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November 13, 2001

TO: Internal File

THRU: Pete Hess, Sr. Reclamation Specialist/Team Lead PHH by BGM

FROM: Jim Smith, Sr. Reclamation Specialist JPS

RE: Midterm Review, Andalex Resources, Inc., Wildcat Loadout, C/007/033–MT01

SUMMARY:

Section of the permit were reviewed for compliance with the Coal Mining Rules. A field visit was made on 8 November 2001, with Mike Glasson from Andalex and Pete Hess, Wayne Western, Daron Haddock, and Jim Smith from DOGM.

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:

Surface-Water Monitoring

The monitoring plan includes total manganese but not total iron, a parameter required by the Coal Mining Rules. Table IV-10 isn't clear that analyses for metals and ions should be for

dissolved concentrations rather than total concentrations (except for total iron and total manganese: analyses should be done for both total and dissolved iron, and for both total and dissolved manganese.)

Siltation Structures.

ASCA #1

This ASCA straddles the railroad right-of-way, but the right-of-way itself is not included in the permit area and the ASCA.

The intended sediment control method south of the tracks is a berm that directs runoff to a culvert, where the plan indicates straw bales are to provide sediment control as the water leaves the bermed area. At the time of the inspection the straw bales were not at the exit of the culvert; however, it was determined that the flow from the culvert ended up in Sedimentation Pond E. This area south of the tracks is flat in many areas and water simply evaporates or infiltrates. Adjacent to the entrance to the loadout, the berm for this ASCA needs to be rebuilt: there was no indication sediment has left the permit area here at this time, but there is a low spot and restoring the berm would reestablish the integrity of the sediment control in this area.

North of the tracks the ASCA is fairly flat, and the designed sediment control is a berm without any further treatment. The berm has been breeched in several locations by small flows, and sediment is going onto the right-of-way and from there probably reaching natural drainage ND-1, which lies along the east edge of the permit area. The berm will be restored by the permittee. Notes on Plate 2 of the MRP indicate straw bales will be used at possible drain points of ASCAs: it was suggested to the permittee that bales or silt fence be placed where the berm has been breached rather than utilizing total containment.

ASCA #2

This is a small, well vegetated area. In addition to the vegetation, straw bales are effective in providing sediment control.

ASCA #3

This is considered a disturbed area mainly because of wind-blown coal-fines. Other than the sedimentation pond and the fence, there has been no construction or disturbance of vegetation, and the area is well vegetated. Straw bales along the fence that crosses the ASCA and in the drainage below Sedimentation Pond B provide sediment control for part of this ASCA. Between the fence and the permit boundary, vegetation is the sediment control, although the plan indicates straw bales are the sediment control method for the entire area.

ASCA #4

ASCA #4 is adjacent to ASCA#3. The plan indicates straw bales are the sediment control method, but no bales were seen. As in ASCA #3 there are wind-blown fines, but otherwise the vegetation has not been disturbed and is providing sediment control.

ASCA #5

This ASCA treats runoff from two large top-soil piles surrounded by a berm, plus a smaller area outside the berm. Treatment is with straw bales.

Bales effectively treat flow as it leaves the bermed area. The large number of bales needed to treat the smaller area outside the berm is disproportionate to the size of the area. These bales were replaced recently, and the truck that carried in the bales probably did more damage to the soil and vegetation than would be caused by the runoff from a design storm. The area is well vegetated, and it was suggested to the permittee to consider changing the treatment for this small area from straw bales to vegetation only: this would require showing the vegetation is as effective as the bales.

Findings:

R645-301-731.211, -221, -222.1 •Total iron needs to be added to Table IV-10 (Water Quality Parameter List) in the Wildcat MRP. •Table IV-10 isn't clear that analyses for metals and ions should be for dissolved rather than total concentrations (except for total iron and total manganese: analyses should be done for both total and dissolved iron, and for both total and dissolved manganese.)

R645-301-742.200, •The berm at the east end of the south part of ASCA #1 needs to be rebuilt to reestablish the integrity of the sediment control in this area. •It appears the runoff (that which doesn't simply pond and evaporate or infiltrate) from the south part of ASCA #1 is not treated but reports to Sedimentation Pond E. If the water that leaves this ASCA does not report to the pond, the straw bales at the outlet of the culvert that drains the ASCA need to be maintained. If this runoff reports to Sedimentation Pond E, the plan should be modified to clearly show the sedimentation pond is as the treatment method. •At ASCA #1 north of the tracks, straw bales or silt fence need to be placed at the drain points through the berm, specifically along the railroad right-of-way. •Part of ASCA #3 and all of ASCA #4 are using vegetation as sediment control, but this is not indicated on Plate 2. If vegetation is to be one of the sediment control methods to be used in these areas, the effectiveness of vegetation as sediment control needs to be evaluated and the plan needs to be updated to show sediment control by vegetation in these areas.

•The permittee should consider changing the treatment for the smaller area of ASCA #5, which is outside the berm, from straw bales to vegetation only: this would require showing the vegetation is as effective as the bales.

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:

Mining Facilities Maps

Plate 2 was found to be inaccurate or unclear, including, but not limited to:

- the conveyor and road in ASCA #1 (north of the railroad tracks) are not shown;
- the disturbed area boundary and berm at the east end of ASCA #1 are not accurately shown;
- the drainage of water from the south part of ASCA #1 to sedimentation pond E is not clearly shown;
- the topsoil pile in ASCA #4 is not shown on Plate 2;
- the fences and roads south of or within ASCAs #3 and #4 are not accurately shown on Plate 2;
- the sediment control method in ASCAs #3 and #4 is not clear.

Some but not all of these features are shown correctly on Plate 1, but all maps in the MRP need to be checked for completeness and accuracy.

Findings:

R645-301-121.200, - 512.100, -512.200, All maps in the MRP, but especially Plate 2, should be checked for completeness and accuracy and corrected as needed.