

OLENE S. WALKER  
*Governor*

GAYLE F. McKEACHNIE  
*Lieutenant Governor*

January 6, 2004

Jay Marshall, Resident Agent  
Utah American Energy Inc.  
P.O. Box 986  
Price, Utah 84501

Re: Conditional Approval Post Mining Land Use Change, Utah American Energy, Inc. (UEI), Horse Canyon Mine, C/007/0013, Task# 1630, 1756 and 1785, Outgoing File

Dear Mr. Marshall:

The above-referenced amendment is conditionally approved upon receipt of five clean copies of the entire submittal (including a signed copy of Exhibit E Memorandum of Agreement and information faxed on December 30, 2003) accompanied by a C1 & C2 form. Please submit these copies by February 27, 2004. Once we receive these copies, final approval will be granted, at which time you may proceed with your plans.

A stamped incorporated copy of the approved plans will also be returned to you at that time, for insertion into your copy of the Mining and Reclamation Plan. A copy of our Technical Analysis is enclosed.

The conditionally approved 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 proposed post mining land use change applies to the remaining disturbed areas that have not been reclaimed as follows:

#2 Sediment Pond	1.44 Acres
Building and Pad Area	10.80 Acres
Fan and Manway Portal Pads	2.83 Acres
Powder and Cap Magazine Area	0.57 Acres
<u>Water Tank Area</u>	<u>0.54 Acres</u>
Total Area	16.18 Acres

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. Attachment #1 "Cultural and Historic Resource Discussion," describes the history of the site and

Page 2  
Jay Marshall  
January 6, 2004

provides information on the structures remaining, including recent photographs of the structures. State History was consulted with regard to the potential historic property and actively supports transferring of ownership of these potentially historic properties to CEU. The facilities will not be regulated under SMCRA after the land exchange, therefore, a signed copy of Exhibit E Memorandum of Agreement is a requirement for final approval.

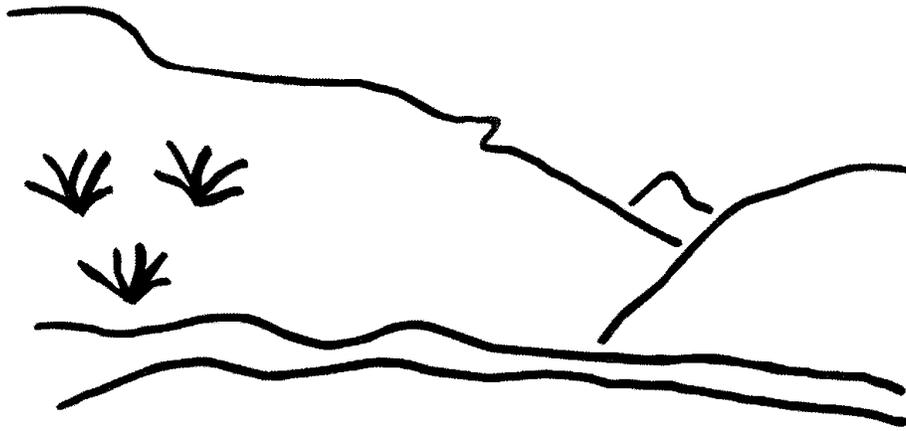
If you have any questions, please call me at (801) 538-5268 or Priscilla Burton at (801) 538-5288.

Sincerely,

Pamela Grubaugh-Littig  
Permit Supervisor

an  
cc: Price Field Office  
O:\007013.HOR\Final\Con1785.DOC

# State of Utah



## Utah Oil Gas and Mining

Horse Canyon Mine  
Post Mining Land Use Change  
C/007/0013, Task #1785  
Technical Analysis  
December 31, 2003



## TABLE OF CONTENTS

---

INTRODUCTION .....	3
GENERAL CONTENTS .....	5
IDENTIFICATION OF INTERESTS .....	5
VIOLATION INFORMATION.....	5
RIGHT OF ENTRY .....	5
LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS.....	6
PERMIT TERM.....	7
PUBLIC NOTICE AND COMMENT .....	7
PERMIT APPLICATION FORMAT AND CONTENTS .....	7
MAPS AND PLANS .....	8
ENVIRONMENTAL RESOURCE INFORMATION.....	9
PERMIT AREA.....	9
HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION.....	9
SOILS RESOURCE INFORMATION.....	10
LAND-USE RESOURCE INFORMATION.....	11
MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION.....	11
Affected Area Boundary Maps .....	12
Cultural Resource Maps.....	12
Existing Structures and Facilities Maps.....	12
Existing Surface Configuration Maps.....	12
Findings: .....	12
OPERATION PLAN .....	13
EXISTING STRUCTURES: .....	13
PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES .....	13
RECLAMATION PLAN.....	15
POSTMINING LAND USES.....	15
PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES...	16
APPROXIMATE ORIGINAL CONTOUR RESTORATION.....	16
MINE OPENINGS.....	17
TOPSOIL AND SUBSOIL.....	18
Redistribution.....	18
ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES .....	18
Retention.....	18
HYDROLOGIC INFORMATION .....	19
Hydrologic Reclamation Plan .....	19
REVEGETATION .....	19
STABILIZATION OF SURFACE AREAS .....	21
CESSATION OF OPERATIONS.....	21
MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS .....	22
Bonded Area Map.....	22
Reclamation Backfilling And Grading Maps .....	22
Reclamation Facilities Maps.....	22
Certification Requirements .....	22
BONDING AND INSURANCE REQUIREMENTS.....	23

**TABLE OF CONTENTS**

---

---

General.....	23
Form of Bond.....	23

---

## TECHNICAL ANALYSIS

---

# TECHNICAL ANALYSIS

The Division derives its authority from the Surface Mining Control and Reclamation Act of 1977(SMCRA). When companies submit a Permit Application Package or an amendment to their Mining and Reclamation Plan, the Division reviews the proposal for conformance to the R645-Coal Mining Rules. This Technical Analysis is such a review. Regardless of these analyses, the Permittee must comply with the minimum regulatory requirements as established by SMCRA.

Readers of this document must be aware that the regulatory requirements are included by reference. A complete and current copy of these regulations and a copy of the Technical Analysis and Findings Review Guide can be found at <http://ogm.utah.gov/coal>

This Technical Analysis (TA) is written as part of the permit review process. It documents the Findings that the Division has made to date regarding the application for a permit and is the basis for permitting decisions with regard to the application. The TA is broken down into logical section headings that comprise the necessary components of an application. Each section is analyzed and specific findings are then provided which indicate whether or not the application is in compliance with the requirements.

Often the first technical review of an application finds that the application contains some deficiencies. The deficiencies are discussed in the body of the TA and are identified by a regulatory reference that describes the minimum requirements. In this Technical Analysis we have summarized the deficiencies at the beginning of the document to aid in responding to them. Once all of the deficiencies have been adequately addressed, the TA for this permitting action will be finalized.

Not every topic or regulatory requirement is discussed in this TA. Only those sections are analyzed that pertain to the particular permitting action (change in Post Mining Land Use, task #1785). Those sections that are not discussed in this document are generally considered to be in compliance. Previously completed TA's for the mine, would be the source of "findings" for any section not discussed herein.



---

## INTRODUCTION

---

# INTRODUCTION

Information to support the proposal for post mining land use change from wildlife habitat to residential/recreational (review task #1785) was received on December 15, 2003; and (review task 1756) on November 14, 2003, October 16, 2003 and September 3, 2003. Previous information had been received on July 11, 2003 (review task #1630).

Several areas of the Horse Canyon Mine have been reclaimed including pads and ditches behind the buildings, the coal refuse pile and the disturbed drainage ditch at the refuse site and Sedimentation Pond #2. Some areas known as the "excluded areas" were not reclaimed with the other areas. They were excluded from reclamation, because it was anticipated that they would be used in conjunction with operation with the Lila Canyon Mine, if it were to come into operation. They consist of the buildings, a portal and pad, a water tank, an old powder storage building and Sedimentation Pond #1.

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 man way portal pads, powder & cap magazine area and the water tank area (locations are shown in Exhibit A).

The proposed post mining land use change will affect the remaining disturbed areas that have not been reclaimed as follows:

#2 Sediment Pond	1.44 Acres
Building and Pad Area	10.80 Acres
Fan and Manway Portal Pads	2.83 Acres
Powder and Cap Magazine Area	0.57 Acres
<u>Water Tank Area</u>	<u>0.54 Acres</u>
Total Proposed Area	16.18 Acres

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. The science field camp for Utah Universities would offer housing and an opportunity for field study in a variety of subjects, including geology, ecology, botany and other natural sciences. 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).

## **INTRODUCTION**

---

The application documents the condition of the buildings at this time and provides a bit of history on the use of the buildings. State History was consulted with regard to the potential historic property and actively supports this transfer of ownership. The facilities will not be regulated under SMCRA after the land exchange.

---

## GENERAL CONTENTS

---

# 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.

### **Findings:**

The information provided meets the requirements of the Regulations.

## 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 AND STATUS OF UNSUITABILITY CLAIMS**

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.

**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.

---

## GENERAL CONTENTS

---

### 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.

**Analysis:**

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.

**ENVIRONMENTAL RESOURCES INFORMATION**

---

**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 abutements 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 all disturbed areas will achieve Phase I, II, and III bond release before the college takes over use of the property (personal communication with Jay Marshall on November 26, 2003).

**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).

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. More in-depth information on the buildings was supplied as Attachment #1 "Cultural and Historic Resource Discussion," as required by R645-301-411.140. This narrative describes the history of the site and provides information on the structures remaining, including recent photographs of the structures. The locations of the structures are shown on Exhibit A-2.

### **Findings:**

The information provided meets the Historic and Archaeological requirements of the Regulations.

## **SOILS RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

### **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.

---

## ENVIRONMENTAL RESOURCES INFORMATION

---

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 (and again on December 15, 2003 for texture). 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 described as sandy loam.

The soils in the vicinity of the rock dust bin are suitable for use as substitute topsoil.

### **Findings:**

The soils in the vicinity of the rock dust bin are suitable for use as substitute topsoil. The information provided meets the requirements of the Regulations.

## 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**

Appendix X-2 of the MRP contains archaeological/historical inventories of the area conducted in 1980 and 1986. Approximate locations of the sites inventoried are noted in Figure V-2 of Appendix X-2.

### **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 meets the Maps and Plans requirements of the Regulations.

---

## OPERATION PLAN

---

# 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).

Attachment #1 "Cultural and Historic Resource Discussion" provides information on the remaining structures at the site, including photographs.

**Findings:**

The information provided meets the requirements for protection of historic places.

---

## RECLAMATION PLAN

---

# 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.

The application contains information indicating an interest by the Center for Mine Land Redevelopment and or the College of Eastern Utah for use as a science camp. A detailed evaluation of the area and structures has been conducted by the College and is contained in the application.

The site is an ideal location for establishing a science camp because it sits in a central location to gain access to several unique locations. The geologic formations are well exposed in southeastern Utah, which reveal a long history of depositional environments. There are also several unique land features that can be seen and visited in a few hours travel. The Book Cliffs and Wasatch Plateau reveal a geologic history as old 300 million years. One can stand on the rim of the Book Cliffs and see the San Rafael Swell and Henry Mountains. The San Rafael Swell is located south of the site and exhibits canyons deeply carved into Early Mesozoic formations, uplifted as a dome feature during the Laramide Orogenic period. The Henry Mountains are intrusive laccoliths also of the Laramide Orogenic period.

The area surrounding the proposed science camp also contains several mineral and ecological resources. Coal mines are found in the Blackhawk Formation of the Wasatch Plateau and Book Cliffs and the Ferron Sandstone Member of the Mancos Shale in Castle Valley near Emery, Utah. The Ferron Sandstone Member is also a recently developed source of coal bed methane. There have been mineral mines developed in the past producing uranium in the San Rafael Swell, and gold mines in the Henry Mountains. These areas also reveal paleontological sites and archeological areas.

**Findings:**

The site is an ideal location for the post mining land use of a science field camp. Information submitted in the application indicates that the area can support the post mining land use of residential/recreational and that there is a reasonable likelihood for achievement of the post mining land use change on the 16.18 acres. The residential/recreational post mining land use change is a higher or better use for the 16.18 acres, while still providing 51.56 acres of reclaimed wildlife habitat.

**PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES**

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

**Analysis:**

The 51.56 acres of wildlife habitat that received Phase II bond release on April 12, 2002 is not affected by this post mining land use change.

**Findings:**

The information provided is adequate for the purposes of the regulations.

**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 application indicates that the main intake portal (south) or man way portal and the fan portal will have portions of the concrete portal collar removed. This concrete is to be hauled off site to an approved landfill. The fan portal also requires the removal of the temporary metal fan housing, which may be salvaged. The remaining concrete will be covered with a minimum of 3' of cover material. Both portals have been permanently sealed and backfilled.

A review of the approved MRP shows that no pre-mining contours are available do to the age of the mine site (approximately the 1940's). No comparison of pre mining and post mining contours can be made. During a site visit on March 26, 2003 by Division Personnel the portal area was viewed. It was the consensus of Division Personnel that once the concrete and metal

---

## RECLAMATION PLAN

---

are removed and the remaining concrete is covered with 3' of cover material that the area will reflect the surrounding terrain and slopes in accordance with the regulations for approximate original contour. This evaluation was also compared with information contained in Directive Number: Tech-002, effective July 1, 1977. This comparison was done during the review of this application and conforms to the intent of the Directive.

The original application did not specify where the 3' of cover material would be obtained from to cover the portal area. In the new application the operator indicates that the cover material will come from the pad area adjacent to the portals. The cover material resource area needs has been identified in the application with an approximate volume of less than 15 yards.

The operator has also identified the reclamation of the buried rock dust bin. The material to reclaim the rock dust bin will also come from the pad area and will require approximately 19 yards.

The amount of material removed from the pad to due the reclamation work will lower the pad area by approximately two to three feet. Contours used on the drawings are in five foot intervals and will not reflect any change. The final surface configuration is shown on Exhibit A-3.

Exhibits A-1, A-2, A-3, and A-4 have been P.E. stamped, signed and dated as required.

### **Findings:**

The information provided meets the requirements of the Regulations.

## **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 main intake portal (south) or man way portal and the fan portal have been permanently sealed and backfilled. The portal collars remained for future access to the old workings.

### **Findings:**

The portals have been sealed backfilled and abandoned in accordance with MSHA regulations. The operator has determined that future access to the mine through these portals is

no longer feasible. The proposed post mining land use change will totally abandon these portals from future access.

## **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.

## **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 application indicates the retention of the buildings and the public road that parallels the buildings. Page X-16 of the approved MRP indicates that this public road will be retained during mining and reclamation periods. Page X-16 has been revised in the application to give more detail of the public road course and to indicate the alternative post mining land use of residential/recreational. The post mining land use application will be located in Appendix X-4 upon approval.

---

## RECLAMATION PLAN

---

### Findings:

Retention of the public road that parallels the existing buildings is already approved in the MRP. Retention of the road correlates with the proposed alternative post mining land use of residential/recreational.

## 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

A change in the post mining land use to residential/recreation (science field camp) will relieve the mine from reclaiming most hydrologic structures that are associated with the minesite. The ditches, berms and silt fences can be used by the new owner, as they are currently used, but are not controlled as they would be under the coal program. UtahAmerican holds a UPDES permit associated with Sedimentation Pond #2. The Utah Division of Water Quality will not release UtahAmerican's UPDES permit unless UtahAmerican removes the decant and 10yr-24hr spillway.

In the most recent submittal of December 30, 2003, UtahAmerican has confirmed that the spillway/decant will be removed to ground level and filled with concrete, as shown in Drawing VI-4B-1, Spillway Section.

### Findings:

This method of sealing is acceptable to both the Division of Water Quality and to the Division of Oil, Gas and Mining. The applicant has submitted sufficient information to address the minimum requirements of the Hydrologic Reclamation Plan on the Hydrologic Information Section of the regulations.

## REVEGETATION

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

**Analysis:**

The request for a post-mine land use change for portions of the Horse Canyon Mine includes five major areas: sediment pond #2, building and pad area, fan and manway portal pad, powder and cap magazine area, and water tank area. Of these five areas, the Permittee plans to reclaim only the fan and manway portal area before the transfer.

Reclamation of the fan, manway portal, and rock dustbin includes dismantling and removing from the site the fan housing and concrete collars. The Permittee will fill and cover the resulting hole with three feet of material obtained from the rock dust pad. Material from the rock dust pad will also cover the rock dustbin by a minimum of four feet. Removal of material from the rock dust pad will lower the pad by less than two feet.

Preparing the sites for seeding includes regrading, hand raking, and gouging. The Permittee will blend the interface between the disturbed and undisturbed areas to the same slope. The Permittee provided an updated final seed mix (November 13, 2003) and will incorporate this mix into the MRP, pg. VIII-38A. The hand broadcast seeding rate will be at 100 PLS per square foot. The table below shows the updated seed mix for this project.

Grasses

Agropyron spicatum	Blue bunch wheat grass
Elymus salinus	Salina wildrye
Oryzopsis hymenoides	Indian ricegrass
Sporobolus cryptandrus	Sand dropseed
Elymus cinereus	Great basin wildrye
Hilaria jamesii	Galleta grass

Forbs

Sphaeralcea grossulariaefolia	Gooseberry-leaf globemallow
Penstemon palmeri	Palmer penstemon
Linum lewisii	Blue flax
Artemisia frigida	Fringed sagebrush

Shrubs

Artemisia tridentata	Basin big sagebrush
Atriplex canescens	Fourwing saltbush
Cowania mexicana	Cliff rose
Pershia tridentata	Antelope bitterbrush
Ephedra viridis	Green Mormon tea

---

## RECLAMATION PLAN

---

### **Findings:**

Information provided in the application is considered adequate to meet the minimum Revegetation section of the Reclamation Plan regulations.

## **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.

## **CESSATION OF OPERATIONS**

Regulatory Reference: 30 CFR Sec. 817.131, 817.132; R645-301-515, -301-541.

### **Analysis:**

On October 15, 1982, U.S. Steel informed the Division of Oil Gas and Mining that it was temporarily suspending mining operations at the Horse Canyon (Geneva) Mine. U.S. Steel informed the Division of its plans to permanently suspend mining operations in January 1984. The property was purchased by Kaiser Steel in November 1984 and acquired by Intermountain Power Agency (IPA) in April 5, 1990. Phase I reclamation work was conducted in 1991 by IPA on only 42% of the area, leaving the facilities area to retain the possibility of reopening the site (Phase I Bond Release Decision Document, February 5, 1997).

The change in post-mining land use for the facilities at the horse canyon mine will be permanent cessation of mining at this location. UEI will no longer secure, support and maintain surface facilities at this location (R645-301-515.300).

UEI is obligated under R645-301-541 to permanently reclaim all areas that are not suitable for the postmining land use. 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).”

**Findings:**

The information provided meets the requirements of R645-301-541.

**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:**

**Bonded Area Map**

Phase II Reclamation Bond Release Areas are shown on Dwg Nos. II – 4 A – G.

**Reclamation Backfilling And Grading Maps**

A review of the approved MRP shows that no pre-mining contours are available do to the age of the mine site (approximately the 1940’s). The amount of material removed from the pad to due the reclamation work will lower the pad area by approximately two to three feet. Contours used on the drawings are in five foot intervals and will not reflect any change. The final surface configuration is shown on Exhibit A-3.

**Reclamation Facilities Maps**

In the previous review the applicant was asked to provide information about the final disposition of the sedimentation pond that reflects the best option for reclamation. Final reclamation maps and cross-sections were required. The applicant has now submitted a cross-section of the final designs for reclaiming the spillway/decant in the sedimentation pond.

**Certification Requirements.**

Exhibits A-1, A-2, A-3, and A-4 have been P.E. stamped, signed and dated as required.

---

## RECLAMATION PLAN

---

### **Findings:**

The applicant has submitted the sufficient information to address the minimum requirements of the Maps, Plans and Cross-sections of Reclamation Operations 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.

### **Findings:**

The information on record with the Division is adequate for the purposes of the Regulations.