

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 13, 2005

TO: Internal File

THRU: Pam Grubaugh-Littig, Permit Supervisor

FROM: Wayne Western, Team Lead

RE: Phase I Bond Release for Gravel Canyon, Foundation Coal Company, Willow Creek Mine, C/007/0038, Task #2243

SUMMARY:

Foundation Coal Company applied for phase I bond release for the Gravel Canyon area of the Willow Creek Mine on May 5, 2005. They completed reclamation of the area in the fall of 2004.

This technical memorandum discusses the engineering and bonding issues pertaining to the application.

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TECHNICAL ANALYSIS:

RECLAMATION PLAN

APPROXIMATE ORIGINAL CONTOUR RESTORATION

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

Analysis:

The requirements to achieve approximate original contour restoration are a combination of performance standards for backfilling and grading, hydrology, postmining land use and revegetation. The performance standards include:

- Minimization off-site impacts.
- The final surface configuration closely resembles the general surface configuration of the land prior to mining.
- The topsoil/growth media are adequate to support the vegetation requirements.
- Erosion is minimized.
- The land is able to support the approved postmining land use.

The intent of the approximate original contour regulations is not to restore a site to the approximate premining elevation. Rather the intention of the regulations is to ensure that the reclaimed site has slope lengths and gradients that are within acceptable limits.

The main criterion that the Division uses to determine if the Permittee achieved AOC is whether the postmining topography, excluding elevation, closely resembles its premining configuration. Regulatory requirements that must be achieved include:

- Eliminate all highwalls (none at the topsoil storage area).
- Eliminate all spoil piles (none at the topsoil storage area).
- Eliminate all depressions with the exception of small depressions needed to retain moisture, minimize erosion, create and enhance wildlife habitat or assist revegetation.
- Minimize erosion and water pollution both on and off site.
- Support the postmining land use.

Exhibit 3.6-5AB provides reclamation topography and cross-section locations. The Permittee met the minimum requirements for achieving AOC because:

- There are no depressions at the site except for small depressions (pocks). The pocks are part of a standard surface roughening methods used to control erosion and water pollution.
- The slopes were reclaimed according to the approved reclamation plan
- The plan minimizes erosion and water pollution.
- The Division expects that the reclaimed site will support the postmining land use of grazing and wildlife habitat because the slopes blend with the surrounding area and the area was seeded.

Findings:

The information provided in the bond release package meets the minimum requirements of the approximate original contour requirements.

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:

General

The Permittee meet the general backfilling and grading requirements because:

- The area was reclaimed to the approximate original contour requirements. See the Approximate Original Contour section of the TA for details.
- The reclaimed slopes have a safety factor of 1.3 or greater and do not exceed the angle of repose. See Exhibit 3.6-5AB for as-built certifications.
- The Permittee reclaimed the site using surface roughening techniques (pocking). Pocking is an effective means to control erosion and water pollution.

Previously Mined Areas

Wayne although this site was previously disturbed, this is not a pre-SMCRA site. The R645 Rules allow the Division to enforce different standards to pre-SMCRA disturbed sites if highwalls or spoil piles are present. Since there are no highwalls or spoil piles associated with the substation area those rules do no apply for that area.

Pre-SMCRA highwalls do not exist in the Gravel Canyon site.

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Findings:

The information provided in the bond release package meets the minimum requirements of the backfilling and grading requirements.

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:

There were no mine openings at the Gravel Canyon site.

Findings:

The information provided in the bond release package meets the minimum requirements of the mine openings requirements.

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.

Analysis:

Reclamation

All roads, wheel tracks and pad areas where vehicles could travel were reclaimed.

Retention

No roads were retained.

Findings:

The information provided in the bond release package meets the minimum requirements of the mine openings requirements.

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:

Affected Area Boundary Maps

There was no change to the affected area boundary.

Bonded Area Map

There was no change to the bonded area.

Reclamation Backfilling And Grading Maps

The Permittee included the map Gravel Canyon As-Built Topography Treatment Profile and Cross-Sections Map, Exhibit 3.6-5AB with the bond release package.

Reclamation Facilities Maps

There are no reclamation facilities associated with the substation area.

Final Surface Configuration Maps

The Permittee included the map Gravel Canyon As-Built Topography Treatment Profile and Cross-Sections Map, Exhibit 3.6-5AB with the bond release package.

Certification Requirements.

The Permittee had all appropriate maps certified.

Findings:

The information provided meets the requirements for bond release.

BONDING AND INSURANCE REQUIREMENTS

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

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Analysis:

General

The Permittee address the general procedures for bond release as follows:

- The Permittee described the area for which Phase I bond release is being sought as on 5.75 acres of which 4.3 acres were disturbed pre-SMCRA acres in SE1/4SE1/4 of Section 35, Township 12 South, Range 9 East, SLB&M, Utah.
- The Permittee provided as built drawing Exhibit 3.6-5AB that shows acreage of disturbed areas in Gravel Canyon topsoil storage site.
- Exhibit 3.6-5AB provides dates of completion for the reclamation work and status of bond release.
- The Permittee included a brief history of the mining and reclamation activities.
- There were no ponds within the substation area. The Permittee used surface roughening techniques, such as pocking for sediment control.
- The Permittee requested that the designated part of the bond for Gravel Canyon, which is \$159,000, be reduce to \$95,400. The Permittee is seeking a 60% bond reduction, which is the maximum allowed under R645-301-880.310.

Determination of Bond Amount

The current bond for the Willow Creek Mine is \$7,866,000 in 2004 dollars. The Division updated the bond to 2007, next midterm, and the amount was \$7,992,000 in 2005. The increase in bond is \$126,000 that is more than what the Permittee requested in bond release. Therefore, the Division cannot approve bond release at this time.

Findings:

The information provided meets the requirements for bond release.

RECOMMENDATIONS:

The Division should approve Phase I bond release for Gravel Canyon but not reduce the bond. The bond should not be reduced because the reclamation cost estimate has been escalated to 2007 dollars and the amount of the bond increase exceeds the amount of bond release requested.