



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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September 4, 2000

TO: [REDACTED]

THRU: Paul Baker, Team Lead *AB*

FROM: Wayne H. Western, Senior Reclamation Specialist *WHW*

RE: Phase III Bond Release for Miller Canyon, PacifiCorp, Cottonwood / Wilberg Mine AC [REDACTED] 99D

**SUMMARY:**

On December 23, 1999, the Division received a bond release application for the Miller Canyon Portals located at the Cottonwood Mine. Additional information on reclamation in Miller Canyon is found in Appendix XXII. In August 2000 the Division began to process the request. The Division found several deficiencies with the backfilling plan and the maps.

**RECLAMATION PLAN**

**APPROXIMATE ORIGINAL CONTOUR RESTORATION**

Regulatory Reference: 30 CFR Sec. 784.15, 785.16, 817.102, 817.107, 817.133; R645-301-234, -301-270, -301-271, -301-412, -301-413, -301-512, -301-531, -301-533, -301-553, -301-536, -301-542, -301-731, -301-732, -301-733, -301-764.

**Analysis:**

The permittee met the general requirements for restoring the site to the approximate original contours. The reclaimed topography blends into the surrounding topography. French drains allow any water that will drain from the mine to mimic natural seeps in the area. Photographs in Appendix XXII show the operational and reclaimed phases of the Miller Canyon site. The photographs show that the reclaimed site is similar in grade to the surrounding area.

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TECHNICAL MEMO

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**Findings:**

The requirements of this section of the regulations are considered adequate in regard to Phase I and Phase II bond release.

**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:**

The general engineering requirements for backfilling and grading are that the site is restored to the approximate original contours, eliminate all highwalls, spoil piles and depressions; achieve a postmining long term static safety factor of 1.3. In the December 23, 1999, submittal the permittee does not address highwall elimination and slope stability.

From information in the Appendix XXII, the Division found that the site had been restored to the approximate original contours. See the AOC section for more details.

The permittee does not specifically address the highwall elimination. However, the photographs in Appendix XXII show that the portals have been backfilled. From the photographs the highwalls appear to be completely backfilled. However, since the disturbed area was not marked and natural cliffs exist next to the portal the Division cannot make a finding at this time. Before Phase I bond release can be given the Permittee must show that all highwalls were eliminated.

The area should not have had any spoil piles or large depressions since surface activities were limited to the construction of the breakouts. The photographs in Appendix XXII do not show any spoil piles or large depressions. In the December 23, 1999, submittal the permittee states that all non coal and coal waste was removed from the site.

The permittee did not address slope stability. The permittee needs to show that the slopes have a minimum static safety factor of 1.3.

The permittee did not address how the exposed coal seams were covered. The photographs in Appendix XXII show that coal seams near the portals were covered and that there are coal seams in the area are naturally exposed. Since the disturbed area boundaries are not shown, the Division cannot make a finding about the coal seam covering plan.

**Findings:**

Information provided in the proposed amendment is not considered adequate to meet the requirement of this section. Prior to approval, the permittee must provide the following in accordance with:

**R645-301-553.120**, The permittee must state how highwalls at the Miller Canyon site have been eliminated.

**R645-301-553.130**, The permittee must show that the reclaimed slopes will have a static safety factor of 1.3 or higher.

**R645-301-553.300**, The permittee must address how the coal seams that were exposed during mining were covered.

**MINE OPENINGS**

Regulatory Reference: 30 CFR Sec. 817.13, 817.14, 817.15; R645-301-513, -301-529, -301-551, -301-631, -301-748, -301-765, -301-748.

**Analysis:**

The Miller Canyon portals were sealed according to a plan approved by MSHA and the Division. Seals were placed in the portals and then the entrances backfilled. Due to natural cliff failure the backfill did not extend to the seal. A cross section of the site showing how the portals were sealed is Appendix XXII. Because the portals are in a remote location, the Division is not concerned with the public or wildlife gaining access to the mine through the Miller Canyon portals even if the backfill does not extend to the seals.

**Findings:**

The requirements of this section of the regulations are considered adequate in regard to Phase I and Phase II bond release.

**ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 701.5, 784.24, 817.150, 817.151; R645-100-200, -301-513, -301-521, -301-527, -301-534, -301-537, -301-732.

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TECHNICAL MEMO

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**Analysis:**

No roads are associated with the Miller Canyon portals.

**Findings:**

The requirements of this section of the regulations are considered adequate in regard to Phase I and Phase II bond release.

**MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-323, -301-512, -301-521, -301-542, -301-632, -301-731.

**Analysis:**

**Bonded area map**

The permittee did not give the Division any bonded (disturbed area) maps for the Miller Canyon area.

**Reclamation backfilling and grading maps**

The permittee did not give the Division any backfilling or grading maps in the bond release package. In Appendix XXII, the permittee included a general cross section of the reclaimed portals. The cross section was **not** certified by a professional engineer and give only conceptual information.

**Final surface configuration maps**

The permittee did not include any final surface configuration (topographic) maps in the bond release package.

**Findings:**

Information provided in the proposed amendment is not considered adequate to meet the requirement of this section. Prior to approval, the permittee must provide the following in accordance with:

**R645-301-542.200 and R645-301-512.100**, The permittee must give the Division certified maps that show the disturbed area boundaries, the final surface configuration (topography) and cross sections of the reclaimed area.

## **BONDING AND INSURANCE REQUIREMENTS**

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

### **Analysis:**

#### **Determination of bond amount**

The permittee does not seek any bond reduction for the Miller Canyon portals. Since no bond reduction is sought, the Division will not recalculate the bond at this time.

### **Findings:**

The requirements of this section of the regulations are considered adequate in regard to Phase I and Phase II bond release.

### **RECOMMENDATIONS:**

The Division should deny Phase I and Phase II bond release until the permittee resolves all the deficiencies in this TA.