0032

FILE COPY

January 02, 1987

TO: File

FROM: James S. Leatherwood

RE: Review of December 23, 1986 Submittal, Andalex Resources, Inc., Centennial Project, ACT/007/019, Folder No. 2 Carbon County, Utah

The resubmitted, December 23, 1986 Mine Reclamation Plan (MRP) has been reviewed. I have found the MRP to be incomplete. The following concerns must be addressed.

UMC 783.21 Soil Resources Information - JSL

The applicant has submitted the soil survey by Earth Environmental Consultants Inc. However the soil survey and map conducted by the SCS, May 27, 1980 was not submitted. The May 27, 1980 survey is found in the previously permitted MRP as exhibit IV-C, and the corresponding soils map as plate XIII. This survey and map corresponds to that portion of the disturbance area that was not mapped by Earth Environmental Consultants Inc. The SCS soil survey and map must be incorporated into the MRP. Plate 18 must be updated to reflect the previously surveyed area by the SCS. This can be accomplished by identifying the previously surveyed area on plate 18 with a reference to the SCS map.

The applicant must update the acreage of each soil series disturbed (page 3, Earth Environmental Consultants Inc. soil survey). The acreages given for each specific soil series is incorrect. The total acreage of disturbance does not equal 20.66 acres. DOGM staff planimetered the total disturbance acreage of Map 20 to be approximately 33.8 acres.

UMC 783.27 Prime Farmland Investigation - JSL

The MRP does not contain a negative determination of Prime Farmland from the Soil Conservation Service (SCS) as stated within the MRP (pg. 45, part D, section 8, ch. 3 and ch. 7, cross reference). The SCS determination of Prime Farmland must be provided within the MRP.

UMC 817.22 Topsoil: Removal - JSL

A topsoil mass balance table must be incorporated into the MRP. This table must include the acreage of proposed future disturbance and present disturbance; volume of stockpiled topsoil; and the proposed depth of topsoil redistribution. The applicant must also include the specific depths of topsoil removal for all future disturbances. Include the methodology to verify that the appropriate depth of soil is being removed (flagging, islands etc.).

UMC 817.23 Topsoil: Storage - JSL

Plate 7 must be resubmitted. Plate 7 must identify the temporary topsoil stockpile.

UMC 817.24 Topsoil: Redistribution - JSL

The applicant must submit the following information:

A) The soil redistribution plan must include specific methodology to minimize soil slippage. The Division recommends ripping the subsurface material six inches prior to topsoil redistribution;

B) Plans to alleviate topsoil compaction after redistribution must be specified within the MRP. The Division recommends tilling in one ton of alfalfa per acre at a six inch depth (or other organic material with a C:N ratio of 20:1). This amendment would enhance the aeration, water holding capacity, microbiological communities and stabilize a favorable nutrient cycle within the topsoil;

C) The minimum depth of topsoil redistribution must be explicitly defined for the disturbance area; and,

D) The third paragraph of page 46, chapter 3, part E, No. 2 must be updated. The wording "was revegetated" must be changed to will be revegetated.

UMC 817.25 Topsoil: Nutrients and Amendments - JSL

The following must be committed to within the MRP:

A) Sample and test all redistributed topsoil and subsoils for the following parameters: organic matter, available phosphorus, potassium, pH, electrical conductivity and texture. Sampling rate must be equal to a minimum of one sample for each five acres of disturbance. Each site must be sampled at the following depths: 0-6 inches, 6-12 inches, and 12-24 inches. The specific sample sites must be identified and presented on the soil survey map 90 days prior to final reclamation; and,

B) Redistribute and incorporate one ton of alafalfa (or other organic material with a C:N ratio of 20:1) into the redistributed topsoil.

UMC 817.48 Hydrologic Balance: Acid- Forming and Toxic-Forming Materials - JSL

The applicant contends that there are no acid- or toxic-forming materials. However the acid base potential (ABP) of the roof, floor, and midseam was not submitted (ie. appendix IVF was not submitted). This information must be presented within the MRP. If the analysis finds as ABP of negative five (5) or less (tons $CaCO_3$/1000 tons material) the applicant shall:

A) Determine the ABP of the spoil material contained within the sediment pond; and,

B) Develop a plan to handle all acid- or toxic- forming materials in compliance with this regulation and UMC 817.103.

UMC 817.106 Regrading or Stabilizing Rills and Gullies - JSL

The applicant must commit to fill, regrade, stabilize and reseed all rills and gullies prior to an eroded depth of nine inches.

jvb
cc: S. Linner
0534R-68