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DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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TO: **Internal File**

FROM: Paul B. Baker, Reclamation Biologist and Project Team Lead 

RE: Miller Canyon Portals Phase III Bond Release Application, PacifiCorp, Cottonwood\ Wilberg Mine, C015/019-BR99D-1

**SUMMARY:**

On December 23, 1999, the Division received a proposal for Phase III bond release for the Miller Canyon portal area of the Cottonwood Mine. These are remote portals, and the only disturbances are the portals and immediately adjacent areas. Total disturbance is 0.02 acres. PacifiCorp is not seeking bond reduction; rather, they want to be released from reclamation liability. The bond release was advertised in the *Emery County Progress* April 25 through May 16, 2000. The Division's technical analysis of this proposal was sent October 30, 2000, and PacifiCorp responded with a submittal the Division received February 20, 2001.

In its cover letter and technical analysis of the first submittal, the Division explained that the ten-year period for extended liability and successful revegetation applies to this site. The Division also said the site may meet the requirements for Phase I bond release but that certain deficiencies would need to be addressed in the mining and reclamation plan and in the bond release application before Phase I bond release could be given.

In this application, PacifiCorp is proposing revegetation success standards and methods for monitoring the vegetation for ten years, so it appears this is no longer a proposal for final bond release.

TECHNICAL MEMO

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**TECHNICAL ANALYSIS:**

**RECLAMATION PLAN**

**REVEGETATION SUCCESS STANDARDS**

Regulatory Reference: R645-301-356

**Analysis:**

**Revegetation methods**

In 1999, the applicant proposed a specific plan for reclaiming the portals in Miller Canyon. Before this, the approved mining and reclamation only said these portals would be sealed from inside the mine. There was no other information about what reclamation methods would be used. The plan does not say the portal areas will not be revegetated.

Appendix XXII of the current mining and reclamation plan is essentially a description of what reclamation activities occurred at the site, so there are no changes to this section under the proposed amendment. The portals were permanently sealed in 1987, and they were backfilled and seeded in 1999. The reclamation work done in 1999 included establishing a water discharge point in portal No. 1, backfilling with rock, bringing in soil material by helicopter, spreading this material and soil from adjacent areas by hand, incorporating mulch, seeding, and covering the areas with straw mulch and netting. Rocks and tree branches were also brought in by helicopter to help anchor the netting and to make the sites blend as well as possible with adjacent areas.

The work the applicant did to restore the area to a natural appearance is commendable, and in 2000, the Board of Oil, Gas and Mining gave an Earth Day Award for this reclamation work.

**Revegetation success standards**

The postmining land use in the area of the portals is a wildlife habitat. The requirements of R645-301-356 for this use are that the vegetation is judged on the basis of tree and shrub stocking and vegetative ground cover. Specific tree and shrub stocking density requirements are determined by the Division in consultation with appropriate wildlife management agencies.

According to the application, a reference area will be located adjacent to the reclaimed portals, and cover and diversity of the reclaimed area will be compared with this reference area. The application also discusses specific methods for measuring cover and judging whether it is adequate. These methods are in accordance with the performance standards and are acceptable.

The application does not specify a particular area as the reference area, but the Vegetation Information Guidelines are very flexible about the type of standard to be applied when the area of the disturbance is less than one acre. Division biologists have discussed the standard with the applicant's personnel and agreed that an unspecified undisturbed area adjacent to the portals could be used. Because the disturbed areas are very small, it should be possible to measure all of the vegetation on them rather than taking samples. By doing this, it would not be necessary to apply statistical tests.

The woody plant density success standard has been set at zero shrubs and trees per acre. The Division feels the site can meet the postmining land use without having any shrubs or trees as long as there is as much vegetation cover as in adjacent areas and erosion is being controlled. Wildlife can gain access to the site, and the area contains elk winter range. However, shrubs are not as important for elk forage as they are for some other big game species, and the extremely steep terrain and limited amount of forage on the slope restrict the value of the area for big game habitat.

At the time of bond release, similarity between the reclaimed area and the corresponding reference area will compare life forms and/or species present in each community by using one of the similarity indexes in Appendix B of the Vegetation Information Guidelines.

Regulation R645-301-357 requires a period of extended responsibility for successful revegetation after the last augmented seeding, irrigation, or other work. This period is five years for areas with more than 26 inches of annual precipitation and ten years for areas with less than 26 inches of precipitation. It is assumed that the period for the Miller Canyon portals is ten years, and the application shows a ten-year monitoring schedule. Although the area would be checked yearly for pest and erosion problems, the revegetation inventory for bond release would only be done in the ninth and tenth years.

According to the application, rills and gullies will be filled and seeded if they develop, and the application says this repair work will follow regulations R645-301-357.360 through R645-301-357.365. The applicant needs to be aware that repairing rills and gullies, whether or not they are reseeded, can result in increasing the liability period for successful reclamation.

The success standards proposed in the application meet regulatory requirements and can be approved.

**Findings:**

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

TECHNICAL MEMO

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## **BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645 -301-800, et seq.

### **Analysis:**

The applicant is required to submit the bond release application during a season when it is possible to evaluate the success of reclamation. The Division received the application December 23, 1999, which is not normally a time when it is possible to easily view or gain access to the site. However, since the Division has delayed analyzing the bond release application, the timing of the submittal is not critical.

The applicant submitted copies of letters it sent to owners of land in the area and to local, state, and federal agencies. The application also includes a copy of the affidavit of publication for the public notice that was published in the *Emery County Progress* April 25 through May 16, 2000.

The current mining and reclamation plan contains concurrence letters from the Forest Service and the state Division of Wildlife Resources, and the application has a letter from the Bureau of Land Management. The Bureau of Land Management said they have no objections to the release of liability for the breakouts.

### **Findings:**

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

### **RECOMMENDATIONS:**

Information in the reviewed sections of the application is adequate for approval and incorporation into the mining and reclamation plan.