

0003



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

November 15, 1988

Mr. Mike Glasson
Andalex Resources
P. O. Box 902
Price, Utah 84501

Re: Technical Deficiencies, Permit Application Package, Andalex Resources, Inc., Wildcat Loadout, PRO/007/033, Folder #2, Carbon County, Utah

Division technical staff have reviewed the materials submitted by Andalex on October 14 and 21, 1988 regarding completeness and technical deficiencies for the Wildcat Loadout Permit Application Package (PAP). The completeness deficiencies have been addressed well enough to determine the PAP complete and therefore allow initiation of the public notice period for this PAP. However, several technical deficiencies must be rectified during the public notice period.

Attached is an enumeration of the current deficiencies. Please review these and contact me to set up a meeting to discuss them. It would be my preference to meet in Price the week of November 28 at the DOGM office there.

The deadline for Andalex's response to the attached deficiencies is December 16, 1988.

Sincerely,

A handwritten signature in cursive script that reads "John J. Whitehead".

John J. Whitehead
Permit Supervisor/
Reclamation Hydrologist

JJW/djh
Attachment
cc: L.P. Braxton
Tech Review Team
AT7/75

TECHNICAL DEFICIENCIES
WILDCAT LOADOUT FACILITY
PRO/007/033

Andalex Resources, Inc.
Carbon County, Utah
November 15, 1988

UMC 817.43-.44 (JRF)

The berm at the point of diversion on UD-1 must be sized for the 100-year, 24-hour event. Include all dimensions and construction details. The face of the berm may require riprap. If so, provide all design details. UD-1 extension will intercept a side drainage. Provide construction details on cut and fill and ditch construction on fill material.

The riprap plan for UD-1 (near Pond F) will require riprap with a D50 of 18 inches.

The applicant must provide the following information on all riprap locations:

1. D15, D50, and D85 stone sizes;
2. Depth of riprap must be 1.5 times D50 (at a minimum);
3. Commit to using well graded angular riprap.

All diversions must be portrayed consistently on all plates. There were differences in UD-1 and UD-2 as shown on plates submitted October 14, 1988, then submitted on October 21, 1988. All plates must be correct, accurate and consistent.

UD-2

The applicant and the Division should consult with Beaver Creek Coal Company to determine responsibility limitations on UD-2. Culvert C-33 (on UD-2) will require erosion protection. Please provide.

ND-1

Channel reclamation must be addressed for the removal of Culvert C-34 and C-33 during final reclamation. Please provide all design details (peak flow, channel dimensions, and erosion protection).

UD-3 and UD-4

The Division has calculated channel velocities of 11 fps and 13 fps for UD-3 and UD-4 respectively. Please increase riprap sizes accordingly.

Diversion D-13 cross-sectional area must be increased to 2.0 feet squared.

UMC 817.43-.44 (JRF) (Cont'd)

Temporary Diversions

The Division recognizes that ditches near coal piles may change over time. However, this does not release the applicant from design responsibilities. The temporary ditch near Pond B must be designed to accommodate a runoff event with a 2-year recurrence interval. Furthermore, the ditch must be shown on the surface facilities map. Temporary ditches that exist more than 180 days will be considered permanent and must be designed to accommodate the 10-year, 24-hour event.

UMC 817.46 Hydrologic Balance: Sedimentation Ponds - (PGL)

The inadequacy of Pond D to contain the required volumes for drainages D and E during Phase I reclamation still exists. Please revise accordingly.

UMC 817.48 Hydrologic Balance: Acid-Forming and Toxic-Forming Materials - (HS)

Coal data submitted October 29, 1988 under section UMC 817.22 for sulfate sulfur, pyritic and organic sulfur, continues to indicate an acid production potential from the coal material (Acid Base Potential [ABP] of -7.31 Tons CaCO_3 /1000 Tons material). Based on these findings, a groundwater monitoring plan (UMC 817.52) and a backfilling and grading plan for toxic and acid-forming material disposal (UMC 817.103) remains to be adequately addressed.

Based on ABP determinations, further analysis of the coal storage areas must be performed to adequately assess the extent and amplitude of the acid-forming material.

To accurately identify the potential for acid formation, the applicant must submit ABP analyses for each individual coal storage pile to include: one sample of the coal-soil interface; one composite sample of accumulated sediments within sediment ponds adjacent to coal storage piles and one composite sample of the existing salable coal pile.

The results of the aforementioned analyses must be submitted to the Division for review. Based on this review, it will be determined if UMC 817.52 and UMC 817.103 are applicable, and if so, would require further consideration.

UMC 817.52 Hydrologic Balance: Surface and Ground-Water
Monitoring - (JRF)

As previously requested, Plate 2 must show all water monitoring stations or the PAP must reference Plate 15 as showing water monitoring stations. Table IV-10 must incorporate the following changes:

1. N02 should read Nitrite,
2. Manganese should read Total Manganese,
3. Acidity should be included.

UMC 817.56 Hydrologic Balance: Postmining Rehabilitation of
Sedimentation Ponds, Diversions, Impoundments, and
Treatment Facilities - (JRF)

The following technical deficiencies exist for postmining diversions:

1. Figure IV-3 cross-sectional area is 1.5 feet squared (calculated with .3' of freeboard); as such, Diversions RD-1, 2, 4, 5, 6 and 7 will not contain the design event.
2. Submit minimum and maximum riprap stone sizes (D15, D85);
3. Depth of riprap must be 1.5 times D50;
4. Plate 8 legend gives reconstructed ditch widths as 6.0 feet, while Figure IV-3 gives 4.0 feet.
5. Plate 8 shows loose-rock checkdams on all ditches. Plate 9 does not show the checkdams for final reclamation. Please clarify.
6. Ditch configurations change from Plate 8 to Plate 9 without discussion in the text. Please clarify.
7. Delineate extent of riprap on Plates 8 and 9, for all ditches.
8. The applicant has proposed berms to control drainage during Phase I reclamation. Please provide berm dimensions and final reclamation of the berms.

UMC 817.95 Air Quality - (WM)

Recent field inspections have confirmed that windborne coal fines are increasingly a problem. Surface drainages off the permit area as well as topsoil stockpiles are being impacted. The PAP must include measures to address this problem.

Page 4
Technical Deficiencies
PRO/007/033
November 15, 1988

UMC 817.106 Regrading or Stabilizing Rills and Gullies - (PGL)

The statement that rills and gullies will be stabilized "during operations" (page 80) should be deleted. This statement implies that rills and gullies will not be stabilized during and after reclamation. Please delete the words "during operations".

AT7/76-78
A Team