



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor *DRH*

FROM: Peter H. Hess, Sr. Reclamation Specialist/Engineer, Team Lead *PHH*
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RE: Midterm Review, Andalex Resources, Inc., Wildcat Loadout, C/007/033-MT01

SUMMARY:

As part of the Division's midterm permit review process, sections of the Wildcat mining and reclamation plan were reviewed for compliance with the R645 Coal Mining Rules. A field visit / partial inspection was made on November 8, 2001, with Mike Glasson representing the permittee, and Peter Hess, Wayne Western, Daron Haddock, and Jim Smith representing the Division.

Prior to the November 8 field visit, an examination of the current legal and financial information as it exists within the current plan was performed with the assistance of Mr. Glasson.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

As part of the midterm permit review for the Wildcat Loadout, an examination of the applicant violator system information was conducted. A review of the information as it exists within the current Wildcat MRP reveals that there have been no major changes in principal officers. The permittee has updated this information in the approved mining and reclamation plan.

TECHNICAL MEMO

The operating officer list in the Wildcat MRP was last updated in March of 1996.

Findings:

The permittee must update the legal and financial information, as it exists for the Wildcat loadout (Andalex Resources, Inc.) within the Division's records, with any changes that were corrected prior to the November 8, 2001 partial inspection. This is part of the renewal requirements for this midterm review process.

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

During the review of water monitoring information from the third and fourth quarter of 2000, and the first quarter of 2001, it was noted that several minor problems existed with the surface and ground water monitoring regimes. The currently approved surface water-monitoring plan includes a required parameter to analyze for total manganese, but an analysis for total iron is not indicated as being required. The analysis for total iron is a parameter required by the Coal Mining Rules. Table IV-10 is unclear, in that the analyses for metals and ions (cation/anion balance) is not specifically stated as being determined using the concentrations of **dissolved** metals. The required surface water monitoring parameter list should be clarified, such that **both total and dissolved concentrations for both iron and manganese** are performed for each submitted water sample.

Siltation Structures

ASCA #1

This ASCA is separated into two sections by the Utah Railway right-of-way, and is adjacent to the County road close to the upper NW access gate. The right-of-way itself is **not included** within the Wildcat permit area.

The intended sediment control method on the portion south of the tracks is a berm that directs runoff to a twelve-inch culvert, where the plan (Plate 2) indicates straw bales are to provide sediment control as the water leaves the bermed area. During the inspection, it was determined that the straw bales did not exist at the exit of the culvert. However, it was determined that the flow from the culvert reported to a ditch which is collinear with the permit boundary and which reports to Sediment Pond "E". This area is generally flat and water simply evaporates or infiltrates. Adjacent to the upper NW gate entrance, the berm for ASCA #1 needed enhancement. Although there was no indication that sediment had left the permit area here, there is a low spot that could impound water. Restoring the berm would reestablish the integrity of the sediment control in this area.

The portion of ASCA #1 on the northern side of the Utah Railway right-of-way is fairly flat, and the designed sediment control is total containment via a berm. There is no other method of treatment. The berm was observed to have breached in several locations by small flows, and sediment has reported onto the right-of-way. Although this could technically be considered an "off-site" impact, the minute size of the flows, the type of sediment (coal fines) and the extremely dry nature of the area are felt to be adequate justification to not consider this impact significant to the extent that a notice of violation is justified. The Wildcat loadout area has been used for coal loading, processing, and transportation purposes for many years, and the adjacent areas are familiar with both water borne and wind borne coal fines impacts. The adjacent undisturbed drainage designated as ND-1 very seldom flows, with the exception of thunderstorm events. The berm will be restored by the permittee. Notes on Plate 2 located within the mining and reclamation plan indicate that straw bales will be used at possible drain points of ASCA's. It was suggested to the permittee that bales or silt fence be placed where the berm has been breached rather than trying to utilize total containment as the method of treatment.

ASCA #2

This is a small, well-vegetated area that lies directly north of sediment pond "D". In addition to the vegetation, straw bales are effective in providing sediment control. New bales have recently been installed along the crest of the west embankment adjacent to ND-1.

ASCA #3

This area is considered to be a disturbed area because of wind-blown coal-fines. Other than the sediment pond and the fence, there has not been any construction or other disturbance of the native vegetation. Hence, the area is well vegetated. Straw bales run parallel with the fence that bisects the ASCA. These, in addition to those that have been placed in the drainage below sediment pond B provide the 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. The permittee should consider revising that text, such that the in-place vegetation becomes the primary means of sediment control.

TECHNICAL MEMO

ASCA #4

ASCA #4 lays SW of ASCA#3, but ENE of sediment pond "A". The plan indicates straw bales are the sediment control method, but no bales were seen. As in ASCA #3 there are wind-blown fines. The vegetation has not been disturbed and is providing sediment control. ASCA #4 contains a topsoil storage pile, which utilizes a total retention berm and vegetation for the preservation of that resource.

ASCA #5

This ASCA lies on the SW side of the permit area and treats the runoff from a small area adjacent to a topsoil and a subsoil storage pile. Both soil piles utilize vegetation and total containment berms as their means of resource preservation. Treatment is indicated on Plate 2 to be via straw bales, although the area is well vegetated.

Bales effectively treat flow before it leaves the permit area. The large number of bales needed to treat the smaller area outside the bermed soil piles is disproportionate to the size of the area. These bales were recently enhanced with a secondary row of bales, 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 that consideration be given to changing the treatment for this small area from straw bales to vegetation only. This would require showing via hydrologic / engineering analysis that the vegetation in this area is as effective a means of sediment control as the bales.

Findings:

R645-301-731.211, -221, -222.1, 1) Total iron needs to be added to Table IV-10 (Water Quality Parameter List) in the Wildcat MRP. 2) Table IV-10 is unclear in that analyses for metals and ions should be for dissolved rather than total concentrations (except for total iron and total manganese). Analyses should be performed for total and dissolved iron, and for total and dissolved manganese.

R645-301-742.200, 1) 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. 2) It appears that some runoff from the south part of ASCA #1 is not treated but reports to sediment 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 sediment pond "E", the plan should be modified to clearly show the sediment pond is the treatment for this area. 3) 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. 4) 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. 5) 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 that the established vegetation is as effective as the bales, via hydrologic / engineering analysis.

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 sediment 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.