

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 28, 2005

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor, Task Manager
Priscilla W. Burton, Environmental Scientist III/Soils, Team Lead

FROM: James D. Smith, Environmental Scientist III/Hydrology

RE: Division Order-Design Drawings and Specifications, Andalex Resources, Inc., Wildcat Loadout, C/007/033, Task ID #2182

SUMMARY:

In 1994, the Division issued NOV N94-34-1-3 for coal-fines on the ground surface east of the disturbed area. DWR sent the Division a letter in 1999 concerning the effects of coal fines on vegetation and wildlife habitat in adjacent areas, and Division and DWR biologists jointly confirmed the effects on vegetation. Patrick Collins' March 2003 report documented more than three inches of coal fines on undisturbed soils east of the coal stockpiles.

On December 9, 2004, the Permittee was informed by letter that the Division had determined the Wildcat Loadout MRP lacked information on controls to minimize coal-fine accumulations from windblown sources. Division Order DO-041, which was attached to the letter, explained the issues and requested that specific information be incorporated into the MRP.

In the DO, the Division required that the MRP include:

- 1) Specifications of measures already in place or to be put into use to control windblown coal-fine accumulation and coal particles blown from stockpiles, roadways, and other disturbed areas (separate from the Air Quality Approval Order in Appendix B);
- 2) Describe the method, other than vacuuming, for removal of coal fines on undisturbed soils within the permit area, with follow-up seeding; and
- 3) Address or include a plan for monitoring of coal fine deposition outside the permit area, specifically east of the permit boundary.

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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.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

No new geologic resource information is presented.

Findings:

Geologic information in the current MRP is sufficient for the Permittee to address the issues of Division Order DO-04 and to meet the requirements of the Coal Mining Rules.

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Analysis:

Sampling and Analysis

No new hydrologic sampling or analysis is required to address the issues of Division Order DO-04.

Baseline Information

No new hydrologic baseline information is required to address the issues of Division Order DO-04.

Baseline Cumulative Impact Area Information

This amendment does not affect the CHIA so no new hydrologic baseline CIA information is required to address the issues of Division Order DO-04.

Probable Hydrologic Consequences Determination

This amendment does not involve or affect the PHC determination.

Groundwater Monitoring Plan

This amendment does not involve or affect the ground-water monitoring plan.

Surface-Water Monitoring Plan

This amendment does not involve or affect the surface-water monitoring plan.

Findings:

Hydrologic Resource Information in the current MRP is sufficient for the Permittee to address the issues of Division Order DO-2031 and to meet the requirements of the Coal Mining Rules.

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:

There are no new maps or plans in the proposed amendment, and no maps or plans have been revised.

Findings:

Maps and plans in the current MRP is sufficient for the Permittee to address the issues of Division Order DO-04 and to meet the requirements of the Coal Mining Rules.

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OPERATION PLAN

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

A small amount of coal processing waste is generated at this site by screening and crushing. That material is stored in a waste pile on the west side of the permit area. The pile will be buried under 4 feet of cover at reclamation. There are no indications the problem of windblown dust involves this material.

The coal stored and shipped at the Wildcat Loadout and the windblown coal fines from those piles are not coal processing waste or underground development waste as defined in the Coal Mining Rules, so they are not coal mine waste and this section does not apply to DO-04 or the Permittee's response.

Findings:

Information in the Operations Plan of the current MRP is sufficient to meet the R645 Coal Rules requirements for spoil and waste materials.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

General

The proposed amendment will not affect the hydrologic balance in or adjacent to the permit area or affect the approved postmining land use.

Groundwater Monitoring

The proposed amendment does not affect ground-water monitoring at the Wildcat Loadout.

Surface Water Monitoring

The proposed amendment does not affect surface-water monitoring at the Wildcat Loadout.

Acid- and Toxic-Forming Materials and Underground Development Waste

There is limited information on acid- and toxic-forming materials in the current MRP and Annual Reports. This amendment does not provide any new or revised information on acid- and toxic-forming materials.

[The following pertains to the current MRP only; the commitment referred in the approved MRP has been removed from the revised MRP (under review as Task # 2277).] Coals stored at the Wildcat Loadout are to be subjected to a leach test annually, and the results reported in the Annual reports (Section UMC 784.19 O 1 1.1): no test results were included in the 2000, 2001, 2002, and 2003 Annual Reports.

- **Title:** Annual leachate testing of waste pile for potential acid- and toxic-forming materials.
- **Objective:** A leach test will be done on material in the waste pile to determine if there are acid- or toxic-forming materials present.
- **Frequency:** Annual
- **Status:** Ongoing
- **Reports:** Analysis results
- **Citation:** UMC 784.19 O 1 1.1 (p. 23)

Sediment Control Measures

This amendment does not provide new any new or revised information on sediment control measures. The windblown coal-fines may eventually end up as water-borne sediments: if they fall within the permit area, the sediment control measures in place should be adequate to control these sediments. For information on hydrology and design of impoundments, reference is made on p. 4-10 of the proposal to Section R645-301-512.240 of the current MRP.

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Studies suggested by the Permittee may determine how much windblown sediment is leaving the permit area, to potentially contribute additional suspended solids to streamflow or runoff outside the permit area. If such studies determine it necessary to expand the permit area to include areas affected by these windborne sediments, the need for additional sediment control measures and water monitoring can be addressed at that time.

Siltation Structures: General

All disturbed areas report to a sedimentation pond. Sediment in runoff from ASCAs is controlled by containment, vegetation, silt fences, or straw bales (p. 4-10, items 13 and 14).

Findings:

Operation Plan Hydrologic Information is adequate to meet the requirements of the R645 Coal Rules.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

There are no new maps or plans in the proposed amendment, and no maps or plans have been revised.

Findings:

Maps and plans in the current MRP is sufficient for the Permittee to address the issues of Division Order DO-04 and to meet the requirements of the Coal Mining Rules.

RECOMMENDATIONS:

The proposed amendment should be approved.