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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

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

January 9, 1995

Paige Beville
Manager, Environmental, Health and Safety
ARCO Coal Company
555 Seventeenth Street
Denver, Colorado 80202

Re: Phase II Bond Release, Gordon Creek #3 and #6 Mines, Mountain Coal Company, ACT/007/017, Folder #3 and #4, Carbon County, Utah

Dear Ms. Beville:

Paige

Enclosed please find the Decision Document and Findings for the Phase II Bond Release for Gordon Creek #3 and #6 Mines. Pursuant to these findings, the Division will release \$85,429 (Phase II) for the Gordon Creek #3 and #6 Mines. The remaining \$52,971 represents the amount of bond retained for the revegetated area which would be sufficient to cover the cost of reestablishing revegetation if completed by a third party.

If you have any questions, please call me or Pamela Grubaugh-Littig.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Lowell P. Braxton'.

Lowell P. Braxton
Associate Director, Mining

Enclosure

cc: Pamela Grubaugh-Littig
Daron Haddock
Joe Helfrich



DECISION DOCUMENT
PHASE II BOND RELEASE
GORDON CREEK #3 AND #6 MINES
ACT/007/017

SUMMARY OF THE REVIEW PROCESS

The Gordon Creek #3 and #6 Mines is a reclaimed underground coal mine located in Coal Canyon, approximately 20 road miles northwest of Price, Utah . The permit area is located on the Jump Creek Utah, U.S. Geological Survey 15 minutes quadrangle map. The Gordon Creek #3 and #6 Mines shared common surface facilities, except conveyors and stockpiles. The Gordon Creek # 3 Mine was opened in 1969 and was continuously operated until September 1983. Three underground operations were located within a short distance of the Gordon Creek #3 Mine , - Sweets, National and Consumers Mine which were active in the 1940's, but are now closed. The Gordon Creek #6 Mine, located 160 feet above the #3 Mine was opened in 1978, although the construction and disturbance was created in 1969 (the same time as the #3 opened), and was operated until November 1980, when it closed due to economic and safety factors. Portals were sealed for both mines in September 1983.

The permit area is located on the eastern edge of the Wasatch Plateau and is characterized by a steep, narrow canyon containing conspicuous sandstone cliffs. The elevation of the area lies between 7,550 and 7,850 feet above sea level. Vegetation types adjacent to the mine area were oak-shrubland and sagebrush-grassland communities. The permit area cover 668 acres with the bonded area of about 28 acres. The mine permit area is located on mostly privately-owned land, with some state lands. Coal was mined from fee, state, county and federal leases.

Mine site reclamation included portal seals, structural removal, coal waste removal, backfilling, grading and revegetation. The Gordon Creek #3 and #6 Mines completed Phase I reclamation during the period of September 15, 1985 through November 30, 1986. The original bond posted for this property was \$346,000. The Division approved a 60% bond release (\$216,062) on June 26, 1987.

The Mountain Coal Company submitted a Phase II bond release application to the Division for the Gordon Creek #3 and #6 Mines on December 13, 1994 including a SEDCAD analysis and vegetative information. Mountain Coal Company requested release of an additional 30% of the original bond, or \$103,800 for the Phase II bond release.

The Phase II bond release inspection was conducted on May 18, 1994 with personnel from the Division, OSM-Albuquerque Field Office, OSM- Western Support Center, and Mountain Coal Company in attendance.

FINDINGS FOR PHASE II BOND RELEASE
GORDON CREEK #3 AND #6 MINES
ACT/007/017

In accordance with R645-301-880.120 and 200, the Mountain Coal Company published the newspaper advertisement for the Phase II bond release in the Sun Advocate on September 21, 28 and October 5 and 12, 1993. The Division scheduled the Phase II bond release inspection for May 18, 1994 by sending letters on April 22, 1994. This inspection was scheduled when weather permitted for inspection and evaluation of the reclamation work involved.

The Phase II bond release inspection was conducted on May 18, 1994 with the following attendees:

DOGM:	Susan White, Tom Munson, Henry Sauer, Pamela Grubaugh-Littig
OSM-AFO:	Edzel Pugh and Russ Porter
OSM-WSC:	Daylan Figgs and Phil Reinholtz
Mountain Coal Company:	Dan Guy and Dana Ballard (Blackhawk Engineering)

Vegetation Data for Phase II Bond Release

Mountain Coal Company notified the Division of its intent to conduct vegetation sampling on July 29 through July 31, 1993 for Phase II bond release. The Division subsequently notified OSM and invited them to conduct their own sampling. Division vegetation sampling was completed on August 6 and 10, 1993.

Mountain Coal Company sampled for vegetative cover and woody species density. Vegetative cover and woody species density met the Division's requirement for sample adequacy while production measurements were only taken to provide guidance to Mountain Coal Company for final bond release. Mountain Coal Company summarizes the statistical differences in the data in Table 33 of the vegetation report for bond release. The report finds that the reclaimed area is either significantly greater than or equal to the vegetation reference area for vegetative cover and woody plan density.

The Division sampled only for vegetative cover on the reclaimed mine site and the reference area. Vegetation composition and diversity data were obtained from

the cover data. The Division also found that the reclaimed area was either significantly greater than or equal to the vegetation reference area.

Statgraphics, Version 6 (1992) was used for all of the statistical analysis. The Division found no significant difference between the vegetation on the lower pad area and the reference area. Data from the Division and Mountain coal Company indicate the same statistical conclusion. According to the Division's definition of successful revegetation establishment, Gordon Creek #3 and #6 Mines have met the minimum qualification for the vegetation cover portion of Phase II bond release. R645-301-356.120 states that the reclaimed area only has to meet 90 percent of the success standard. All of the statistical conclusions used in this analysis were based on 100 percent of the standard. This fact provides greater confidence for Phase II bond release at this site. All of this information was forwarded to OSM-AFO on May 5, 1994, prior to the bond release inspection.

A final report by Division Biologist, Susan White, was done July 7, 1994 subsequent to the Phase II bond release field inspection and recommended Phase II bond release pursuant to R645-301-880.320.

Contribution of Additional Suspended Solids

An analysis related to past and present erosion rates from reclaimed mine sites were submitted by Mountain Coal Company using a Sediment Production Comparison generated by the Civil Software Design SEDCAD + Program, Version 3 (1992). The runoff volume, peak flow and sediment concentration were compared between past and present activities. Initial results of this computer analysis indicated that the sediment loads from the reclamation activities are no different than the pre-mining conditions. This information was forwarded to OSM-AFO on May 5, 1994.

The Universal Soil Loss Equation used in SEDCAD does not allow for gully erosion and an on-site assessment was made to ascertain any significant rill or gully erosion. This field assessment was made May 18, 1994. Based on visual observation by the Division Hydrologist, Tom Munson, he concluded the site was stable. A Phase II bond release was recommended based on the outcome of the site visit observation and the Sediment Production Comparison for pre- and postmining pursuant to R645-301-880.320, as well as reviewing past inspection report to document overall stability. The site has sustained several severe storm events successfully.

This Phase II bond release encompasses the entire surface disturbance for the Gordon Creek #3 and #6 Mines.

Remaining Reclamation

Reclamation was completed in 1986 and the ten year bond liability period is completed in 1996. Mountain Coal Company started collecting the requisite vegetative information for two years for final bond release in 1994.

Other Actions Surrounding Bond Release Inspection

On June 20, 1994 TDN X94-020-179-002 TV3 was received at the Division for 1) "Failed to demonstrate in writing to the Division that there was insufficient spoil to backfill face-up at #6 Mine", 2) "Failed to use all reasonably available spoil to backfill the face-up at #6 Mine", and 3) "Failed to eliminate all highwalls at face-up at #3 Mine", as a result of the May 18, 1994 Phase II Bond Release inspection. The Division submitted a response to OSM-AFO for this TDN on June 30, 1994. On July 18, 1994, TDN #94-020-179-002 TV1 was issued as a result of TDN X94-020-179-001TV3 being withdrawn and read: "Failed to eliminate all highwalls at Mine #3 and #6". The Division responded on July 28, 1994, but this response was found inappropriate by OSM-AFO on August 18, 1994.

On August 29, 1994, the Division responded to the August 18, 1994 OSM-AFO finding by letter to Ed Kay, Deputy Directory of OSM in Washington requesting and informal review of the TDN, i.e. review of the documentation surrounding the TDN issue. On September 9, 1994 the Division requests a stay of the Informal Appeal based on pending acquisition of field data and submittal of additional informal regarding availability of excess spoil at the mine. Verbal concurrence from OSM-Washington is granted on September 23, 1994 to this request. On September 27, 1994, the Division requested a second extension to October 5, 1994 to formalize the Division's position on the availability of spoil at this site. By letter dated October 3, 1994 to Ed Kay, OSM-Washington from Lowell Braxton, Associate Director, Mining, Division, a request is made to put the TDN informal appeal on hold until the October 1994 site visit by OSM-Washington is completed.

A site visit by OSM-Washington, OSM-AFO, OSM-WSC, and the Division to the Gordon Creek #3 and #6 Mines on October 24, 1994 with the following attendees:

OSM: Ed Kay and Vermal Davis (Washington), Charles Sandberg (OSM-WSC), Thomas Ehmett and Edzel Pugh (OSM-AFO)

Division: Lowell Braxton, Pete Hess, and Joe Helfrich

Mountain Coal Company: Paige Beville and Dan Guy

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Pursuant to the October 24, 1994 site visit, OSM-Washington reversed the AFO decision of August 18, 1994.

On August 22, 1994 Lowell Braxton sent a letter to Thomas Ehmett requesting comments on any other outstanding issued at the Gordon Creek #3 and #6 Mines. No comments on any technical issues related to the Phase II bond release have been received to date.

Decision for Phase II Bond Release

Based on the documented findings that: 1) vegetation has been established pursuant to R645-301-880.320, and 2) no reclaimed lands at the Gordon Creek #3 and #6 Mines are contributing additional suspended solids to streamflow or runoff outside the permit area in excess of the requirement set by UCA 40-10-17 (j) of the Act and by R645-301-751, the Division proposes to release \$85,429.

The remaining \$52,971 represents the amount of bond retained for the revegetated area which would be sufficient to cover the cost of reestablishing revegetation if completed by a third party.