



State of Utah

Department of
Natural ResourcesROBERT L. MORGAN
*Executive Director*Division of
Oil, Gas & MiningMARY ANN WRIGHT
*Acting Division Director*OLENE S. WALKER
*Governor*GAYLE F. McKEACHNIE
Lieutenant Governor

OK

December 16, 2004

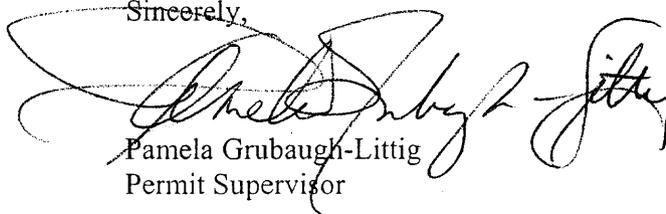
Dennis Ware, Controller
Castle Gate Holding Company
P.O. Box 30
Helper, Utah 84526-0030Re: Phase I Bond Release - Hardscrabble Substation Area, Castle Gate Holding Company, Castle Gate Mine, C/007/0004, Task ID #2037, Outgoing File

Dear Mr. Ware:

The above-referenced amendment has been reviewed. There are deficiencies that must be adequately addressed prior to approval. A copy of our Technical Analysis is enclosed for your information. In order for us to continue to process your application, please respond to these deficiencies by March 1, 2005.

If you have any questions, please call me at (801) 538-5268 or Wayne Western at (801) 538-5263.

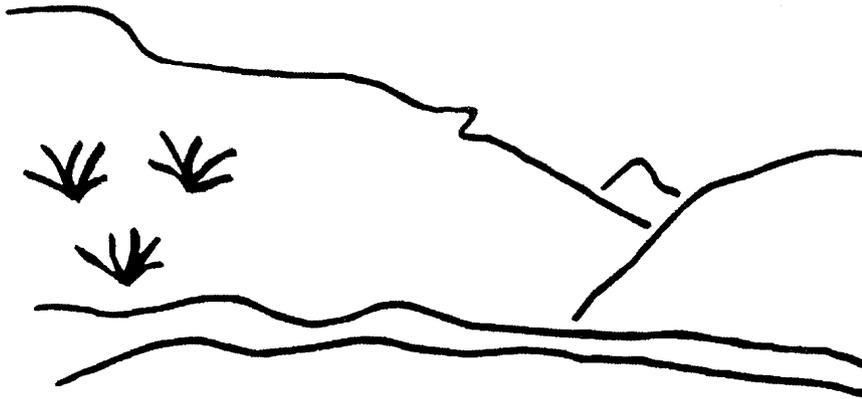
Sincerely,



Pamela Grubaugh-Littig
Permit Supervisor

an
Enclosure
cc: Price Field Office
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State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Castle Gate Mine
Phase I Bond Release Hardscrabble Substation
C/007/0004, Task # 2037
Technical Analysis
December 14, 2004

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TECHNICAL ANALYSIS

TECHNICAL ANALYSIS

The Division ensures that coal mining and reclamation operations in the State of Utah are consistent with the Coal Mining Reclamation Act of 1979 (Utah Code Annotated 40-10) and the Surface Mining Control and Reclamation Act of 1977 (Public Law 95-87). The Utah R645 Coal Mining Rules are the procedures to implement the Act. The Division reviews each permit or application for permit change, renewal, transfer, assignment, or sale of permit right for conformance to the R645-Coal Mining Rules. The Applicant/Permittee must comply with all the minimum regulatory requirements as established by the R645 Coal Mining Rules.

The regulatory requirements for obtaining a Utah Coal Mining Permit are included in the section headings of the Technical Analysis (TA) for reference. A complete and current copy of the coal rules can be found at <http://ogm.utah.gov>

The Division writes a TA as part of the review process. The TA is organized into section headings following the organization of the R645-Coal Mining Rules. The Division analyzes each section and writes findings to indicate whether or not the application is in compliance with the requirements of that section of the R645-Coal Mining Rules.

When review of an application results in findings of noncompliance with the R645-Coal Mining Rules, the Division discusses the deficiencies in the analysis sections and cites regulatory references for the deficiencies in the findings sections of the Draft TA. The regulatory references cited describe the minimum requirements for meeting the R645-Coal Mining Rules.

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TECHNICAL ANALYSIS

SUMMARY OF DEFICIENCIES

SUMMARY OF DEFICIENCIES

The Technical analysis of the proposed permit changes cannot be completed at this time. Additional information is requested of the Permittee to address deficiencies in the proposal. A summary of deficiencies is provided below. Additional comments and concerns may also be found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this review, any deficiencies will be evaluated for compliance with the regulatory requirements. Such deficiencies may be conditioned to the requirements of the permit issued by the division, result in denial of the proposed permit changes, or may result in other executive or enforcement action and deemed necessary by the Division at that time to achieve compliance with the Utah Coal Regulatory Program.

Accordingly, the Permittee must address those deficiencies as found within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

- R645-301-761;** The Permittee needs to include the as-built calculations and channel certification statements for drainages HCRD-12 and the swale road crossing in Appendices 3.3N and 3.3O. 9

- R645-301-761;** The Permittee needs to provide the as-built profiles and cross sections for drainages HCRD-12 and the swale road crossing in Exhibits 3.3-21 and 3.3-22, respectively, as referenced in Section 3.3. 11

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SUMMARY OF DEFICIENCIES

RECLAMATION PLAN

RECLAMATION PLAN

On September 14, 2004, the Permittee requests bond release for the 0.72-acre substation area of Hardscrabble. They reclaimed the area in the fall of 2002.

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:

- Off-site impacts are minimized.
- The final surface configuration closely resembles the general surface configuration of the land before 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 site meets the AOC requirements is whether the postmining topography, excluding elevation, closely resembles its premining configuration. The Permittee must achieved the following regulatory requirements:

- Eliminate all highwalls (none at this substation site).
- Eliminate all spoil piles (none at this substation site).
- Eliminate all depressions with the exception of small depressions needed to retain moisture, minimize erosion, create and enhance wildlife habitat or assist revegetation.
- All slopes will have a static safety factor of 1.3 or greater and not exceed the angle of repose.
- Minimize erosion and water pollution both on and off site.
- Support the postmining land use.

RECLAMATION PLAN

As-Built Reclamation Topography and Cross-section Location Map is Exhibit 3.3-19. Cross sections are on Exhibits 3.3-20A, B, and C. 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 subsequent water pollution.
- The slopes have a static safety factor of 1.3 or greater and the slope angles are less than the angle of repose.
- The reclaimed site is expected to support the postmining land use of grazing and wildlife habitat, because the slope configuration blends with the surrounding area and an approved seed mix (Appendix 3.3S) was applied.

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 met the general backfilling and grading requirements, including static safety factor and approximate original contour, see the Approximate Original Contour section of the TA for explanation. See Exhibits 3.3-19 and 3.3-23 for as-built certifications.

The site meets the backfilling and grading requirements because:

- The Permittee reclaimed the area to the approximate original contour requirements. See the Approximate Original Contour section of the TA for details.
- There were no highwalls or spoil piles at the site so those regulations are not relevant.
- There are no depressions at the site except pocks used to control erosion.
- The reclaimed slopes have a safety factor of 1.3 or greater and do not exceed the angle of repose. See Exhibit 3.3-23 for as-built certifications.

RECLAMATION PLAN

- The Permittee reclaimed the site using surface roughening techniques (pocking). Pocking is an effective means to control erosion and water pollution.
- The reclaimed site will support the postmining land use of grazing and wildlife habitat because the Permittee graded the slope so that it would blend into surrounding area and vegetated the slope with an approved seed mix.

Previously Mined Areas

Pre-SMCRA mining disturbed the site. The R645 rules allow the Division to enforce different standards if highwalls or spoil piles are present. Since there are no highwalls or spoil piles associated with the substation area those rules do not apply for that area.

Pre-SMCRA highwalls did exist in the Hardscrabble site and the Division addressed the issue during the general Phase I bond release process.

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 are no mine openings at the substation area.

Findings:

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

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

The Permittee did not apply topsoil at the site.

Findings:

The information provided meets the requirements for 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.

Analysis:

Retention

The approved reclamation plan calls for the retention of the road in Hardscrabble Canyon.

Findings:

The information provided in the bond release package meets the minimum requirements of the road systems and other transportation facilities requirements.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Hydrologic Reclamation Plan

The reclamation as-built calculations, drawings, and cross-sections for drainages HCRD-12 and the swale road crossing are included in Appendix 3.3O. The as-built specifications for HCRD-12 vary slightly and the channel is shorter than the approved reclamation design because the upper part of the drainage appeared to be undisturbed. There was no approved reclamation design for the swale road crossing. The as-built calculations and information provided have been reviewed and appear to be accurate and complete. Furthermore, the cover page of the addendum

RECLAMATION PLAN

has been signed and stamped by a registered professional engineer. The drainages can handle the approved reclamation design for a 10-year, 6-hour storm event.

However, the as-built calculations for HCRD-12 and the swale road crossing should be presented in Appendix 3.3N, Reclamation As-Built Hydrology Calculations. Channel certifications for all reclaimed drainages should be included in Appendix 3.3O, Reclamation As-Built Channel Certifications. To be consistent with the text and format of the approved MRP, the Permittee needs to include the as-built calculations and channel certification statements for drainages HCRD-12 and the swale road crossing in these appendices.

Findings:

The information provided is not consistent with the text reference documenting drainage in the approved reclamation plan. Before approval, the Permittee must provide the following, in accordance with:

R645-301-761; The Permittee needs to include the as-built calculations and channel certification statements for drainages HCRD-12 and the swale road crossing in Appendices 3.3N and 3.3O.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Erosion control for the substation was accomplished by gouging 2 ton/acre noxious weed-free hay into the surface soil; seeding with the mix described in App 3.3S; and mulching with 1.5 ton/acre noxious weed-free straw and 500 lbs/ac of hydromulch and tackifier (Section 3.3-4(3)). See Exhibit 3.3-23 for treatments.

Findings:

The information provided in the bond release application meets the bond release regulations.

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 did not include any backfilling and grading maps with the bond release package. The Division approved the backfilling and grading maps for the earthwork completed at the substation and other parts of Hardscrabble Canyon into the MRP on May 11, 2000. See Exhibit 3.3-19 and Exhibits 3.3-20A-C in Volume III of the MRP.

The backfilling and grading maps are adequate to show that the Permittee meet the minimum backfilling and grading regulations including the approximate original contour requirements.

Reclamation Facilities Maps

There are no reclamation facilities associated with the substation area.

Final Surface Configuration Maps

Exhibit 3.2-23, Hardscrabble Canyon As-Built Topography and Treatment Map, shows the substation area and drainages HCRD-12 and the swale road crossing.

As-built profiles and cross sections are included in the submitted amendment to Appendix 3.3O. However, as-built profiles and cross sections for all reclamation channels is referenced in the text as being provided in Exhibits 3.3-21A, 3.3-21B, 3.3-21C, and 3.3-22. The as-built profiles and cross sections for drainages HCRD-12 and the swale road crossing must be provided in Exhibits 3.3-21 and 3.3-22, respectively.

RECLAMATION PLAN

Reclamation Surface And Subsurface Manmade Features Maps

Other than the road shown on Exhibit 3.3-19 in the MRP, there are no surface or subsurface manmade features at the substation site.

Certification Requirements.

All appropriate maps were certified.

The information provided in the bond release package meets the minimum requirements of the maps, plan and cross section of reclamation requirements.

Findings:

The information presented in the Maps, Plans and Cross Section of Reclamation Operations is not adequate to meet the minimum requirements of the R645 Rules. Before approval, the Permittee must provide the following in accordance with:

R645-301-761; The Permittee needs to provide the as-built profiles and cross sections for drainages HCRD-12 and the swale road crossing in Exhibits 3.3-21 and 3.3-22, respectively, as referenced in Section 3.3.

BONDING AND INSURANCE REQUIREMENTS

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

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 0.72 acres in SE1/4SW1/4 of Section 3, Township 13 South, Range 9 East, SLB&M, Utah. The substation area is shown on Exhibit 3.3-23 in the MRP, which was incorporated January 23, 2003.
- Exhibit 3.3-23 shows the Phase I bond release area and was incorporated into the MRP on January 23, 2003. The map shows 1) all the disturbed areas in Hardscrabble Canyon, 2) the dates when reclamation occurred, 3) the reclamation status of each area within the

Hardscrabble area, 4) dates when each area received phased bond release and the acreage, and the area where phased bond release is sought.

- The Permittee showed when the work reclamation work was done.
- In the bond release package, the Permittee included a brief history of the mining and reclamation activities.
- Exhibit 3.3-23 in the MRP, which shows when the seeding was done, was incorporated into the MRP on January 23, 2003.
- There are no ponds within the substation area; sediment control was done with surface roughening techniques, such as pocking.
- Table 3.1-2 shows the amount of bond release being sought.
- Table 3.1-2 shows the sites within the Castle Gate Mine, the disturbed acres and the bond amount.

Determination of Bond Amount

Current bond for Hardscrabble is \$318,100 in 2004 dollars (Section 3.1, Table 3.1-2). The Permittee requested a bond release of \$83,100 for the reclamation work done at the Hardscrabble substation. After bond release, the bond would be \$235,000 in 2004 dollars.

R645-301-830.300 requires that the Division escalate the bond. In 2004, the Division escalated the bond by 2.59%. The Division determined that the bond escalated to 2009 dollars would be \$267,000. Therefore, the Division can only grant \$32,000 in bond release.

Findings:

The information provided in the bond release package meets the minimum requirements of the bonding and insurance requirements.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

Information provided is adequate to update the Cumulative Hydrologic Impact Assessment if necessary.

Findings:

The information provided meets the requirements for bond release.