



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

Michael O. Leavitt
Governor
Kathleen Clarke
Executive Director
Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
801-538-5340
801-359-3940 (Fax)
801-538-7223 (TDD)

February 23, 2000

To: Internal File

From: Peter Hess, Reclamation Specialist III, Team Lead

RE: Addition of Ditch DD-2A, Surface Drainage Plan, Andalex Resources, Inc., Centennial Project, ACT/007/019-00A

SUMMARY:

During the October 27, 1999 inspection, an erosion gully was noted directly east of the Pinnacle Mine truck loadout adjacent to ditch DD-2. Rather than repair the erosion and redirect the flow reporting to this area, Mr. Mike Glasson suggested that the permittee add the diversion to the surface drainage system for the Centennial Project. This submittal attempts to meet the permitting requirements for the addition of ditch DD-2A.

TECHNICAL ANALYSIS:

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:

Diversions

The submittal, in its entirety, consists of a revised Plate 6, which is an "as constructed" surface facilities map of the Dead Man Canyon (Centennial Project) area. The erosion gully

mentioned above is depicted a ditch "DD-2A". Plate 6 was P.E. certified by Mr. Dan Guy on September 2, 1999.

R645-301-732.300 requires that all diversions will be constructed and maintained to comply with the requirements of 301-742.100.

R645-301-742.110 requires that diversions within the disturbed area must be designed, constructed and maintained using the best technology available.

Ditch DD-2A is a very minor ditch on the property and the amount of runoff reporting to same can probably be considered to be minimal. Ditch DD-2A will have the same design configuration as DD-2, and will be capable of handling a 1.7 cfs flow, (0.47 sq. ft. flow cross section), as depicted on Table IV-3B, page 182 of Chapter 5 of the Centennial Project mining and reclamation plan.

Upon Division approval of this application, the permittee needs to address the maintenance of ditch DD-2A, defining it to the configuration shown on Page 206, Figure IV-3, "Typical Disturbed Diversion Ditch."

In the Centennial Project mining and reclamation plan, Plate 8 is designated as the "Support Facilities Surface Area Drainage" map. This plate **has not been revised** to show the addition of ditch DD-2A.

Plates 6 and 8 both show the surface drainage plan depicting ditch designations and culvert designations and sizes. It is not known why the permittee feels the need to show the surface drainage on both plates.

It is suggested that the culvert immediately down stream of the confluence (18-inch CMP) of ditches DD-2 and DD-2A be sized to determine its adequacy for the combined flows.

Findings:

Although the application contains no design per se for ditch DD-2A, the mining and reclamation plan contains a "typical disturbed diversion ditch" design. This is adequate.

The application shows the ditch on the surface facilities map, but not on the surface drainage map. Only the surface facilities map has been recently P. E. certified, (R645-301-731.720).

The applicant needs to update Plate 8, Support Facilities Surface Area Drainage.

RECOMMENDATIONS:

Conditional Approval of ACT/007/019-00A

It is recommended that the aforementioned amendment, which will include ditch DD-2A as part of the surface drainage system for the Centennial site be approved, pending submittal of the requisite number of revised Plate 8, Support Facilities Surface Drainage Area.

sd
O:\007019.CEN\FINAL\phhAM00A.wpd