

a

#3981
R

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

December 5, 2011

TO: Internal File

THRU: Joe Helfrich, Team Lead *JH*
Steve Christensen, Permit Supervisor *SC*

FROM: Peter Hess, Environmental Scientist III, Reclamation Cost Estimate and Bond Review *PHH by SCS*

RE: Midterm Permit Review, Canyon Fuel Company, LLC, Gordon Creek 2, 7 & 8, C/007/0016, Task ID #3981

SUMMARY:

The Division initiated a Mid-term Permit Review of the Gordon Creek 2 / 7 and 8 Mines on December 1, 2011. These Mines operated until closed in 1990. Reclamation of the portal areas, operational pads and accesses were completed in 1997. Re-grading of the access road was completed in July of 1999.

Phase I bond release of the site was approved in October of 2003.
Phase II bond release was approved in March of 2007.
The three cell sediment pond was reclaimed in October of 2007.

To date, a Phase III bond release application has not been received from the Permittee, Mountain Coal Company.

The site is well vegetated; a single stock pond (Jacob's Pond) exists at the confluence of the main forks. Springs emanating from the bank above the pond in the main canyon are the main source of water for this pond.

All reclamation work at the site, has at this time, been completed.

At the request of the surface landowner, Canyon Fuel Company, LLC, installed a new dual gate at the terminus of the County Road in the fall of 2011.

The Division's inspection frequency for this site is monthly.

TECHNICAL ANALYSIS:

RECLAMATION PLAN

BONDING AND INSURANCE REQUIREMENTS

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

Analysis:

General

All reclamation work at the site is complete. The site appears to be well vegetated, and there are no major erosion problems. Surface roughening of the reclaimed sediment pond area is retaining runoff inside the permit boundary.

The amount of bond being retained is relative to 31.79 acres of disturbance which must complete the requirements of a Phase III bond release application.

At this time, no additional reclamation work is needed; therefore any additional reclamation costs can be calculated.

Form of Bond

The form of bond held by the Division is a surety, issued by the St. Paul Fire & Marine Insurance Company (bond # 400KB056-CO). St. Paul Fire and Marine has an "A+" rating with A.M. Best, (as of September 30, 2011).

Determination of Bond Amount

The amount of bond which is currently held by the Division for the Gordon Creek property amounts to \$ 641,443.00.

A reverse analysis of the posted bond amount of \$ 641,443.00 was performed using that figure as the escalated amount to 2016 (the next mid-term permit review). The Direct Costs for (1) demolition and (2) backfilling and grading were determined to be zero in this analysis. The total direct cost for the calculation was determined to be \$ 441,747.00 (Revegetation Costs Only).

This cost was re-calculated at 26.8% to generate the indirect costs, calculated at \$ 118,388.00 (See Page 1).

Total Cost in 2011 dollars = \$ 560,135.00.

Escalating that amount to 2016 = \$ 49,236.00.

Total Escalated Reclamation Cost to 2016 = \$ 609,371.00.

The difference between the posted bond amount of \$ 641,443.00 and \$ 609,000.00 = \$ 32,443.00, which is +%.05%.

The revegetation cost was broken down in the following manner;

- 1) Re-seed/Re-mulch @ 1 Ton / Acre @ \$ 129 / Ton
 - 2) Equipment and Labor to Hydro-Seed = \$ 19.8 / 1000 square feet (32.52 acres)
 - 3) Seed Costs (Dugout Mix #1 cost figures used) \$ 394 / acres
-

Total Cost / 32.52 Acres = \$ 45,056

This analysis shows that the posted bond (\$ 441,747.00) is almost ten times more than the cost associated with re-seeding and re-mulching the entire 32.52 acres of disturbance.

At this time (December 2, 2011) the amount of bond posted for this site is more than adequate to maintain the site and the coal mining permit through 2016.

Terms and Conditions for Liability Insurance

The Permittee maintains general liability insurance coverage through the National Union Fire Insurance Company of Pittsburgh, Pa. Coverage is renewed annually, and the term of coverage extends from July 31 to July 31. The Division confirms that insurance requirements are being met four times a year, during each of the quarterly complete inspections.

Findings:

The amount of bond which is currently held by the Division for the Gordon Creek property amounts to \$ 641,443.00. The amount of bond posted for this site is adequate to maintain the site and the coal mining permit through 2016 (date of the next Mid-term Permit Review).