

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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November 2, 2006

TO: Internal File

THRU: Steve Christensen, Environmental Scientist II *SC*

FROM: Priscilla Burton, CPSSc, Environmental Scientist III *PWB by an*

RE: Proposed Elimination of Sediment Basin B, Andalex Resources Inc., Centennial Project, C/007/0019, Task ID #2641.

SUMMARY:

A new administration building/bathroom is proposed for the existing material storage area shown on Plate 6, As Constructed Surface Facilities Deadman Canyon. The location is partially within the existing disturbed area, but will add a small area of previously disturbed land to the disturbed acreage. The building will be constructed against a slope that was used as a pre-SMCRA coal mine waste disposal site. Excavated material will be placed in Catch Basin B and in abandoned sediment pond A. The out slopes of sediment pond A are designated as substitute topsoil.

Some additional information is requested 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.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Analysis:

A new administration building/bathhouse is proposed as shown on Plate 6, As Constructed Surface Facilities Deadman Canyon. The soils in the area were surveyed in 1981 and are shown on Map 18 as Bd, Brycan soil disturbed. In 1981, soil sample SC was taken in the vicinity of the proposed construction and samples SW and SP were taken immediately adjacent to the proposed location. The analyses are included in Appendix M. The spoil sample (SP) was not acid/toxic forming.

Appendix M describes a typical soil profile for the Brycan soil type as having a 26 inch topsoil horizon (consisting of A11 and A12 horizons). However, since the area is previously disturbed, less material may be available.

Excavated material will be placed in Catch Basin B and in abandoned sediment pond A. The outsoles of sediment pond A are designated as substitute topsoil pile G.

Findings:

The Permittee has complied with the Environmental Soil Resource requirements of the Regulations.

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

A new administration building/bathroom is proposed as shown on Plate 6, As Constructed Surface Facilities Deadman Canyon. It will add a small amount of disturbed area.

The soil survey indicates a potential of 26 inches of topsoil salvage adjacent to the road and in the material storage area. The plan should give an indication of proposed topsoil removal depth as well as subsoil removal (if any) from the roadside at the existing material storage area and from beneath the waste rock slope, as well as an estimate of the volume of topsoil material to be stored and location of storage.

Findings:

The Permittee has not complied with the Operational Soil Resource requirements of the Regulations.

R645-301-231.100, The soil survey indicates a potential of 26 inches of topsoil salvage adjacent to the road and in the material storage area. The plan should give an indication of proposed topsoil removal depth as well as subsoil removal (if any) from the roadside at the existing material storage area and from beneath the waste rock slope, as well as an estimate of the volume of topsoil material to be stored and location of storage.

R645-301-121.100, The plan must indicate the area of increased disturbance.

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Coal Mine Waste

The building will be constructed against a slope that was used as a pre-SMCRA coal mine waste disposal site. The plan does not indicate the volume of rock and soil to be cut and placed in catch basin B. The waste was last sampled in 1981, but as waste rock oxidizes, the concentrations of acid forming material may have changed over time. Therefore, th plan should

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include sampling of the waste as it is placed in catch basin B for acid/toxic parameters, in particular pH, EC, and SAR, Se and B.

Findings:

The Permittee has not met the requirements to disclose the characteristics and volume of the coal mine waste to be used as fill.

R645-301-536.400, The plan does not indicate the volume of rock and soil to be cut and placed in catch basin B. The waste was last sampled in 1981, but as waste rock oxidizes, the concentrations of acid forming material may have changed over time. Therefore, th plan should include sampling of the waste as it is placed in catch basin B for acid/toxic parameters, in particular pH, EC, and SAR, Se and B.

RECLAMATION PLAN

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

General

The plan does not describe reclamation of the facilities or cutslope created by construction of the administration/bathroom.

Findings:

The information provided does not meet the general requirements for reclamation.

R645-301-541, the plan must include a description of the reclamation of the facilities and the cutslope created by construction of the administration/bathroom.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

The plan indicates a six inch topsoil replacement depth. The plan also indicates a deficit of 8,000 yd of topsoil that will be remedied by the use of substitute topsoil from the outslopes of operational pads. Topsoil stripping prior to this construction may also alleviate the deficit.

There is no change to the reclamation plan for topsoil replacement.

Findings:

The information meets the requirements of the regulations for replacement of topsoil.

RECOMMENDATIONS:

The Division should not approve this application until all deficiencies listed above are resolved.