

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

April 25, 2005

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor

FROM: Jerriann Ernstsens, Ph.D., Environmental Specialist, Biologist

RE: GOB Gas Vent Hole Supplemental Information, Andalex Resources, Inc., Centennial Mine, Permit C/007/0019, Task ID # 2161 (2)

SUMMARY:

The Division received amendments from the Centennial Mine to drill degas holes. This memo refers to holes drilled in April/May 2005 - these include holes 1, 2, 5, and 6. The Permittee should know they are held responsible for any stipulations or requirements if the project extends into May.

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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_[Sheila Mo1]

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

Analysis:

The MRP meets R645-301-411 regulations pertaining to historic resources. The MRP (see Confidential Files in Division PIC room after June 2005) includes an evaluation of historic resources that focus on the permit area in Deadman Canyon (1976).

Senco-Phenix states that cultural resources are unlikely for the project area (GOB hole April/May 2005). The area is currently under snow, therefore, the Permittee cannot conduct a Class III survey. SHPO considered the project and recommended that Permittee conduct a monitoring evaluation in the summer (2005) for the holes drilled in April 2005. The Permittee will conduct a Class III survey for future hole projects and will conduct the monitoring evaluation for the holes drilled in April/May 2005.

It is important for the Permittee to understand that workers must avoid all historic resources during the life of the project. In the event that construction or operations uncover historic resources, the Permittee must stop all work near the resources and notify the Division. At that time, DCM, DOGM, and other appropriate parties will develop a strategy to avoid the site or mitigate the impacts.

Findings:

Information provided in the plan meets the minimum Environmental -Historic and Archeological Resource Information requirements of the regulations.

VEGETATION RESOURCE INFORMATION_[Sheila Mo2]

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

Analysis:

The MRP meets R645-301-321 because there is adequate information of plant communities observed within the permit area. The MRP contains supporting documents on vegetation for permit area. Volume 1 (Chap. 3) provides a brief discussion of plant communities within the permit and adjacent area, which is supported by community vegetation maps (Vol. 4, Plates 19, 19A, and 20). The plant communities within the permit area include: sagebrush-grass, conifer, quaking aspen, oak brush, mountain brush, and pinyon-juniper. Volume 2 contains - vegetation surveys for the main mine facilities and adjacent areas (App. M) and for the left fork fan project (App. V).

The Permittee provides minimal, additional vegetation information for the GOB hole project (April/May 2005). Plate 19A (Vol. 4) illustrates the community types for the project sites. The Permittee provides productivity values, ecological site descriptions (ESD), and determinations that the sites are fair to better condition as estimated from ESD (NRCS).

The Permittee will use the Range Site method (Division's Vegetation Guidelines) for the standard of success for the GOB holes (April/May 2005). The Division, therefore, does not require baseline data for the sites prior to disturbance. The Division considers this GOB hole project exceptional in nature and, therefore, is allowing the Range Site method only for the holes drilled in April/May 2005.

The Permittee will select at least a one-acre range site with the same ESD for each GOB hole drilled in April/May 2005. The Permittee will use these sites as the standards of success during reclamation monitoring. The Permittee will conduct qualitative vegetation analysis of the range sites during the summer of 2005 providing it is a normal precipitation year (refer to Vegetation Guidelines for explicit definition). This survey will at least provide the Permittee with baseline for the areas planned for the success standard. The Permittee will take pictures at identified and repeatable photo locations of the project sites prior to disturbance. These picture will be added to the MRP by June 2005.

Findings

Information provided in the plan meets the minimum Environmental - Vegetation Resource Information requirements of the regulations.

FISH AND WILDLIFE RESOURCE INFORMATION[Sheila Mo3]

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

Analysis:

GENERAL WILDLIFE

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The MRP meets R645-301-322 because there is discussion, supporting documentation, and maps on fish and wildlife resource for the permit and adjacent areas. There is information to design the protection and enhancement plan. The MRP provides narrative, supporting documentation, or maps.

Volume 2, App. A is a DWR report (1981) for the Centennial mine that provides mitigation recommendations, habitat resources, and species specifics on vertebrates, aquatics, birds, that may inhabit the permit area. It also provides the "Vertebrate Species of Southeastern Utah" report and a recommended plant species list. Volume 2, App. D provides an old and undated raptor analysis and the 2004 raptor survey. Volume 4, Plates 34 (May 2002) and 34 (August 2004).

Ungulates

DWR does not consider that traffic or construction will impact the ungulates during the GOB hole project (April/May 2005).

Fish or other aquatics

The Division has no concerns that the project will impact aquatic species because the April/May 2005 GOB hole sites are not adjacent to or include stream channels.

Raptors

The Permittee will relocate the raptor data to the confidential files as of June 2005. There are 22-raptor nest within the permit and adjacent areas. The results of the 2004 survey show that two golden eagle nest were active, with one containing young.

The Division has no concerns that the project will impact raptor nests because there are no nests within 0.5-mile buffer zone of the April/May 2005 GOB hole sites.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL/PLANT SPECIES

The MRP meets R645-301-322 because there is discussion, supporting documentation, or maps on TES species that could occur within or adjacent to the permit area. The Permittee provides a current TES species list for Carbon County.

The USFWS informally consulted on this project and had no concerns for the April/May 2005 GOB holes.

Plants

For the GOB hole project (April/May 2005), the Permittee provides a letter from Patrick Collins stating that he considers there is little probability that there are federally listed threatened or endangered species within or near the proposed project area. Mr. Collins will provide a vegetation survey in 2005 that will include an on the ground evaluation for TES plant species.

Mexican Spotted Owl (MSO)

For the GOB hole project (April/May 2005), Mel Coonrod (EIS) provides documentation stating that the models and other criteria do not support that there is suitable habitat for MSO within the drill hole sites. The Utah Heritage Group supports that there are no known observations of MSO within the project area.

Findings:

Information provided in the plan meets the minimum Environmental - Fish and Wildlife Resource Information requirements 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:

Archeological Site Maps[Sheila Mo4]

The MRP meets R645-301-411.141 because there are archeological maps showing known resource locations within the permit area. These maps are in the Confidential Files (Division PIC room after June 2005).

Vegetation Reference Area Maps[Sheila Mo5]

The MRP meets R645-301-323.100 because vegetation maps illustrate community types within the main facilities and adjacent areas. The Division typically requests two vegetation maps: one that shows the entire area (Plate 3-1 is adequate) and one that details the reference and disturbed areas.

The Permittee will use range sites (range site method) for the standard of success for the April/May 2005 GOB hole project.

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The Permittee will submit a map that details the locations of the reference areas for the main facilities site and all other projects areas (refer to R645-301-323.100; see Environmental - Vegetation Information section for more details). The Division requests that the Permittee illustrates the reference areas on a single map if possible. The most important criteria are to make sure locations are clearly defined.

Findings:

Information provided in the plan meets the minimum Environmental - Maps, Plans, and Cross Section Resource Information requirements of the regulations.

OPERATION PLAN

FISH AND WILDLIFE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

Analysis:

GENERAL WILDLIFE

The MRP meets R645-301-333, R645-301-342, and R645-301-358 because the Permittee will use the best technology available to minimize impacting wildlife and its critical habitat.

For the GOB hole project (April/May 2005), the Permittee will access the drill hole sites using a dirt road starting near the mine facilities area. This choice will avoid any impact that construction and operations would have on sage grouse in the "Park" that will be strutting at that time. There are no raptor nests within the 0.5-mile buffer zone for any of the drill hole sites.

Findings:

Information provided in the plan meets the minimum Operations - Fish and Wildlife Information requirements of the regulations.

VEGETATION_[Sheila Mo6]

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

Analysis:

The MRP meets R645-301-330, R645-301-331, and R645-301-332 because the Permittee provides measures to disturb the smallest area possible and to apply interim reclamation practices when applicable.

The Permittee will revegetate topsoil piles with the final seed mix for the GOB hole project (April/May 2005). The Permittee will use the final seed for the contemporaneous and final reclamation of the drill sites.

Findings:

Information provided in the plan meets the minimum Operations - Vegetation requirements of the regulations.

RECLAMATION PLAN

GENERAL REQUIREMENTS[Sheila Mo7]

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:

For the GOB hole project (April/May 2005), the plan includes to remove all structures, recontour the site to approximate premining contours, rip the soil, and replace salvaged/stored topsoil. The reclamation plan does not include irrigation.

Findings:

Information provided in the plan meet the minimum Reclamation - General Requirements of the regulations.

PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES[Sheila Mo8]

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

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Analysis:

The MRP meets R645-301-342 and R645-301-358.

The GOB hole amendment (April/May 2005) provides enhancement and protection measures that include reseeding the drill sites with a seed mix that is suitable for fish and wildlife habitat.

Findings:

Information provided in the plan meets the minimum Reclamation - Protection of Fish, Wildlife, and Related Environmental Values requirements 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_[Sheila Mo9]

The MRP meets R645-301-353 through R645-301-356 because the Permittee provided a reclamation plan and discussion of how the reclamation measures will meet the performance standards.

For the GOB hole project (April/May 2005), the seed mixes for interim and final reclamation are the same. The Permittee will apply a wood fiber mulch at 2,000 pounds per acre. The Permittee will use the "Range site method" for measuring the standard of success. The NRCS will assign range site Ecological Site Descriptions and productivity values for the drill sites.

Findings:

Information provided in the plan meets the minimum Reclamation - Revegetation requirements of the regulations.

RECOMMENDATIONS:

Approve the amendment.