



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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July 22, 1997

TO: File

THROUGH: Daron Haddock, Permit Supervisor

FROM: Paul Baker, Reclamation Biologist

Re: 160-acre Incidental Boundary Change, Andalex Resources, Inc., Centennial Project, ACT/007/019, Carbon County, Utah

ACT #2

## SUMMARY:

On April 4, 1997, the Division received a proposal from Andalex Resources, Inc., to add 160 acres to its permit area for the Centennial Project. The Division previously approved inclusion of about a six-acre area to the permit area. Andalex has gained right of entry to this area through a modification of lease UTU-66060, the Graves Lease. A revised application was received June 23, 1997.

No effects are anticipated to wildlife or vegetation resources. However, the plan contains no commitment to monitor raptor nests on an ongoing basis, and it appears this commitment is needed for the western part of the current permit area. This is not directly associated with the incidental boundary change.

## TECHNICAL ANALYSIS:

## ADMINISTRATIVE INFORMATION

### OWNERSHIP AND CONTROL AND RIGHT OF ENTRY INFORMATION

Regulatory Reference: R645-301-112 and R645-301-114

### Analysis:

The current mining and reclamation plan contains ownership and control information required by R645-301-112. Plate 2 shows surface owners of land within and adjacent to the

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permit area, Plate 3 shows coal ownership information, and Plate 4 shows the boundaries of coal leases. The lists of owners of surface and mineral lands within and contiguous to the current permit area do not need to be updated for this proposed incidental boundary change.

Since this is an amendment rather than a significant revision, updated information about the officers and directors is not required. The Division also does not require updated violation information.

In Section R645-301-114, the applicant has added the legal description for the area proposed to be added to the permit area. This area is a modification to lease UTU-66060, also known as the Graves Lease, and it was modified on October 3, 1994. The lease increased from 933 to 1093 acres.

**Findings:**

Information provided in this section of the proposal is considered adequate to meet the requirements of this section of the regulations.

## **ENVIRONMENTAL RESOURCE INFORMATION**

### **HISTORIC AND CULTURAL RESOURCES INFORMATION**

Regulatory Reference: R645-301-411.140

**Analysis:**

No cultural or historic resources information was included in the application, and none relating to the proposed incidental boundary change could be found in the current mining and reclamation plan. The 1990 decision document for the Graves Lease does not indicate there was any cultural resources information; however, based on the lack of surface disturbance, the Division of State History concurred with allowing mining.

Correspondence from State History dated July 8, 1997, concerning the current proposal says the Utah Preservation Office recommends that there would be no effect upon cultural resources by the project.

**Findings:**

Information provided in the proposal is considered adequate to meet the requirements

of this section of the regulations.

## **VEGETATION RESOURCE INFORMATION**

Regulatory Reference: R645-301-321

### **Analysis:**

The current mining and reclamation plan contains general descriptions of the vegetation in the area. The proposed addition to the permit area is on a plateau with mainly grass/sagebrush and aspen communities.

Since there will be no surface disturbance other than possible surface effects of subsidence, detailed vegetation information is not required. The information in the plan is considered to be adequate.

### **Findings:**

Information provided in the proposal is considered adequate to meet the requirements of this section of the regulations.

## **FISH AND WILDLIFE RESOURCE INFORMATION**

Regulatory Reference: R645-301-322

### **Analysis:**

Plate 34 in the current mining and reclamation plan is a map showing wildlife habitat in the area. The proposed addition to the permit area contains critical deer winter range but does not appear to have other habitat of unusually high value.

There are several known raptor nests within the permit area, and they are all on cliffs. The surface of the proposed incidental boundary change is almost entirely a relatively flat plateau. The 1994 raptor survey included part of the plateau where there are groves of aspens, but no raptor nests were found.

While the plan is adequate for the current proposal, there is no plan for continued monitoring for raptor nest activity in other parts of the permit area. It appears that nests

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found in the 1994 survey have now all been undermined, and there is probably little potential for damage to nests in canyons in the east side of the permit area. On the west side of the permit area, only one nest was found in the Left Fork of Deadman Canyon, and no nests were found in Alrad Canyon. However, Wildlife Resources has record of one raptor nest on the west side of Alrad Canyon just outside the permit area.

Both Alrad Canyon and the Left Fork of Deadman Canyon have potential habitat for cliff-nesting raptors, and the applicant plans to continue longwall mining under portions of both of these canyons. For these reasons, the applicant needs to commit to doing ongoing raptor surveys in these canyons as long as there is a potential for cliff habitat to be adversely affected

The application contains no information about threatened or endangered species that might occur within the proposed incidental boundary change. The Fish and Wildlife Service provided a letter to the Division stating there are no threatened or endangered species known to occur in the area. However, as discussed below, there is a potential for negative effects to threatened and endangered fish of the upper Colorado River basin.

### **Findings:**

Information provided in the proposal is considered adequate to meet the requirements of this sections of the regulations. However, information in other parts of the current mining and reclamation plan is not considered adequate to meet the requirements of this section. The applicant must provide the following commitment in accordance with:

**R645-301-322,** The applicant needs to commit to conduct raptor surveys on an ongoing basis in areas where potential cliff-nesting habitat could be affected by mining operations. Specifically, it appears Alrad Canyon and the Left Fork of Deadman Canyon have potential habitat, and the applicant intends to longwall mine under these areas over the next few years.

## **OPERATION PLAN**

### **FISH AND WILDLIFE RESOURCE PROTECTION**

No raptor nests were found in the aspens on top of the plateau during the 1994 survey, but tree nests are more difficult to find than cliff nests. Accipiters usually nest in wooded areas, but they prefer a nearby source of perennial water. This makes it unlikely there are accipiter nests within the proposed incidental boundary change although they could

be in nearby areas. Red-tailed hawks, however, commonly build tree nests, and they prefer areas with forest edges similar to the discontinuous aspen groves on the plateau.

While there could be some raptor nests within the incidental boundary change, it is very unlikely any nests would be affected by mining for the following reasons:

1. Mining would mostly be under more than 2000 feet of cover, and there will probably be no surface expression of subsidence. Even if there are surface effects, they should be minimal. According to information in the 1995 annual report, no vertical or lateral movement has ever been detected at this mine.
2. Tree nests are less susceptible to damage from subsidence than cliff nests. Subsidence sometime causes trees to fall, but the more normal scenario is a broad, gentle lowering of the area. Cliffs sometimes spall, and this has led to loss of some eagle nests, but the Division is unaware of tree nests lost through subsidence.

The Fish and Wildlife Service has determined that water depletions to the Upper Colorado River drainage may adversely affect certain threatened or endangered fish. A one-time mitigation payment is required where projects use over 100 acre feet of water per year.

Water is lost through evaporation from the mined area due to mine ventilation. However, according to information in the probable hydrologic consequences document, the ground water encountered within the mine is anticipated to be associated with a localized perched system that has no known surface expression. Therefore, there should be no effect on surface water caused by evaporation losses.

The mining and reclamation plan indicates the applicant has water rights in four wells and an abandoned mine for 0.7 cubic feet per second of water. If all of this water was utilized, the mine would be using about 507 acre feet of water each year from these sources. However, according to information received from the applicant, about 54 acre feet is actually used in mining operations. This is based on 200 gallons per minute being used for four hours each day when coal is actually being cut. Since a few years ago, all of this water has been produced in the mine, and, as with evaporation losses, it is all from perched aquifers with no known surface expressions.

In 1990 when the Graves Lease was permitted, the Fish and Wildlife Service said in a memorandum to the Office of Surface Mining, "No Colorado River drainage water depletion is anticipated at this time." This 160-acre addition to the 933-acre Graves Lease will not change the situation that existed in 1990.

**Findings:**

Information provided in the proposal is considered adequate to meet the requirements of this section of the regulations.

## **RECLAMATION PLAN**

### **REVEGETATION**

Regulatory Reference: R645-301-341

**Analysis:**

Since there will be no surface disturbance other than possible effects of subsidence, there are no specific revegetation plans for the proposed incidental boundary change. The existing mining and reclamation plan contains commitments to repair subsidence cracks that could cause problems for wildlife or livestock.

**Findings:**

Information provided in the proposal is considered adequate to meet the requirements of this section of the regulations.

**RECOMMENDATIONS:**

The applicant has met the requirements for approval of the proposed amendment. However, the plan needs to contain a commitment to continue to monitor or survey for raptor nests in areas containing habitat that could be adversely affected by subsidence.