18.9 acres as well as of the adjacent area needs to be conducted and included in the application.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

Protective measures for vegetation can be found on page 3-24 of chapter 3. Critical Winter Elk habitat areas will be avoided when Elk are “physically present on the range” which is likely to occur between December and April. Also, the Applicant states that construction activities will be avoided during critical Deer fawning seasons, which are from June to July each year.

Findings:

The information included in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with;

R645-301-322, -301-333, -301-342, -301-358, Appendix F, page 93 of the wildlife resources information identifies the current permit area as critical valued deer and elk winter range. However page 13 of Appendix T, the EA document prepared by the BLM, includes the additional disturbance of 2.34 acres as” crucial deer winter range and specifies elk range as not being within the limits of the project area. The applicant needs to have an individual qualified in big game wildlife management clarify this inconsistency.

A list of threatened or endangered species should be included in the application. (Pg 92 of Appendix F refers to Appendix A- a list of threatened or endangered species. This needs to be included in the application). (Page 12 of Appendix T states that there is a Threatened and Endangered species habitat delineation, no such appendix can be found and it needs to included in the application.)

The mitigation plan needs to be accompanied by an updated map including the location of the one to one mitigation area, 18.9 acres, associated with the 2008 modification plan.

TECHNICAL MEMO

VEGETATION

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

Analysis:

Protective measures for vegetation can be found on page 3-24 of chapter 3. Critical Winter Elk habitat areas will be avoided when Elk are “physically present on the range” which is likely to occur between December and April. Also, construction activities will be avoided during critical Deer fawning seasons, which are from June to July each year.

Appendix F states that one to one mitigation is expected for critical area impacts. Disturbance to high value habitat is described as “unreasonable” without mitigation, disturbance to substantial valued wildlife area including streams lakes or ponds may require mitigation beyond the reclamation obligations and disturbance to limited valued wildlife use areas will seldom receive mitigation beyond reclamation obligations. None of these areas are mapped.

Pg. 103 of Appendix F states, “Where practicable disturbances to vegetation communities should be kept to a minimum and planned to create irregular edges rather than long smooth edges.” This needs to be described in Section r645-301-331.

Findings:

The information provided is not adequate to meet the requirements of this section. The following regulations need to be included in the application for final approval:

R645-301-330: The applicant needs to describe how they intend to protect vegetation and minimize disturbances. There are numerous references to this information in various appendices, but a summarized plan needs to be included in this section. The mitigation plan needs to be accompanied by a map that includes the one to one acreage, 18.9 acres, in the 2008 Modification plan as noted in the Fish and Wildlife section of the operation plan.

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:

This information can be found on page 4-6 of chapter 4 and in Appendix T. As noted in the environmental resource section, grazing, as a current and post mining land use needs to be deleted from the land use sections of the application.

Findings:

The Application does not meet the requirements of this section. The following regulation needs to be updated.

R645-301-412: The Permit Applicant needs to alter the current and post mining land use to describe where grazing will be excluded according to Appendix T.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES

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

Analysis:

Information for this Section can be found on page 3-39 and the introduction of Chapter 3 and Appendix E and F. The Applicant states that they will enhance wildlife habitat including water sources, thermal cover, escape ways, hiding and loafing places and travel ways during reclamation. The applicant will avoid unnecessary disturbances and has incorporated a visual training guide for its employees to be used for mine training.

Findings:

The Application meets the minimum regulatory requirements of this section.

CONTEMPORANEOUS RECLAMATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.100; R645-301-352, -301-553, -302-280, -302-281, -302-282, -302-283, -302-284.

TECHNICAL MEMO

Analysis:

General

On page 3-41, Contemporaneous Revegetation will occur on the topsoil piles and sediment pond embankments. Otherwise, it is stated that the majority of the project area will remain disturbed until final reclamation.

Findings:

The Permit Applicant met the minimum regulatory requirements of this section.

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

This information is found on page 3-43 and meets the requirements of this section.

Revegetation: Timing

This information is found on page 3-44 and states that revegetation will be conducted in the fall following topsoil replacement.

Revegetation: Mulching and Other Soil Stabilizing Practices

This information is included on pages 3-36 and 3-37. The mulching practices meet the requirements but this section needs to be updated to include the correct reclamation area suggested on the updated plate 9.

Revegetation: Standards For Success

This information can be found on page 3-41 and 3-42 and suggests that standards for success will be evaluated according to DOGM's "Vegetation Information Guidelines. This Section meets the minimum regulatory requirements.

Findings:

The permit applicant must provide the following information:

R645-301-355: The Permit Applicant must demonstrate that Mulching and other Soil Stabilizing Practices will occur during reclamation on the entire area to be disturbed. The Permit Applicant needs to update the acreage of the disturbed area to be reclaimed.

RECOMMENDATIONS:

The application is not recommended for approval at this time.