



State of Utah

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DIVISION OF OIL, GAS AND MINING

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TO: File

THRU: Daron Haddock, Permit Supervisor *DQH*

FROM: Susan M. White, Senior Reclamation Biologist *S.M.W.*

RE: Fan Portal Reclamation Review, PacifiCorp, Cottonwood Wilburg Mine, ACT\015\019, Folder #2, Emery County, Utah.

SUMMARY:

The operator is proposing to reclaim the Cottonwood Fan Portal this year. The existing reclamation plan in the MRP was reviewed. The MRP did not contain sufficient information concerning the reclamation of the Fan Portal to make a finding of compliance with the regulations.

HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference R645-301-411.

Analysis:

The Old Johnson Mine is located directly across the canyon from the Trail Mountain Mine surface facilities and directly adjacent to the Cottonwood Fan Portal area (Appendix III, page 5 and Plate 3-16A). The Old Johnson Mine site has been recorded as a historic resource and provided with the Smithsonian registration number 42Em1633. An analysis of the site by F.R. Hauck of AERC, concluded that this mine is of historic significance and has the potential for nomination to the National Register. The Johnson Mine site includes two walled-in portals, a mine terrace associated with the portals, road, the remnants of a coal slide or chute, a storage area under a rock walled boulder, an outhouse, and the old weigh house structure. The site is justified to the National Register Status as significant because it is an integral unit.

A rough sketch of the Old Johnson Mine is given in the original 1983 site survey in Chapter 2 Attachment 6. Portals and "cabin" of the Old Johnson Mine are identified on Plate 3-16A. However, Plate 3-16A does not show the Cottonwood Fan Portal Area and the disturbed area associated with it. It is assumed that a portion of the Old Johnson Mine Road

was and will be used to access the fan portal area. The importance of the road as an integral part of the site is not discussed. The reclamation of this road in the area of the fan must be discussed and a Historian and land owner must be consulted as to the disposition of the road.

In section Protection of Public Parks and Historic Places (page 4-40) of the permit or elsewhere in the permit, no protection measures for the Johnson Mine are described. The permit must include a description of the measures used to protect the site during operation and reclamation of the Cottonwood Fan and Conveyor Portal.

Findings:

The permittee must provide the following in accordance with the requirements of:

R645-301-411.141, The permit must include a map which shows the existing and intended disturbance associated with the reclamation of the Cottonwood Fan Portal and the area which is considered the historic resource of the Johnson Mine site.

R645-301-411.142, The permit must describe the protection measures used during reclamation to protect the Johnson Mine site.

R645-301-411.143, The permit must contain an evaluation of the Old Johnson Mine Site and the road associated with the site. The evaluation must be a coordinated review with input from the State Historic Preservation Officer, the land owner and the Division. The evaluation must determine the extent of the road that is considered part of the historic resource and how or if the road should be reclaimed and to what condition.

FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 784.21; R645-301-322.

Analysis:

Much of the information concerning the raptors and threatened and endangered species in the permit (pages 2-168 through 2-175) is outdated. Numerous raptor nests are located within a mile radius of the fan portal. A Peregrine Falcon pair were observed adjacent to the area in 1996 displaying courtship activities. Raptor monitoring information on Map 2-19A must be updated prior to any site disturbing activities associated with the Cottonwood Fan Portal if the activities

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will occur during nest or rearing of young. The permit must include the current status of these birds and reference the potential for nesting of Peregrines adjacent to or within the permit area.

The permit states that no threatened or endangered species occur on the site property (1976) (page 2-172). The USFWS considers no findings statements only valid for six months. The Division requires a new statement of findings by qualified persons every five years or sooner if conditions change or new activity occurs (i.e. reclamation activities).

Findings:

The permittee must provide the following, prior to approval, in accordance with the requirements of:

R645-301-121.100 and R645-301-322, The permit must contain current information concerning the status and presence of threatened and endangered species within or adjacent to the permit area. Map 2-19A, Raptor Nesting Location & Habitat Map, with a current legend and information must be updated. For the purposes of this review the required information must be submitted only if construction work is done during critical time periods of the birds.

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 783.22; R645-301-411.

Analysis:

The stated premining and hence postmining land use is range forage and wildlife habitat. The land in the Cottonwood portal area is used primarily for spring and winter range forage, wildlife habitat and mineral mining. It seems doubtful that cattle would ever use the steep slopes of the revegetated disturbed areas in the Cottonwood fan portal area. If the permittee desires, the requirement to return the site to a grazing land use may be revised. By eliminating this land use the requirement for a production success standard is also eliminated.

No comments could be found in the permit from the surface land owner concerning the proposed reclamation and post mining land use. The L.D.S. Church is shown as the land owner.

Findings:

The permittee must provide the following in accordance with the requirements of :

R645-301-412.200, A copy of the comments from the land owner concerning the proposed reclamation and the post mining land use must be included in the permit.

VEGETATION RESOURCE INFORMATION

Regulatory Reference: R645-301-320.

Analysis:

The Cottonwood Fan Portal Reference area was measured for vegetative cover and shrub density, the date and methods of measurement are not reported. The total living cover was estimated to be 42.75 percent and 624 individual tree and/or shrubs per acre. Productivity was estimated at 1,800 pounds forage per acre based on the reference area in October 1989 (page 2-158.1).

Findings:

The permit is in compliance with the requirements of this section.

REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

Analysis:

General Requirements

The seed mixture to be used for final revegetation on the disturbance associated with the Cottonwood Fan Portal (page 4-19) will be broadcast seeded by hand or with a hydromulcher. The seed mixture contains several introduced species. In this area numerous native species are available and are known to support the postmining land uses. The mixture must be revised to eliminate all introduced species. The Division should be contacted if assistance is desired in building a revised seed mixture. The results of the Trail Canyon test plots removed in 1991(?) should be reviewed when determining which species to use in the mixture. The operator proposes to use containerized tree and shrub transplants to establish the woody species component of the vegetation. The Operator and the Division have extensive experience in

planting woody species from seed and the Operator may want to modify the plan. The proposed planting plan meets the requirements of the regulations however, a more cost effective plan could also be proposed.

Mulching and Other Soil Stabilizing Practices

Seeded areas will be covered with hay mulch and netting or erosion control mulch blanket. If the seed is hydroseeded then a hydromulch is proposed for use. The use of hydromulch on slopes steeper than 3:1 is not approved and the operator must propose another method to provide for surface stabilization for seeding establishment. The detail provided on maps of the proposed reclaimed surface is not sufficient to identify those areas which will be reclaimed to slopes more or less than a 3:1 steepness.

Standards for Success.

Insufficient map detail is provided to ascertain the areas of actual disturbance. Some "interim" revegetation has already occurred that may or may not need to be reseeded to meet the success standards for bond release. The plan or maps do not clearly show the areas which will be revegetated. A general disturbed area boundary line is shown on some maps but not all of the area has been disturbed. The operator must provide a map and description of the area which will be revegetated. The operator must describe and/or show on the map the area of previous seeding and the disposition of that area during current reclamation activities.

Findings:

The permittee must provide the following, prior to approval, in accordance with the requirements of:

R645-301-353.120, The seed mixture must be revised to exclude all introduced species. Sufficient native species are available for seeding to meet the approved postmining land use.

R645-301-355, The permittee must provide maps of the post disturbance topography which allow sufficient information and detail to review mulching and success standards of the proposed reclamation work.