

# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

---

November 26, 2003

TO: Internal File

FROM: Priscilla Burton, Environmental Scientist, III, Soils

RE: Post Mining Land Use Change, UtahAmerican Energy, Inc., Horse Canyon Mine, C/007/0013, Task #1630 and 1756

## **SUMMARY:**

Information to support the proposal for post mining land use change from wildlife habitat to residential/recreational (review task #1756) was received on November 14, 2003; October 16, 2003; and September 3, 2003. Previous information had been received on July 11, 2003 (review task #1630). This post-mining land use change is for the 16.18 acres of the mine pad area that have not yet been reclaimed and that have not received Phase II bond release. The area being considered for post mining land use change is more specifically designated as the #2 sediment pond, buildings & pad area, fan and manway portal pads, powder & cap magazine area and the water tank area (locations are shown in Exhibit A). These facilities along with additional acreage will be donated by UEI to the College of Eastern Utah for the purposes of a science field camp. This post- mining land use is being promoted by the University of Utah's Center for Mine Land Redevelopment and is supported by the Emery County Board of Commissioners (Exhibit C).

TECHNICAL MEMO

---

**TECHNICAL ANALYSIS:**

**GENERAL CONTENTS**

**IDENTIFICATION OF INTERESTS**

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

**Analysis:**

The MRP indicates that in July of 2000, UtahAmerican Energy, Inc. (UEI) purchased the Intermountain Power Agency (IPA) holdings associated with the Horse Canyon Permit ACT/007/013. Updated ownership and control information for UEI is presented in Appendix 1-7. This information is dated (11/7/03) and is being reviewed as part of the mid-term review (Task #1750).

**Findings:**

The information provided meets the Identification of Interests requirements of the Regulations.

**VIOLATION INFORMATION**

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

**Analysis:**

Violation history is recited in Appendix 1-8 and was last updated in December of 1998. A revision to the violation history was received with this application, but was incorrectly title Appendix 1-3. Appendix 1-3 in the MRP holds insurance information..

**Findings:**

The information provided does not meet the Violation Information requirements of the Regulations. Prior to approval, the Permittee must provide the following, in accordance with:

**R645-301-113.300**, Correctly label the Appendix containing the revision of violation history such that it replaces the existing violation information in the MRP (i.e. Appendix 1-8).

## **RIGHT OF ENTRY**

Regulatory Reference: 30 CFR 778.15; R645-301-114

### **Analysis:**

Page I-6A of the MRP indicates UtahAmerican Energy, Inc. (UEI) purchased the Intermountain Power Agency (IPA) holdings associated with the Horse Canyon Permit ACT/007/013 in July 2000. The assets purchased are outlined in a Quitclaim deed filed in the Emery County Court House on August 1, 2003. The MRP provides the following description of the assets purchased:

“All the federal coal leases that IPA controlled that were associated with the Horse Canyon/LilaCanyon Mines (SL-066490, U-014218, U-0126947, U-014217, SL-069291, SL-066145).

Approximately 1,600 acres of surface land and some fee coal lands.

The Horse Canyon Mine including all the surface facilities.

All associated water rights and rights-of-ways that IPA controlled.”

### **Findings:**

The information provided meets the Right of Entry requirements of the Regulations.

## **LEGAL DESCRIPTION**

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

---

**TECHNICAL MEMO**

---

**Analysis:**

The area of post mining land use change is designated in the public notice and in Exhibit A of the application. The area encompasses 16.18 acres of the Horse Canyon Mine along the county road.

**Findings:**

The information provided is adequate to meet the legal description requirement of the Regulations.

**PERMIT TERM**

Regulatory References: 30 CFR 778.17; R645-301-116.

**Analysis:**

The Utah mining permit was transferred from IPA to UEI on December 22, 1998. The five year permit term expires in December, 2003.

**Findings:**

The information provided is adequate to meet the permit term requirement of the Regulations.

**PUBLIC NOTICE AND COMMENT**

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

**Analysis:**

A copy of the public notice is included in Exhibit B. The notice will run for four consecutive weeks in both the Sun Advocate and the Emery County Progress.

**Findings:**

The information provided is adequate to meet the permit term requirement of the Regulations.

## PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

### **Analysis:**

On June 4, 1999, Plates II-4A through II-4G were submitted along with revised page II-2 and additional pages II-39 and II-39 as part of the Phase II bond release application. The Phase II bond release was conditionally approved on November 10, 1999, conditioned upon the removal of the culverts and sedimentation pond. The culvert and sedimentation pond work was inspected and determined complete on March 21, 2002. After which, final approval of Phase II bond release was given on April 11, 2000.

Plates II-4A through II-4G and the tabulations found on pages II-38 and II-39 (received September 3, 2003) establish the location and acreage of Phase II bond release and the remaining acreage to be affected by the post mining land use change.

### **Findings:**

The information provided meets the requirements of the Permit Application Format and Content Regulations.

## MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Plate II-1A and II-1B of the MRP distinguish between pre-law (Aug 1977) and post-law disturbance. Exhibit A shows the location of the land to undergo postmining land use change. Exhibit E contains a map showing the location of all the land (896.13 acres) to be donated to the State of Utah/College of Eastern Utah. These areas all fall under post-law disturbance areas.

### **Findings:**

The information provided is adequate for the purpose of the Maps and Plans requirements of the Regulations.

TECHNICAL MEMO

---

## ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

### PERMIT AREA

Regulatory Requirements: 30 CFR 783.12; R645-301-521.

#### Analysis:

The total permit area of 1,707.38 will be reduced by 896.13 acres upon the proposed donation of the acreage to the State of Utah/College of Eastern Utah (Exhibit E). The permit will then contain 811.25 acres. This reduction in permit area is reflected in the Table on pages II-39 of the MRP. Phase II bond release in April 2000 covered 40.9 acres. The remaining 222.7 acres is accounted for as follows: 0.1 acres of bridge abutments were returned to the county; the 6.5 acre borrow site was not redisturbed for topsoil substitute and will achieve Phase II and III bond release without further disturbance; leabind 16.1 acres of land to be donated to CEU in 2003 for use as a field institute. The 16.1 acre donation includes sediment pond #2, facilities area, manway portal area, magazine access road, magazine area, and water tank area. The manway portal will be reclaimed and will achieve Phase I, II, and III bond release before the college takes over use of the property.

#### Findings:

The information provided meets the requirements of permit area.

## HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.12; R645-301-411.

#### Analysis:

Four brick buildings constructed during WWII (1940's) are located at the surface facilities: a shop, a warehouse, a bathhouse, and an office building. The proposal for post-mining land use change would entail transferring the ownership of the four buildings. As described in Exhibit D of the application, the buildings will be renovated for a science field camp. The external appearance of the buildings will not be changed. Exterior work to the buildings will consist of roof work, new gutters, fascia boards, cement work and clean up.

An unsigned, draft memorandum of agreement (Exhibit E) in the application includes a statement that the buildings are over 50 years old and may be of some interest to the State Historical Preservation Office (SHPO). Exhibit E also encourages CEU to contact SHPO prior to rehabilitation of the buildings (or demolition).

More in-depth research on the buildings was requested in the TA dated August 29, 2003, as per R645-301-411.140, -411.141, and -411.142. No further information concerning the buildings was drafted by UEI or provided to the Utah Preservation Office. However, UEI's request for assistance in evaluating the buildings status (unsigned letter from UEI to Jim Dykman, Cultural Resource Coordinator at the Utah Preservation Office dated October 7, 2003) was answered with a letter from Mr. Dykman dated November 4, 2003, indicating no historic properties would be affected by the transfer. Mr. Dykman made this statement to indicate that the transfer of the ownership will not affect the status of the buildings and indeed, may offer greater protection for the buildings. The buildings are valued as an important part of the area's mining history. Some of the buildings have been recorded and are eligible for listing (personal communication with Jim Dykman on December 1, 2003).

The Division is obligated to obtain an accurate listing and record of the historic properties involved in the transfer. As indicated in the previous review of this submittal, more in-depth research on the buildings is required by R645-301-411.140, -411.141, and -411.142

### **Findings:**

The information provided is not adequate for the Historic and Archaeological requirements of the Regulations. Prior to approval, the Permittee must provide the following in accordance with:

**R645-301-411.140**, The application will contain maps and a supporting narrative describing the nature of the cultural and historic resources listed or eligible for listing in the National Register of Historic Places within the permit and adjacent areas. The maps will clearly show the location of any cultural or historical resources listed or eligible for listing (see also deficiency listed under R645-301-521.150).

## **SOILS RESOURCE INFORMATION**

---

TECHNICAL MEMO

---

**Analysis:**

Appendix VII-8 of the MRP provides a substitute topsoil evaluation of the facilities area. The investigation involved five test pits along the northwest side of the county road, in the facilities area, between the fence and the shoulder of the road. The analytical data presented in Table 1 of Appendix VII-8 indicates the surface soils are sandy-loam with slightly alkaline pH values (8.1 – 8.4). However, this soil will remain in place and will not be affected by reclamation of the portal and rock dust bin.

This submittal explains in Exhibit D of Exhibit E that the soils to be used for reclamation of the portal will come from the existing pad. An additional section was added to the postmining land use application, entitled “Regrading, Reclamation, Stabilization and Revegetation Plan for Portal and Rock Dust Bin Post Mine Land Use Change (PMLU).” In this summary of reclamation, it is estimated that 34 cu yds of soil will be needed for the portal rock dust bin reclamation. This soil material will come from the rock dust bin area. A composite soil sample from the rock dust bin was analyzed by Brigham Young University Soil and Plant Analysis Laboratory on October 17, 2003. The analytical report indicates that the pH is 7.48; Electrical Conductivity is 0.58 dS/m and that the SAR is less than 1.0. Phosphorus (4.81 ppm) and potassium (67.20 ppm) were analyzed, but nitrogen was not. Soil texture was not provided.

**Findings:**

The information provided is not adequate for the purpose of the Environmental Soil Resource requirements of the Regulations. Prior to approval, the Permittee must provide the following in accordance with:

**R645-301-233.100**, To demonstrate suitability of topsoil substitute, the Permittee must include an evaluation soil texture in the soil analysis.

**LAND-USE RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.22; R645-301-411.

**Analysis:**

Chapter X, Section 10.3 of the MRP describes land use. Prior to mining, the land was used by wildlife and for access to grazing allotments.

**Findings:**

The information provided meets the Land-Use Resource Information requirements.

## MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

### Analysis:

#### Affected Area Boundary Maps

Phase II Reclamation Bond Release Areas Horse Canyon Mine Dwgs No. II-4A through G (received September 3, 2003) show the 16.18 acres under consideration for post mining land use change.

#### Cultural Resource Maps

No map was provided with this application. Such maps were requested in the August 29, 2003 Technical Analysis. Plate 4-3 of a separate proposal (Lila Canyon Extension to the Horse Canyon Mine) contains the requested information.

#### Existing Structures and Facilities Maps

Existing structures are shown on the Exhibits A-1, A-2, A-3 and A-4. Plate II-1B shows the facilities and structures pre-reclamation.

#### Existing Surface Configuration Maps

Existing surface configuration is shown on the Exhibits A-1, A-2, A-3 and A-4.

#### Surface Ownership Maps

Plate I-1 shows surface ownership.

### Findings:

The information provided does not meet the Maps and Plans requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

**R645-301-521.150**, The Permittee must include Plate 4-3 Cultural Resources with the application.

## OPERATION PLAN

### EXISTING STRUCTURES:

Regulatory Reference: 30 CFR 784.12; R645-301-526.

#### Analysis:

Ownership of all remaining structures at the Horse Canyon Mine will be transferred to the State of Utah/College of Eastern Utah to support the proposed residential/recreational post-mining land use. The submittal lists these facilities in Exhibit E as follows:

- 1) Sedimentation Pond #2 and associated drainage features
- 2) Pump House
- 3) Office Building
- 4) Bathhouse
- 5) Warehouse
- 6) Shop
- 7) Chain Link Fence
- 8) Building Pads
- 9) Parking Lot
- 10) Powder Magazine
- 11) Cap Magazine
- 12) Water Tank
- 13) Portal Pad.

#### Findings:

The information provided meets the requirements of the Regulations.

## PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES

Regulatory Reference: 30 CFR784.17; R645-301-411.

#### Analysis:

An unsigned, draft memorandum of agreement (Exhibit E) in the application includes a statement that the buildings are over 50 years old and may be of some interest to the State Historical Preservation Office (SHPO). Exhibit E also encourages CEU to contact SHPO prior to rehabilitation of the buildings (or demolition).

Mr. Jim Dykman's (SHPO) letter to Mr. Marshall dated November 4, 2003 states there will be "no historic properties affected" by the transfer of ownership from UEI to CEU. Mr. Dykman made this statement to indicate that the transfer of the ownership will not affect the status of the buildings and indeed, may offer greater protection for the buildings. The buildings are valued as an important part of the area's mining history. Some of the buildings have been recorded and are eligible for listing (personal communication with Jim Dykman on December 1, 2003).

**Findings:**

The information provided does not meet the requirement for protection of historic places. More information was sought under Historic and Archaeological Resource Information.

## RECLAMATION PLAN

### POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

**Analysis:**

The disturbed area is recorded as 63.6 acres, of which 51.56 acres have received Phase II bond release. These 51.56 acres have a wildlife postmining land use. The remaining acreage within the disturbed area (the mine facilities pad) along with additional acreage will have a post mining land use change from wildlife to residential/recreational. The area encompassed by the post mining land use change encompasses 16.18 acres. The land will be donated to the College of Eastern Utah for the purpose of a science field camp.

**Findings:**

The information provided meets the Post Mining Land Use requirements of the regulations.

---

TECHNICAL MEMO

---

## TOPSOIL AND SUBSOIL

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

### Analysis:

#### Redistribution

An additional section was added to the postmining land use application, entitled “Regrading, Reclamation, Stabilization and Revegetation Plan for Portal and Rock Dust Bin Post Mine Land Use Change (PMLU).” In this summary of reclamation, it is estimated that 34 cu yds of soil will be needed for the portal and rock dust bin reclamation. The concrete portal collar will be buried three feet deep. The dust bin will be buried four feet deep. This cover material will come from the rock dust bin area. The size of the area to be regraded at the portal and rock dust bin is approximately 1100 square feet (0.025 acres).

### Findings:

The information provided meets the requirements for topsoil redistribution in Reclamation.

## STABILIZATION OF SURFACE AREAS

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

### Analysis:

An additional section was added to the postmining land use application, entitled “Regrading, Reclamation, Stabilization and Revegetation Plan for Portal and Rock Dust Bin Post Mine Land Use Change (PMLU).” In this summary of reclamation, it states that the area will be pocked and mulched with straw according to the approved MRP. The disturbance will be minimal and all run-off will report to sediment pond #2.

### Findings:

The information provided meets the Stabilization of Surface Areas requirements of the regulations.

## **BONDING AND INSURANCE REQUIREMENTS**

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

### **Analysis:**

#### **General**

Reclamation was completed on 42% of the disturbed area in 1991. Phase I bond release was granted on February 5, 1997 with the release of \$812,276 and the retention of \$1,137,726 in the bond. The current bond covers both the Horse Canyon Mine and the Lila Canyon Extension. So that, during Phase II Bond Release (achieved on April 11, 2002), the bond was reduced from \$2,809,000 to \$2,617,328.

An amount of \$88,492 remains in the bond for the purpose of revegetation of the 51.56 acres in the event of revegetation failure during the remainder of the Permittee's liability period. An amount of \$946,054 remains in the bond for reclamation of the unreclaimed disturbed area as well as the 51.56 acres (Division Decision Document October 19, 1999).

#### **Form of Bond**

Surety bond.

### **RECOMMENDATIONS:**

The proposal is not recommended for approval.