



State of Utah
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
 Governor

Ted Stewart
 Executive Director

James W. Carter
 Division Director

355 West North Temple
 3 Triad Center, Suite 350
 Salt Lake City, Utah 84180-1203
 801-538-5340
 801-359-3940 (Fax)
 801-538-5319 (TDD)

February 27, 1996

TO: Daron Haddock, Permit Supervisor

FROM: James D. Smith, Reclamation Specialist *JDS*

RE: Technical Analysis, February 5, 1996, Responses to December 19, 1995
 Mid-Term Review, Centennial Project, Andalex Resources, Inc.,
 ACT/007/019, Folder #2, Working File, Carbon County, Utah

SYNOPSIS

On December 19, 1995, DOGM sent a mid-term Technical Analysis and approval of the reformatted MRP to Andalex. Andalex responses to the deficiencies identified in that TA was received February 5, 1996. Comments in Andalex response indicated that several deficiencies that had been satisfactorily addressed previously were again included in the December 1995 TA; a review of past TA's and Andalex' responses found this to be true.

The Left Fork Fan Amendment, 94G, was approved May 25, 1995. Approximately forty pages of text and three plates concerning the left fork fan were submitted to DOGM on August 8, 1995. Several pages of text from that submittal, but not all, have been incorporated into the current MRP, and none of the plates have been incorporated into the MRP. The status of the pages that have not been inserted into the MRP is unclear. Several of the pages that have not been incorporated into the MRP show the total disturbed acreage to be other than 34.2 acres, which is the correct disturbed acreage according to Mike Glasson's February 5, 1996, letter. Also, the pagination for the August 8 submittal does not match the currently approved plan. (Judging from some of Mike Glasson's February 5, 1996 responses to DOGM's December 14, 1995, mid-term TA, this August 8 submittal might have been mistakenly included and reviewed as part of DOGM's December 14, 1995-TA of Andalex responses to previous mid-term TA comments.)

The configuration of the permit area boundary at the left fork fan is not clear from maps in the MRP. Although the primary purpose of Plates 2, 3, 26, 27, and 28 is not to show the permit area boundary, information on those plates does include the permit boundary. The permit area boundary shown on Plates 2, 3, 26, 27, and 28 did not include the left fork fan. Plates 1 and 29 are the only maps in the current MRP on which the permit boundary includes the left fork fan pad, and they show it with slight differences and at small scales, 1:24,000 and 1:12,000 respectively.

TECHNICAL ANALYSIS

Last revised - February 27, 1996

No map could be found in the MRP that shows the disturbed area boundary at the left fork fan. Plate 5 shows the disturbed area boundary at the mine portal area but has no information on the left fork fan area. (Text on Plate 5, received September 19, 1990, states that there are 34.2 acres disturbed, so the left fork fan disturbed area is not included in Mike Glasson's figures of 34.2 acres stated in his February 5, 1996-letter.) Plate 1 shows an approximate outline of the permit/disturbed area boundary at the left fork fan at a scale of 1:24,000, but there is no map at a scale large enough to show the detail of the disturbed area boundary at the left fork fan area. The disturbed area boundary for the left fork fan should be shown on a map of 1:6,000 or larger scale.

IDENTIFICATION OF INTERESTS, VIOLATION INFORMATION, AND RIGHT OF ENTRY INFORMATION

Regulatory Reference: UC R645-301-112; R645-301-113; R645-301-114

Analysis:

Right of Entry Information

Legal descriptions of the leases correspond with Plate 4, the map showing Centennial Project leases, and with the permit. In the previous review, it was noted that Plates 2, 3, and 4 stated lease UPU-69600 was for the "Centennial Seam only." This has been corrected.

Findings:

This portion of the mining and reclamation plan is complete and accurate.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: UCA R645-301-620 (30 CFR Sec. 784.22)

Analysis:

Pages 340 to 345 contain information on the drill holes in the Centennial Project. The five holes drilled by Centennial Coal Assoc. in 1971 are described on page 340. Pertinent information including elevations is in Table III-1. Locations are mapped on Plates 22, 26, 27, 28, and 29. Lithologic logs of each of the five holes drilled by Centennial Coal Assoc. in 1971, including DH-1, are in Appendix E.

Findings:

Geologic resource information is complete and accurate.

TECHNICAL ANALYSIS

Last revised - February 27, 1996

MAPS, PLANS, AND CROSS SECTIONS

Regulatory Reference: UCA R645-301-512 and 521.100 (30 CFR Sec. 784.23)

Analysis:

The location of the permit boundary at the left fork fan is not clear from maps in the MRP. Although the primary purpose of Plates 2, 3, 26, 27, and 28 is not to show the permit area boundary, information on those plates includes the permit area boundary. The permit area boundary shown on Plates 2, 3, 26, 27, and 28 is not as currently approved but rather as it was before the left fork fan was added. Plates 1 and 29 are the only maps in the current MRP on which the permit boundary includes the left fork fan pad, and they show it with slight differences and at small scales. (Plate 4, Centennial Project Leases, is not intended to show the permit boundary at all but does show the BLM Right-of-Way 64158 where the left fork fan and the ancillary road are located.)

No map could be found that shows the disturbed area boundary at the left fork fan. Plate 5 shows the disturbed area boundary at the mine portal area but has no information on the left fork fan area. Plate 1 shows an approximate outline of the permit/disturbed area boundary at the left fork fan at a 1:24,000 scale, but there is no map at a scale of 1:6,000 or larger that shows the detail of the disturbed area boundary.

Findings:

This portion of the mining and reclamation plan is complete and accurate with the following exceptions:

- 1) The Operator has not updated Plates 2, 3, 26, 27, and 28 to show that the permit boundary now includes the disturbed area associated with the fan portal breakout.
- 2) The MRP does not include a map at a scale of 1:6,000 or larger that shows the disturbed area boundary at the fan portal breakout.

HYDROLOGIC INFORMATION

Regulatory Reference: UC R645-301-730, 740, 750 (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)

TECHNICAL ANALYSIS

Last revised - February 27, 1996

Analysis:

Discharges into an underground Mine

More than fifteen acres of disturbed and undisturbed surface area drains into the mines. The Permittee has approval from the State Engineer, Division of Water Rights, to collect the surface runoff from the disturbed area and discharge into the mine. This water is used for dust suppression underground. Water collected is a direct result of precipitation within the disturbed area (Sections R645-301-512.240, page 173 and R645-301-731.510). This information broadly meets the requirements for discussion of quantity and quality of water diverted, minimizing disturbance to the hydrologic balance on the permit area, off-site impacts, preventing material damage outside the permit area, and disturbance to the hydrologic balance.

DOGM requested that the MRP include a discussion of MSHA approval of discharge of water into the mine, as required by Rule R645-301-731.511.4. Andalex has responded that MSHA does not require an approval for discharge of water into the mine; therefore Rule R645-301-731.511.4 is not applicable. It is unclear whether MSHA has made a determination and found MSHA approval is not required for the situation at the Centennial Project, or that Andalex has made such a determination without input from MSHA.

Findings:

The required hydrologic information on an operational plan in the revised plan is complete and accurate except for the following deficiency:

- 1) MSHA approval for discharges into the mine, or why MSHA approval is not required, needs to be discussed in Section R645-301-731.511.4.

RECLAMATION PLAN

GEOLOGIC PERFORMANCE STANDARDS

Regulatory Reference: UC R645-301-640, 641, 642

Analysis:

Under R645-301-640 and 641, reclamations of exploration holes and bore holes, reference is made to R645-301-551 and R645-301-529.100, where it states

TECHNICAL ANALYSIS

Last revised - February 27, 1996

that all exploratory drill holes have been sealed with cement and all water wells have been cased with steel and will be maintained. A commitment is made to seal all water and monitoring wells after mining is completed, except if then State Engineer allows them to remain open for other purposes.

Under R645-301-642, reclamation of monuments and surface markers, reference is made to R645-301-525.170, where a commitment is made to remove all subsidence monitoring stations, which consist of cemented rear, upon completion of mining and following all required subsidence monitoring.

Findings:

Geologic information for the reclamation plan is complete and accurate.

mt
h:\users\coal\WP\007019\draft\midterm.mjs