



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)

June 24, 1999

TO: File

THRU: Joe Helfrich, Permit Supervisor *JH*

FROM: Priscilla Burton, *B* Soils Reclamation Specialist

RE: Barn Canyon Ventilation Facility, Permit Amendment, Cyprus Plateau Mining Corporation, Willow Creek Mine, ACT/007/038-98B, Folder #2, Carbon County, Utah

SYNOPSIS:

Cyprus Plateau Mining Corporation (CPMC) has submitted an amendment for the Barn Canyon Ventilation Facility. The ventilation facility will consist of a ventilation shaft and emergency escape hoist. The original Barn Canyon Ventilation submittal was on March 6, 1998, followed by a revision dated July 13, 1998 and a second revision dated March 8, 1999. The third revision, dated June 3, 1999 was written in response to the Technical Analysis dated May 3, 1999. This soils Technical Analysis addresses the June 3rd submittal.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 783.21, 817.200(c); R645-301-220, -301-411.

Analysis:

Standard soil descriptions were completed in the field and a total of eleven soil samples were collected from the four pits. Copies of the actual field data sheets are provided within Volume 9, Exhibit 5 of the MRP, however, the Table of Contents to Exhibit 5, Volume 9 does not reflect this addition. Page 3.1-7 of the submittal should identify the location of the field notes as being located in **Volume 9**, Exhibit 5 of the MRP.

Findings:

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

R645-301-120, Identify the location of the field notes on page 3.1-7 and update the soils survey appendix table of contents to reflect the addition of the January 1998 Barn Canyon soil survey.

OPERATION PLAN

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil salvage projections were updated for each Map Unit in a chart on page 3.1-32 of the submittal. This chart reflects the total available topsoil within the disturbed area boundary rather than the anticipated area of disturbance. Consequently, this chart does not clarify the narrative, rather it adds confusion. The reader can not reconcile the information in the chart on page 3.1-32 with that provided in Table 4.2-1 and 4.2-1A. Also, the information provided in this chart is erroneously used to represent actual salvage volumes on page 5.4-12 and in Table 5.4-1.

Table 4-2.1 no longer provides information on acreage of disturbance and depth of salvage. It has been altered from that in the approved MRP. Table 4.2-1A does contain acreage and depth of salvage information, but one cannot use this information to arrive at the volume of soil salvaged listed in the table. This is because the volumes noted are actual volumes recovered, but the depths of recovery are projections. Perhaps Table 4-2.1 should be titled Actual Soil Recovery and Table 4-2.1A should be titled Projected Soil Recovery to eliminate confusion for the reader.

A footnote to Table 5.4-1 indicates that the mollisol soils salvaged will be taken to the Willow Creek Mine topsoil stockpile and identified as mollisol topsoil with a sign.

Figure 3.1-1 Barn Canyon Shaft Facility Soils Study must be checked by the soil scientist who conducted the study, Jim Nyenhuis

Findings:

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

R645-301-231.400, Update topsoil salvage projections listed in table form on page 3.1-32 for each soil survey Map Unit, based upon the anticipated area of disturbance.

R645-301-121.100 and R645-301-121.200, The table at the top of page 3.1-32, Tables 4-2.1, Table 4-2.1A, the last paragraph on page 5.4-12 and Table 5.4-1 must be edited for clarity and brought into agreement as described in the technical analysis section above.

R645-301-222, Figure 3.1-1 Barn Canyon Shaft Facility Soils Study must be checked by the soil scientist who conducted the study, Jim Nyenhuis.