

# TECHNICAL MEMORANDUM

## Utah Coal Regulatory Program

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March 13, 2008

OK

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor *DRH*

FROM: Wayne H. Western, Team Lead *W of U*

RE: Phase III Bond Release, Utah American Energy, Inc., Horse Canyon Mine, C/007/0013, Task ID # 2905

### SUMMARY:

On January 23, 2008, the Division received an application for Phase III bond release on 91.73 acres. The acreage is subdivided as:

- 51.56 acres has gone through Phase I and Phase II bond release.
- 6.5 acres of land that were never disturbed.
- 16.18 acres donated to the College of Eastern Utah
- 0.01 acres associated with a removed bridge abutment.
- 17.72 acres associated with the Range Creek Road.

The Horse Canyon Mine is located in Emery and Carbon Counties, Utah, within the Book Cliff Coal Field. The mine is located south of Columbia, Utah with the cities of East Carbon/Sunnyside, Utah being the closest communities that are shown on the Utah highway map. The most direct access route is from State Highway 6 turn east onto State Highway 123 for 9 miles and then turn south onto State Highway 124 for 8 miles. See the Lila USGS quadrangle map for location.

The Defense Corporation first opened the Horse Canyon Mine in 1942 as a source of metallurgical coal for the Geneva Steel Works in Orem, Utah. The Defense Corporation sold the mine to U.S. Steel Corporation in 1946, which operated the mine until January 1984, when mining was permanently suspended.

In November 1984, Kaiser Steel Corporation purchased the mine. In February 1987, Kaiser Coal, successor to Kaiser Steel, filed for Chapter 11 bankruptcy. Intermountain Power Agency (IPA) acquired the mine and the permit was transferred to IPA in August 1990.

**TECHNICAL MEMO**

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IPA conducted reclamation work on 51.56 acres in 1990 and 1991. The Division granted Phase I bond release on 51.56 acres on February 5, 1997.

UtahAmerican Energy Inc. acquired the mine from IPA on December 21, 1998. The Division granted Phase II bond release for 51.56 acres on April 11, 2002.

**TECHNICAL ANALYSIS:**

**RECLAMATION PLAN**

**GENERAL REQUIREMENTS**

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

**Analysis:**

The Permittee did not meet the minimum requirements of this section. On January 23, 2008, the Permittee submitted a Phase III bond release application. The Permittee seeks Phase III bond release on a total of 91.97 acres. The Permittee subdivided the acreage as follows:

- 51.56 acres has gone through Phase I and Phase II bond release.
- 6.5 acres of land that were never disturbed.
- 16.18 acres donated to the College of Eastern Utah
- 0.01 acres associated with a removed bridge abutment.
- 17.72 acres associated with the Range Creek Road.

Of the 51.56 acres that received Phase II bond release 0.49 had to be disturbed because of modification to a stream channel. The Permittee must revise the acreages to take into account the stream channel.

The information in the public notice does not meet the requirements of this section. The Permittee states that bond release is for all disturbed areas within Permit C/007/0013. That statement is incorrect for three reasons. The first reason is that at the date of publication the disturbed area had increased because of actions at the Lila Canyon facilities. The second reason is that within the Horse Canyon Part A area 0.49 acres were not eligible for Phase III bond

release. The third reason is that the Permittee does not clearly state how they want the 6.5 acres that were in the disturbed area but never disturbed handled.

The Permittee has two ways of handling the 6.5 acres that are in the disturbed area not that were never disturbed. The first method is to remove the 6.5 acres from the disturbed area and then apply for a bond adjustment. The second method is to include the 6.5 acres in the bond release application. If the Permittee chooses to include the 6.5 acres then they must specifically mention it as an area for which Phase III bond release is being sought.

### **Findings:**

The information provided in the bond release application is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the Division with the following in accordance with:

**R645-301-880.330**, The Permittee must revise the acreage associated with Phase III bond release because 0.49 acres within the 51.56 acres that were approved for Phase II bond release were disturbed for channel restoration and are not eligible for Phase III bond release at this time. The Permittee states on page 1 of Appendix III-1 that the application is for 91.97 acres and then later states that 0.49 acres are not eligible for Phase III bond release. For clarification purposes, the Permittee must use 51.07 acres when describing the areas that underwent Phase I and Phase II bond release and are eligible for Phase III bond release instead of using the 51.56 acres and later subtracting the 0.49 acres. In addition, the Permittee must either state that they are seeking bond release on the 6.5 acres that were never disturbed or remove that area from the disturbed area and request a bond adjustment.

**R645-301-120**, The Permittee must revise the public notice. The Permittee states that bond release is for all disturbed areas within Permit C/007/0013. That statement is incorrect for three reasons. The first reason is that at the date of publication the disturbed area had increased because of actions at the Lila Canyon facilities. The second reason is that within the Horse Canyon Part A area 0.49 acres were not eligible for Phase III bond release. The third reason is that the Permittee does not clearly state how they want the 6.5 acres that were in the disturbed area but never disturbed handled.

## **POSTMINING LAND USES**

**TECHNICAL MEMO**

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**Analysis:**

The Permittee met the minimum requirements of this requirement. The postmining land uses are:

- 51.56 acres has gone through Phase I and Phase II bond release will be wildlife and grazing.
- 6.5 acres of land that were never disturbed will be wildlife and grazing.
- 16.18 acres donated to the College of Eastern Utah will be residential/recreation.
- 0.01 acres associated with a removed bridge abutment will be industrial.
- 17.72 acres associated with the Range Creek Road will be industrial.

**Findings:**

The information provided in the bond release application is considered adequate to meet the minimum requirements of this section.

**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 Permittee met the minimum requirements for this section of Phase III bond release. The Division made findings about the restoration of the site to the approximate original contours during Phase I bond release. The Phase I bond release covered 51.56 acres.

The Permittee met the AOC requirements on the 6.5 acres of land that was never disturbed. The disturbed areas have been graded to complement the 6.5 acres.

The remaining areas meet the AOC requirements because those areas as acceptable for the approved alternative postmining land use. The Range Creek Road was donated to Emery County as a public road. Emery County manages the road and is responsible for proper maintenance which includes slope stability and erosion control.

The area donated to the College of Eastern Utah meet the industrial postmining land use. The area was developed in the 1940 and remained stable since. Runoff controls were left in place and meet the Division design standard.

**Findings:**

The information provided in the bond release application is considered adequate to meet the minimum requirements of this section.

**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 for the reclaimed areas. The Division made the determination as part of the Phase I bond release, which they granted on February 5, 1997.

The Permittee met the general backfilling and grading requirements for the areas that they donated to Emery County and the College of Eastern Utah. The areas donated to Emery County are part of the Emery County road system. The Emery County engineer is responsible maintaining the roads which include slope stability and erosion control.

The areas donated that the Permittee donated to the College of Eastern Utah met the general backfilling and grading requirements. Since the postmining land use allows those areas, to remain as is no backfilling or grading is required. The areas meet the general backfilling and grading requirements because they:

- There are no highwalls or spoil piles left on the site.
- There are no depressions except those that are needed as part of the postmining land use such as sediment ponds.
- All slopes are less than the angle of repose and have a static safety factor of 1.3.
- The area is maintained to minimize erosion and water pollution.
- The site will support the postmining land use.

**Findings:**

The information provided in the bond release application is considered adequate to meet the minimum requirements of this section.

**TECHNICAL MEMO**

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## **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 Permittee met the minimum requirements of this section. There are twelve portals within the bond release area. In 1986, all portals were by the permit holder. From 1992 to 1994, BXG worked with the MSHA to implement an exploration plan to breach the seals to allow exploration work and then reseal the portals.

All portals in Horse Canyon have been sealed and backfilled. Two portals in Lila Canyon were also sealed, breached and resealed. The Division and MSHA

### **Findings:**

The information provided in the bond release application is considered adequate to meet the minimum requirements of this section.

## **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**

The Permittee met the minimum requirements of this section. All roads not scheduled to remain after final reclamation were reclaimed by the permit holder.

The Division found that the all the roads scheduled for reclamation were adequate reclaimed during Phase I and Phase II bond release.

#### **Retention**

The Permittee met the minimum requirements for this section. The all roads that were retained have been approved as part of the post mining land use. The retained roads include the

Range Creek Road, which is an Emery County road and any roads associated with the property donated to the College of Eastern Utah.

**Findings:**

The information provided in the bond release application is considered adequate to meet the minimum requirements of this section.

**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**

The Permittee met the minimum requirements for this section. The effected area maps will not change because of Phase III bond release. The maps in the MRP show the affected area.

**Bonded Area Map**

The Permittee met the minimum requirements for this section. The Permittee provided the Division with updated bond maps that show what areas would have bond release. Those maps include Drawing III-2A through Drawing II-2G.

**Reclamation Backfilling And Grading Maps**

The Permittee met the minimum requirements for this section. All reclamation backfilling and grading maps were included into the MRP at the time of Phase I Bond release. In addition, Drawing III-2A through Drawing II-2G shows the surface configuration at the time of Phase III bond release including those areas that were backfilled and graded and those areas that were left as is for the Drawing III-2A through Drawing II-2G shows

**Reclamation Facilities Maps**

The Permittee met the requirements of this section. Drawing III-2A through Drawing II-2G shows the facilities that will be left as part of final reclamation including the Drawing III-2A through Drawing II-2G shows

**TECHNICAL MEMO**

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**Certification Requirements.**

The Permittee did not meet the requirements of this section. Drawing III-2A through Drawing II-2G were not certified by a registered professional engineer. The certification lack an original signature.

**Findings:**

The information provided in the bond release application is considered adequate to meet the requirements of this section. The Permittee must include maps in the final application that have certified maps and cross sections. The maps and cross sections were stamped by a professional engineer but not signed.

**BONDING AND INSURANCE REQUIREMENTS**

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

**Analysis:**

**Determination of Bond Amount**

The Permittee did not meet the requirements of this section. The Permittee must update the reclamation bond calculations to show the changes in the bond amount. The bond calculations must show the cost to reclaim the remaining areas in the Horse Canyon Part A area.

**Terms and Conditions for Liability Insurance**

**Findings:**

The information provided in the bond release application is not considered adequate to meet the requirements of this section. Before approval, the Permittee must provide the Division with the following in accordance with:

**R645-301-830.130**, The Permittee must provide the Division with an updated reclamation cost estimate for the Horse Canyon Mine Part A. At a minimum, the information must be sufficient to show that the Division has bond to reclaim the area in the event of bond forfeiture. The information must be incorporated into the mining and reclamation plan and the old reclamation cost estimate removed.

Page 9  
C/007/0013  
Task ID #2905  
March 13, 2008

**TECHNICAL MEMO**

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**RECOMMENDATIONS:**

It is not recommended that the application be approved.

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