

March 20, 2003

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Priscilla W. Burton, Sr. Reclamation Specialist/Soils

RE: Technical Field Visit, Soil Investigation, Wildcat Loadout, Andalex Resources Inc., C/007/033

Other Attendees:

Mr. Jim Nyenhuis, Soils Consultant

Date & Time:

March 12, 2003, 9:00 a.m. – 2:00 p.m.

PURPOSE:

To evaluate soils within the area of stockpile expansion.

OBSERVATIONS:

Plate 1 Wildcat Loadout Surface Facilities As Constructed shows the location of Sediment Pond A and Topsoil Storage Pile A. Plans are to create an additional stockpile to the south and east across the road. The first phase of expansion would add one acre of coal stockpile on the southeast side of the haul road PR-5 adjacent to Sediment Pond A. A soil pit dug in this area revealed a four-inch layer of coal fines and platy textured soils above a zone of carbonate accumulation. The entire profile of soil in this area could be salvaged, but is not as suitable as the soils located in the drainage way.

TECHNICAL FIELD VISIT

The second phase of expansion would bring the stockpile to the southeast edge of the permit area, adjacent to the existing improved road and would increase the Mine Run Coal Storage Area to cover Sediment Pond D. Soil pits in drainages of the area revealed four inches of coal fines over deep loamy soils with fine-grained texture that could be salvaged to a depth of four feet. In contrast, pits located in Pinyon vegetation on the higher elevations of this expansion area revealed four inches of coal fines over shallow, rocky soils over bedrock and could produce only a foot of salvageable material.

On page 80, the MRP describes five stockpiles (A – E) holding 419,823 cubic ft of soil (15,549 CY). Topsoil Stockpile A and B on the West side of the railroad tracks were observed. Stockpile B was recently reseeded in December 2002. Because of difficulty with wind erosion and plant establishment, surface netting was employed. Although the plants growing on this stockpile and to the west were free of coal fines, wind erosion of the stockpile had left established shrub basal shoots standing three inches above the eroded soil surface.

Topsoil B used to have test plots on its surface. The test plots were installed in 1994 as described on page 52 of the MRP. The test plots were evaluated by Mt. Nebo Scientific in July 1997. (The Mt. Nebo report was provided to the Division during this field visit). The plan for additional soil recovery must evaluate a suitable placement of the additional volumes of stockpiled soil.

More detailed information from these soils pits will be forthcoming in the coal stockpile amendment.

RECOMMENDATIONS/CONCLUSIONS:

The depth of coal fines on the surface was approximately four inches. If 3.5 feet (42 inches) of soils are removed and stockpiled, then the four-inch layer of coal fines would be less than 10% by volume and would have little affect on soil quality. However, if the Permittee only takes a twelve-inch layer of soil, the four-inch layer of coal fines would be one third of the volume and could significantly impact the soil quality. Therefore, if less than 3.5 feet (42 inches) of soil are removed and stockpiled, the surface coal should not be included in the salvage operation.