

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

October 1, 2009

TO: Internal File

THRU: Steve Christensen, Lead *SKC*

FROM: Ingrid Wieser, Environmental Scientist II *IW*

RE: Add Zero Zero North LBA, Consolidation Coal Company, Emery Deep, C/015/0015, Task ID #3405

SUMMARY:

On September 17, 2009, the Division received an application to add an expanded area to the zero zero North panel which consists of 120 acres. The area is fee and federal land. Previously, the Division reviewed and approved task 3339 which added a portion of the zero zero North panel to the M&RP.

This memo will address the biology, cultural resource and land use regulations.

The following deficiencies were identified:

R645-301-411.142: According to the archaeological report MOAC 08-096, the determination “no adverse effect” is proposed *only* if the five eligible sites (42Em3964, 42Em3965, 42Em3966, 42Em3969 and 42Em3974) are periodically monitored for subsidence impacts by a qualified archaeologist. The report also states that additional mitigation may be required. Please provide a monitoring schedule to the Division for these five sites, and a commitment to conduct mitigation if significant impacts occur.

R645-301-322, 301-333: Please provide a protection plan for the active prairie dog town and burrowing owl nesting area located in the Miller tract. Undermining must occur outside of the buffer period (post August 31) to avoid disturbance. The habitat must also be monitored during and after subsidence to ensure that no adverse affects have occurred. A commitment to conduct mitigation if adverse affects from mining occur must be in the plan.

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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:

The permittee submitted a cultural resource report conducted by Todd Seacat and Jody Patterson of Montgomery Archaeological Consultants. The Report is numbered MOAC 08-096 and was prepared on July 14, 2008. The research resulted in the location of 29 sites within the 120 acre expansion area. The report was included in the EA for the BLM and received SHPO concurrence in February of 2009. (See email under 2009 incoming 0039).

Of the 29 identified sites, 17 sites were considered eligible for listing in the National Historic Register. According to the management recommendations of the report, five eligible sites are located north west of the coal burn line (shown in Figure 1 of the report). These sites will require periodic monitoring for subsidence impacts by an archaeologist. Additional mitigation could be required. The remaining twelve sites are situated outside of the subsidence zone and should not be affected.

With the periodic monitoring of the five eligible sites, the researchers found that there would be no adverse effect to cultural resources with this 120 acre expansion. However, no monitoring plan is included in the application.

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:

The application includes appendix VIII-6, Biological Resources of the Zero Zero North LBA, Plant Communities, and TES species study conducted by Mt. Nebo Scientific in November of 2008.

Plant Communities of the Miller Tract Area 2008:

Dr. Pat Collins of Mt. Nebo Scientific conducted this survey using aerial photography and ground data collection. The following plant communities were mapped in the area: Shadscale, Greasewood, Saltgrass, Riparian, Pasture Land, Sagebrush and tamarisk. A vegetation map is included in the report. No surface disturbances are proposed. Subsidence is the only possible effect on vegetation from the proposed undermining.

Threatened, Endangered and Sensitive Species of the Miller Tract Area 2008:

Dr. Pat Collins of Mt. Nebo Scientific conducted a file search for locations of sensitive species that may be present in the study area. A site specific survey was also conducted within the miller tract from April to June 2008. No TES species were found in the area.

Findings:

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

FISH AND WILDLIFE RESOURCE INFORMATION

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

Analysis:

An updated plate 10-1, Selected Wildlife Information that contains the Miller Tract is included in the application. The new area contains the following:

- Crucial/Critical Ring Necked Pheasant year long habitat
- An active Prairie Dog Town
- Burrowing Owl Habitat
- Substantial Value Winter Elk Habitat

A TES, Prairie Dog and Burrowing Owl Survey is included with the application in appendix VIII-6.

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TES Survey

The TES survey was conducted by Dr. Pat Collins of Mt. Nebo Scientific in 2008. Dr. Collins consulted the DWR database of sensitive and high interest wildlife species. Of the listed wildlife species, little or no habitat is present within the Miller tract. The only species that may be present were Burrowing Owl and White tailed Prairie Dog. The results of these two surveys are located in the following reports.

Prairie Dog Survey

Field stations were set up at a known prairie dog colony within the Miller tract to record the activity. The Survey verified that the sensitive species, white tailed prairie dogs, were present at the colony. This colony is shown on figure 1 of the report and plant 10-1.

Burrowing Owl Survey

This survey was conducted by Dr. Pat Collins of Mt. Nebo Scientific between April 15 and July 15th 2008. All active prairie dog burrows were monitored during morning and evenings. It was concluded that Burrowing owls were also present in the active prairie dog colony shown within the Miller tract on plate 10-1 and on figure 1 of the report. Dr. Collins consulted with DWR biologists for the survey and proposed impact to the owls. It was concluded that the owls could be negatively affected during their most critical life period (March through June) due to expected subsidence in the area as a result of undermining. In a conversation with Tony Wright, Sensitive species Biologist of DWR, Tony expressed concern for subsiding the prairie dog/burrowing owl habitat. Collapsing the burrows and/or causing stream downcutting into the habitat would adversely effect the species. According to Mr. Wright and the US Fish and Wildlife Service's Utah Field Office Guidelines for Raptor Protection from Human and land Disturbances, Mining related disturbance cannot occur between March 1 and August 31. In addition, subsidence impacts occurring at any time in the area should be monitored to make sure the habitat remains suitable for the species.

Findings:

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

OPERATION PLAN

PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

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

Analysis:

See the above information on Historic Resource information. The permittee must submit a plan to monitor the eligible sites that could be damaged due to subsidence.

Findings:

The information provided is not considered adequate to meet the minimum regulatory requirements for this section. Prior to approval, the permittee must submit the following in accordance with:

R645-301-411.142: According to the archaeological report MOAC 08-096, the determination “no adverse effect” is proposed *only* if the five eligible sites (42Em3964, 42Em3965, 42Em3966, 42Em3969 and 42Em3974) are periodically monitored for subsidence impacts by a qualified archaeologist. The report also states that additional mitigation may be required. Please provide a monitoring schedule to the Division for these five sites, and a commitment to conduct mitigation if significant impacts occur.

SUBSIDENCE CONTROL PLAN

Regulatory Reference: 30 CFR 784.20, 817.121, 817.122; R645-301-521, -301-525, -301-724.

Analysis:

Renewable Resources Survey

Renewable Resource lands are depicted on the Vegetation and Landuse Map Plate VIII-1. Acreages of pasture land is included in the legend.

Findings:

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

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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

Refer to the above fish and wildlife information. The permittee must provide a protection plan for the burrowing owl/prairie dog colony that could be subsided in the Miller tract.

Wetlands and Habitats of Unusually High Value for Fish and Wildlife

Riparian areas exist in the Miller Tract Area according to the Plant Survey in Appendix VIII-1. Miller Creek is an ephemeral drainage that is used for agriculture. The water in the drainage is maintained by the water users and would not be as significant otherwise. The permittee has committed to maintaining the water flow in the stream.

Findings:

The information provided is not considered adequate to meet the minimum regulatory requirements for this section. Prior to approval, the permittee must submit the following in accordance with:

R645-301-322, 301-333: Please provide a protection plan for the active prairie dog town and burrowing owl nesting area located in the Miller tract. Undermining must occur outside of the buffer period (post August 31) to avoid disturbance. The habitat must also be monitored during and after subsidence to ensure that no adverse affects have occurred. A commitment to conduct mitigation if adverse affects from mining occur must be in the plan.

RECOMMENDATIONS:

The amendment is not recommended for approval.