

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

AK

September 25, 2007

TO: Internal File

THRU:  Dana Dean, Team Lead 

FROM: Joe Helfrich, Biologist 

RE: Waste Rock Pile Expansion, Canyon Fuel Company LLC, Skyline Mine,
C/007/0005 Task ID #2844

SUMMARY:

On May 4, 2007, the Division received an application from the Permittee to expand the waste rock site at the Skyline Mine, task #2800. The application would increase the permit area by 12.65 acres but only add 5.13 disturbed acres to the current waste rock pile. The previously assigned Biologist did not review the application. On August 30, 2007 the Division received a response to the deficiencies enumerated in the review of task #2800. This technical memo will include a review of the Biology, Cultural Resources and Land Use sections of the regulations as they relate to the application for tasks 2800 and 2844.

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TECHNICAL ANALYSIS:

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:

Page 2-4b has been revised to include a reference to Appendix A-3, two 2006 investigations for the proposed waste rock expansion area. They are both class three surveys each for a separate waste rock expansion location. They were conducted in July and November of 2006 by Earth Touch Inc. The applicant has proposed to use the area included in the November 2006 survey. A copy has been forwarded to the SHPO for their concurrence with the DOGM findings. SHPO concurrence was received by way of "E"mail from Matt Seddon, the SHPO for Utah on October 17, 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 addressed in section 2.7.7, page 2-63 of the application. The 1981-82-vegetation information pertinent to the waste rock site has been updated by data collected by Mt. Nebo Scientific. It is included in this application as "Vegetation of the Waste Rock Expansion Site" and can be found in Appendix Volume A-2 Volume 2. It includes but is not limited to quantitative and qualitative analyses, a T & E evaluation, reference areas and a vegetation map. The application needs to include a current Threatened, Endangered and Sensitive plant species list for the proposed waste rock expansion area, Carbon County, and a short narrative describing why those species would not be found at the proposed waste rock expansion site.

Findings:

The information 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; **R645-301-320**, The applicant needs to include in the application a current Threatened, Endangered and Sensitive plant species list for the proposed waste rock expansion area, Carbon County, and a short narrative describing why those species would not be found within the proposed waste rock expansion site.

FISH AND WILDLIFE RESOURCE INFORMATION

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

Analysis:

The application for task 2844 includes a "Waste rock area Raptor, Northern Goshawk, and incidental Species survey" that is referred to on page 2-111 of the application for task # 2800. The application for task 2800 refers the reviewer to section 2.8 through 2.10 and Appendix A-2 for existing wildlife information. Sections 2.8, Aquatic Wildlife Resources, 2.9 Terrestrial Wildlife and Appendix A-2 do not include or make reference to the proposed waste rock expansion area. The application needs to include a detailed description and analyses of the wildlife resources within the proposed waste rock expansion area sufficient enough to develop a protection and enhancement plan required by section R645-301-333 of the regulations.

Findings:

The information 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 detailed description and analyses of the wildlife resources within the proposed waste rock expansion area sufficient enough to develop a protection and enhancement plan required by section R645-301-333 of the regulations. The applicant needs to include in the application a current Threatened, Endangered and Sensitive animal species list for the proposed waste rock expansion area, Carbon County, and a short narrative describing why those species would not be found within the proposed waste rock expansion site.

LAND-USE RESOURCE INFORMATION

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

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Analysis:

The application includes a revision to table 2.12.2-1 for the additional acreage needed for the waste rock site. The table lists the "General Area Classification" of the waste rock site as "Disturbed". It should be revised to include the vegetative communities identified in the Mount Nebo Scientific report for the proposed waste rock expansion area. The narrative and proposed text change for task # 2800 refer the reviewer to sections 2.12.2 and 3.2.8 of the MRP, which states, "The rock waste disposal site is an abandoned strip mine pit and waste area which is accessed by existing roads." This section of the MRP also refers the reviewer to section 4.16 for a detailed description of the waste rock area. This section, page 4-89, include a general description to be revised to include a description of the land use for the undisturbed acreage the applicant proposes to include in the waste rock expansion site.

Findings:

The information 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, The applicant needs to update the land-use resource information in volume 3, section 4.16, page 4-89, to include *Wildlife* as a land-use for the proposed waste rock expansion area. The observations of the August 7, 2007 site visit to the proposed waste rock expansion area with Gregg Galecki and the undersigned and conversations with Leroy Mead on September 28, 2007 indicated that the land use for the expansion area was primarily wildlife. The applicant should verify with the landowner that the area also includes grazing. Table 2.12.2-1 lists the "General Area Classification" of the waste rock site as "Disturbed". It should be revised to include the vegetative communities identified in the Mount Nebo Scientific report for the proposed waste rock expansion area.

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.

Cultural Resource Maps

Cultural resource maps for the proposed waste rock expansion area are included in the November 2006' cultural resource inventory by Earth Touch Inc.

Surface and Subsurface Ownership Maps

The application needs to include surface ownership maps for the proposed waste rock expansion area.

Vegetation Reference Area Maps

Vegetation reference area maps for the proposed waste rock expansion area are included in the "Vegetation of the Waste Rock Expansion Site" report and can be found in Appendix Volume A-2 Volume 2.

Wildlife Maps

Wildlife maps for the proposed waste rock expansion area have not been included in the application.

Findings:

The information 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, The application needs to include surface ownership maps for the proposed waste rock expansion area. Wildlife maps for the proposed waste rock expansion area have not been included in the application.

OPERATION PLAN

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

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

Analysis:

According to the information in the MRP and cultural resource survey there are no Public Parks or Historic places located within the proposed waste rock expansion area. There is a cemetery approximately ½ mile Northwest of the existing waste rock area.

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Findings:

The information 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:

The applicant needs to include information in the application that addresses these four sections of the regulations.

Protection and Enhancement Plan

The application needs to include a wildlife protection and enhancement plan for the proposed waste rock expansion site.

Endangered and Threatened Species

The application needs to include a current list of Threatened, Endangered and Sensitive animal species list for the proposed waste rock expansion area, Carbon County, and a discussion describing why each of those species would not be found within the proposed waste rock expansion site. The raptor survey completed by Terra Tech identified one raptor nest within ¼ mile of the proposed waste rock expansion area. According to the survey observations, photographs, and conversations with Jill Simmons from Terra Tech and Betsy Herrmann, biologist with the USFWS, the nest appeared to have been in place for some time indicating that raptors in the area had habituated to the activities at the waste rock site. Therefore a mitigation plan would not be required by the applicant.

Mine water consumption figures for the four endangered fish species noted in the Colorado Fish Recovery Program are located in Volume 1 A, Section 2.5.2, pages 2-51d and 2-51e of the MRP. According to the applicant the figures will remain the same for the material to be placed in the expansion area resulting in a net gain of 5,966 acre feet per year to the Colorado River Drainage system. The net gain would constitute a "no effect determination" and not require formal consultation with the USFWS. Informal consultation has been initiated with Betsy Herrmann on October 4, 2007.

The division is currently reviewing the criteria used to calculate mine water consumption and may require the applicant to update this section of their MRP.

Bald and Golden Eagles

The application needs to include information about the status of Bald and Golden Eagles.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

This reviewer visited the site with Gregg Galecki, Environmental Coordinator for the Canyon Fuel Co., on August 7th, 2007. Leroy Mead, Biologist for DWR, visited the site sometime between April 4th and the 18th, reporting his findings to the company. On September 28th the undersigned contacted Leroy to discuss the results of his observations and those made on August 7th. Site visit. The consensus was that, aside from the one raptor nest ¼ mile from the site there were no areas that were characteristic of wetlands or habitats of unusually high value for fish and wildlife. The applicant has been requested to monitor the status of the nest near the waste rock site annually and include that information in the annual report regarding pre subsidence surveys for raptors. Language could be added to the commitment in Volume 3, Section 4.18, page 4-103, paragraph three of the MRP, which talks about annual pre subsidence raptor surveys.

The applicant needs to include this information and Leroy Mead's findings about the status of Wetlands and habitats of unusually high value for fish and wildlife in the MRP.

Findings:

The information 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,

- The application needs to include a wildlife protection and enhancement plan for the proposed waste rock expansion site. A similar plan for James Canyon can be found Section 4.18, page 4-103A.
- The applicant needs to include the information stated in the Wetlands and Habitats of Unusually High Value for Fish and Wildlife section of this analysis and Leroy Mead's findings about the status of Wetlands and habitats of unusually high value for fish and wildlife in the MRP.

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- The application needs to include a current list of Threatened, Endangered and Sensitive animal species list for the proposed waste rock expansion area, Carbon County, and a discussion describing why those species would not be found within the proposed waste rock expansion site.
- The application needs to include information about the status of Bald and Golden Eagles.
- The applicant should provide a commitment to monitor the status of the raptor nest near the waste rock site annually. Language could be added to the commitment in Volume 3, Section 4.18, page 4-103, paragraph three of the MRP, which talks about annual pre subsidence raptor surveys. This is a request and not a deficiency.

VEGETATION

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

Analysis:

The application needs to include a plan for protection of vegetation or a reference to the appropriate section of the MRP that describes how vegetation resources will be protected throughout the life of the mine for the proposed waste rock expansion area. See also the requirements of section 301-331.

Findings:

The information 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; **R645-301-330, -301-331**, The application needs to include a plan for protection of vegetation or a reference to the appropriate section of the MRP that describes how vegetation resources will be protected throughout the life of the mine for the proposed waste rock expansion area. See also the requirements of section 301-331.

RECLAMATION PLAN

GENERAL REQUIREMENTS

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 reclamation plan for the proposed waste rock expansion site is described in sections 4.1, "*Reclamation Plan*", 4.2, "*Reclamation Timetable*", 4.4, "*Backfill and Grading*", 4.5, "*Soil Preparation*", 4.6, "*Topsoil Handling*", and 4.7, "*Revegetation*" of the MRP. Maps 4.16.1B, "*Waste Rock Disposal Site Reclamation Plan*", and 1C "*Waste Rock Disposal Site Final Reclamation Plan*", have been updated to include the proposed waste rock expansion area.

Findings:

The information provided in the application and MRP is adequate to meet the requirements of this section of the regulations. The remaining sections under the general heading of "*Reclamation Plan*" may require additional information.

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:

According to the information in the MRP, volume 2, section 3.2.8 page 3-45b, "*The rock waste disposal site is an abandoned strip mine pit and waste area which is accessed by existing roads.*" The land owner, Angelo Georgedes, Administrator for the Telonis Estate, had requested that the reclamation of the dump site be leveled to be used for corrals and livestock containment if need be in a letter dated August 27, 1982 to Vernal Mortensen, Vice President of Costal States Energy Company. Since Mr. Mortensen is no longer with the company and the mine is no longer owned or controlled by Costal States Energy Company the Division is requesting that the applicant provide an updated landowner request for the final configuration of the property. Volume three section 4.1.1 page 4-3(a) states that, "*Part of the disturbed area affected by the disposal operation will, at the request of the property owner's representative, be leveled off and reclaimed to native rangeland for subsequent use as a corral*". During conversations with Gregg Galecki at the August 7th on site meeting it appeared to this reviewer that the proposed waste rock expansion area would be reclaimed to the contours of the existing slope. It is reasonable to assume that both of these statements are true if the current landowner verifies the post mining land use request. A description of the reclamation of the waste rock area is provided for in sections 4.6, "*Topsoil Handling*", and 4.7, "*Revegetation*" of the MRP. Maps 4.16.1B, "*Waste Rock Disposal Site Reclamation Plan*", and 1C "*Waste Rock Disposal Site Final Reclamation Plan*", have been updated to include the proposed waste rock expansion area.

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Findings:

The information 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:

R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275, The application needs to be updated to include a current landowner request for the final configuration of the property.

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 needs to include a plan for the protection of fish, wildlife and related environmental values or a reference to the appropriate section of the MRP that describes how fish and wildlife resources will be protected throughout the life of the mine.

Findings:

The information in the application is adequate to meet the requirements of this section of the regulations. The requirement for a protection and enhancement plan as described in the "Operation Plan" section of this document will address the same set of regulations, **R645-301-333, -301-342 and -301-358.**

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.

Analysis:

Section 4.6.1, page 4-38(a), provides a general description of the contemporaneous reclamation of the waste rock site. As the waste rock is deposited it is compacted in 2' lifts for approximately 20' at which time the out slopes are top soiled and reseeded.

Findings:

The information in the MRP 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

Volume 3, Section 4.7, (Revegetation Plan), of the MRP provides a general description of the reclamation of the waste rock site. Topsoil removal, storage and redistribution is described in section 4.6 of the MRP and text additions to page 4-39(a) and (b).

Revegetation: Timing

Volume 3, Section 4.2, (Revegetation Timetable), table 4.2-1 of the MRP provides a description of the reclamation timetable for the waste rock site. The figures in the table indicate that the waste rock site is slated for reclamation from 2022 to 2027. Scarification of topsoil and seeding in the late fall is described in section 4.7 page 4-49 of the MRP.

Revegetation: Mulching and Other Soil Stabilizing Practices

Fertilizer rates and applications are described in Volume 3, Section 4.5 of the MRP.

Revegetation: Standards For Success

Vegetation Resource Information is addressed in section 2.7.7 on page 2-63 of the application. The 1981-82-vegetation information pertinent to the waste rock site has been updated by data collected by Mt. Nebo Scientific. It is included in this application as "Vegetation of the Waste Rock Expansion Site" and can be found in Appendix Volume A-2 Volume 2. The vegetation analyses include quantitative and qualitative data for the expansion area and reference areas for the vegetative communities. Maps of the site and reference area locations are included with the data.

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Findings:

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

RECOMMENDATIONS:

The applicant should address the noted deficiencies prior to approval.

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