

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

OK

June 30, 2004

TO: Internal Files

THRU: Karl R. Housekeeper, Environmental Scientists III, Team Lead *KRH byan*

FROM: Gregg A. Galecki, Environmental Scientist/Hydrology *GA*

RE: 2004 Midterm Permit Review, Andalex Resources, Inc., Centennial Mine, C/007/019, Task ID #1886

SUMMARY:

Elements selected for review during the Midterm were outlined in the Division's letter to Andalex Resources, Inc. on April 2, 2004. Item #4 is discussed in this memo. The elements reviewed include ensuring that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area. A review of the Plan was conducted in conjunction with a technical site visit on June 10, 2004.

TECHNICAL ANALYSIS:

OPERATION PLAN

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:

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Surface-water Monitoring

The Centennial Project mine facility has had a manual rain gage for quite a few years; however, documentation of the storm events have been observed only on a casual basis. The Division is requesting Mine personnel record each precipitation event in a spreadsheet as it takes place and submit the precipitation information on an annual basis as part of the annual report. This is a prudent measure, as it will demonstrate if a particular storm event exceeds the designed storm event of the ditches, ponds, and culverts servicing the mine facility.

Sediment Control Measures

The existing plan primarily provides sediment control through the use of silt fences, straw bales, and sedimentation ponds for the BTCA treatment of disturbed areas. All silt fences viewed were maintained and in good working order.

Sedimentation Ponds

The Centennial Project has three (3) Sedimentation ponds on site. Surface runoff from the Pinnacle and Apex mine is designed to be controlled by Settling Basin B and Pond C. However, Pond C is rarely used. Surface runoff from the Aberdeen Mine is controlled by Pond E. The MRP indicates Cleanout markers exist in the ponds to readily indicate when the 60 percent capacity is encroached. In Settling Basin B₂ the cleanout is identified by the culvert-connecting basin B₂ to B₁. Cleanout markers are required in ponds C and E as outlined in the MRP.

Since January 2000, discharges from the UPDES discharge points have only occurred occasionally. The Pinnacle mine discharged once (April 2003) and the Aberdeen mine discharged only five (5) times (November 2002-April 2003) with only one (1) exceedance (Feb. 2003 2,013 lbs/day). The Sediment ponds did not discharge during that time period.

Minor clarification in the MRP concerning the UPDES discharge points is requested. On pages 7-2, 7-5, and Figure IV-II the MRP indicates only three (3) UPDES sites exist, when there are actually four (4) sites. Apparently the discharge from the Aberdeen mine is not included.

Findings:

During the technical site visit, the Operator committed to continued monitoring of the precipitation gage, and reporting its activity on an annual basis. This commitment adds valuable information to the hydrologic and climatic monitoring. It also provides valuable storm-event information for determining compliance.

The operator commits to adding clarification to the MRP concerning the four (4) UPDES monitoring sites.

No failure of BTCA off the permit area was noted during the site inspection.

RECOMMENDATIONS:

During the June 10, 2004 midterm field visit, Mine personnel committed to: 1) submitting precipitation information in the annual report, 2) installing any missing 60 percent sediment level markers in the sedimentation ponds, and 3) making modifications to the MRP concerning the UPDES sites and locations. The operator committed to completing these tasks.