

0031



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

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

12 March, 1997

TO: File

THRU: Daron Haddock, Permit Supervisor *DH*

FROM: Jess Kelley, Reclamation Specialist *JK*

RE: Review of Reclamation Plan, PacifiCorp, Cottonwood/Wilberg Mine, ACT/015/019, Folder #2, Emery County, Utah

SUMMARY

The Cottonwood Fan Portal area was initially disturbed in the early 1980's. At that time, it was the intention of the permittee to construct a fan portal and a facilities pad there. However, conditions changed and this plan was never carried out. The salvaged topsoil and subsoil material remained where they had been stockpiled and the cuts for the planned facilities remained, but no facilities were built and nothing further was done with the area.

In 1995, the permittee notified the Division that it planned to reclaim the area sometime in the spring and summer of this year. The Division then decided to review the reclamation plan, which it had approved in the 1980's, for technical adequacy and regulatory compliance.

This memorandum constitutes this writer's review of the approved reclamation plan.

TECHNICAL ANALYSIS

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

Analysis:

The plan does not provide for returning the Cottonwood Fan Portal area to approximate original contour (AOC). Plate 4-7--Reclamation Cross Sections, which actually consists of 8 sheets, shows many areas where vertical and near-vertical cuts and long man-made slopes are to be left as they are, completely unreclaimed, despite the presence of large volumes of stockpiled material.

Findings:

The plan does not fulfill the requirements of this section.

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

R645-301-553.110, The permittee must revise the plan to provide for returning the Cottonwood Fan Portal area to approximate original contour (AOC). The revised plan must provide for the elimination of all cuts and the backfilling of all other areas, using all reasonably available spoil, so that their final configuration is as close as possible to the original.

BACKFILLING AND GRADING

Regulatory Reference: 30 CFR Sec. 785.15, 817.102, 817.107; R645-301-234, -301-537, -301-552, -301-553, -302-230, -302-231, -302-232, -302-233.

Analysis:

As discussed under **APPROXIMATE ORIGINAL CONTOUR RESTORATION** above, the plan does not provide for the restoration of the Cottonwood Fan Portal area to approximate original contour (AOC).

According to the surveyed cross sections of Plate 4-7--Reclamation Cross Sections, almost 50,000 cubic yards of material was stockpiled from this area and is available for its reclamation. However, the backfilling and grading plan, as represented on Plate 4-7, will use only about 8,000 cubic yards--about 15%--of this material.

Furthermore, according to a stability analysis done in 1980 by the consulting firm of Rollins, Brown & Gunnell, Inc., which is referenced on page 4-4.1 of the plan, the reclaimed slopes in the Cottonwood Fan Portal area can be restored to a slope of almost 1.3h:1v and still achieve a static stability safety factor of 1.5. According to the cross sections of Plate 4-7, most of the original slope is less than 1.3h:1v.

There is clearly room for improvement of the backfilling and grading plan so that all of the available material will be used and the area will be restored to a configuration which is closer to the original.

Findings:

The plan does not fulfill the requirements of this section.

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

R645-301-553.100, The permittee must revise the backfilling and grading plan to provide for complete reclamation of the Cottonwood Fan Portal area. The revised backfilling and grading plan must take into account all of the material available, the static stability constraint set forth in the Rollins, Brown & Gunnell analysis, which is part of the approved plan, and the possibility of achieving the original slope.

RECOMMENDATIONS

It is recommended that the plan be revised according to the deficiencies listed above before the reclamation of the Cottonwood Fan Portal area be allowed to proceed.