

0008



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)

May 2, 2000

TO: Internal File

THRU: Joe Helfrich, Project Team Lead

FROM: Paul Baker, Reclamation Biologist

RE: Hardscrabble As-Built, Castle Gate Holding Company, Castle Gate Mine, ACT/007/004-AM00A, Internal File

*APR 28 5/15/2000*  
*PPB*

**SUMMARY:**

The permittee for the Castle Gate Mine has been reclaiming Hardscrabble Canyon since 1993. The substation at the upper end of the canyon remains, but all other facilities have either been removed or modified for the postmining land use. The canyon containing the No. 4 Mine was reclaimed in 1993 with some additional work done in 1995. The Goose Island refuse disposal area was reclaimed in 1984, and part of this area was reworked in 1999. The rest of the canyon was regraded and reseeded in 1996 through 1999. The Board of Oil, Gas and Mining gave the permittee an Earth Day Award for the reclamation work done in 1996.

Some of the plan the Division originally approved was contingent on what conditions were found during regrading. For example, there are some cliffs near the lower gate that were covered with sidecast material during original construction, and it was not known how much sidecast material was present or whether it would be possible to expose these cliffs. Because there were unknown conditions, it was necessary to make numerous field modifications, and these should be reflected in the current amendment.

The Division received the original as-built submittal on April 24, 2000, and modifications were made in a submittal received April 28, 2000.

**TECHNICAL MEMO**

---

**TECHNICAL ANALYSIS:**

**REVEGETATION**

Regulatory Reference: R645-301-341

**Analysis:**

In reclaiming Hardscrabble Canyon, the permittee mostly followed the approved mining and reclamation plan although some changes were made. The plan included applying about two tons per acre of alfalfa hay as a soil amendment, mixing this into the soil through gouging, seeding, applying about one ton per acre of straw mulch, then hydromulching with about 500 pounds per acre of wood fiber mulch and tackifier to hold the straw.

Appendix 3.5 includes information about the seed mixes used at the site. For various reasons, especially unavailability of seed, substitutions were made in both the seed and planting mixes. The changes were not extensive, and the mixes used were basically the same as those shown in Chapter 9.

The proposed amendment accurately reflects the methods that were used, and the portions pertaining to revegetation can be approved.

**Findings:**

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

**RECOMMENDATIONS:**

Portions of the amendment pertaining to revegetation are considered complete and accurate and can be approved.