

September 3, 2003

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

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

Dear Mr. Marshall:

The Division has completed a technical review of your permit application package for post mining land use change at the Horse Canyon Mine.

The application requires modification and is not considered to be technically adequate due to a number of deficiencies. The Division staff has kept you abreast of these deficiencies over the past three weeks. Please remedy these deficiencies and resubmit the application by October 15, 2003. Priscilla Burton (801) 538-5288 is the team lead on this application.

Sincerely,

Pamela Grubaugh Littig
Permit Supervisor

an
Enclosure
cc: Price Field Office

O:\007013.HOR\FINAL\DEF1630.DOC

State of Utah



Utah Oil Gas and Mining

Coal Regulatory Program

Horse Canyon Mine
Post Mining Land Use Change
C/007/0013, Task #1630
Technical Analysis
September 3, 2003

TABLE OF CONTENTS

INTRODUCTION	3
GENERAL CONTENTS	7
IDENTIFICATION OF INTERESTS	7
VIOLATION INFORMATION.....	7
RIGHT OF ENTRY	8
LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS.....	8
PERMIT TERM.....	9
PUBLIC NOTICE AND COMMENT	9
PERMIT APPLICATION FORMAT AND CONTENTS	9
MAPS AND PLANS	10
ENVIRONMENTAL RESOURCE INFORMATION.....	11
PERMIT AREA.....	11
HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION.....	11
SOILS RESOURCE INFORMATION.....	12
LAND-USE RESOURCE INFORMATION.....	13
MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION.....	13
Affected Area Boundary Maps	13
Cultural Resource Maps.....	13
Existing Structures and Facilities Maps.....	14
Existing Surface Configuration Maps.....	14
Findings:	14
OPERATION PLAN	15
EXISTING STRUCTURES:	15
PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES	15
RECLAMATION PLAN.....	17
POSTMINING LAND USES.....	17
PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES...	18
APPROXIMATE ORIGINAL CONTOUR RESTORATION.....	18
MINE OPENINGS.....	19
TOPSOIL AND SUBSOIL.....	20
Redistribution.....	20
ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES	20
Retention.....	20
HYDROLOGIC INFORMATION	21
Hydrologic Reclamation Plan	21
REVEGETATION	22
Revegetation: General Requirements	22
Revegetation: Mulching and Other Soil Stabilizing Practices.....	22
No plan was presented.	22
STABILIZATION OF SURFACE AREAS	22
CESSATION OF OPERATIONS.....	23
MAPS, PLANS, AND CROSS SECTIONS OF RECLAMATION OPERATIONS	24
Bonded Area Map.....	24
Reclamation Backfilling And Grading Maps	24

TABLE OF CONTENTS

Reclamation Facilities Maps.....	24
In a previous section the applicant is asked to provide information about the final disposition of the UPDES discharge point at sedimentation pond #2. Final reclamation maps and cross-sections should accompany the proposed option.	24
Certification Requirements.	24
BONDING AND INSURANCE REQUIREMENTS.....	25
General.....	25
Form of Bond.....	25
CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA).....	27

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). 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.

Page 2
C/007/0013
Task ID #1630
September 3, 2003

TECHNICAL ANALYSIS

INTRODUCTION

INTRODUCTION

The proposal for post mining land use change from wildlife habitat to residential/recreational was received on July 11, 2003. This post-mining land use change is only for the 16.18 acres 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).

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. The reclamation work proposed for the post mining land use change will totally eliminate future access to these portals. The facilities will not be regulated under SMCRA after the land exchange.

Page 4
C/007/0013
Task ID #1630
September 3, 2003

INTRODUCTION

SUMMARY OF DEFICIENCIES

SUMMARY OF DEFICIENCIES

The Technical Analysis (TA) of the proposed permit changes cannot be finalized 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 are found within the analysis and findings made in this Draft Technical Analysis. Upon finalization of this TA, 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 identified within this Draft Technical Analysis and provide the following, prior to approval, in accordance with the requirements of:

Regulations

R645-301-112.900, The Permittee must, as applicable, update, correct or indicate that no change has occurred in the information previously submitted under R645-301-112.100 through R645-301-112.800. 7

R645-301-113.300, The Permittee must provide violation history for the three years prior to the date of this application. 7

R645-301-233.100, The Permittee must identify the overburden materials to be substituted for topsoil in the reclamation of the portal and rock dust bin and demonstrate that the soil medium will be the best available material..... 13

R645-301-244.200 and R645-301-355, The Permittee must describe the stabilization plan for reclamation of the portal and the rockdust bin..... 23

R645-301-341, The Permittee must describe the revegetation plan for reclamation of the portal and the rockdust bin (see also deficiencies written under R645-301-553 and R645-301-541.400, R645-301-241. 22

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

SUMMARY OF DEFICIENCIES

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. The narrative will also describe coordination efforts with, and present evidence of, clearances by SHPO. . . 12

R645-301-512 – The maps in the application are P.E. stamped, but also require a signature and date. 19

R645-301-521.121, The Permittee must provide a map showing the existing location of the buildings with identification of the buildings. 14

R645-301-521.150, The Permittee must provide a map showing existing land surface configuration (topography) for the 16.18 acres that has not been reclaimed. 14

R645-301-541.400, R645-301-241, The Permittee must describe the plan for reclamation of the portal and the rockdust bin (see also deficiency written under R645-301-553. 20

R645-301-542.200 – The anticipated final surface configuration needs to be shown on Exhibit A-3 for the portal area. 19

R645-301-553 - The backfilling and grading plan to cover the remaining concrete liner with 3’ of cover material needs to be described in the application, specifically where the material is coming from and final surface configuration. Vegetation or stabilization methods of fill needs to be identified. 19

R645-301-731, The Permittee shall submit final reclamation maps and cross-sections for the reclamation of the UPDES discharge point at Sediment Pond #2 (see also deficiency under R645-301-761. 24

R645-301-761, The Permittee should identify which option for resolution of the UPDES permit would best fit the reclamation plan for Sediment Pond #2 and submit plans for that option. . . 22

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. Ownership and control information for UEI is presented in Appendix 1-7. This information was recently updated December 1998.

Findings:

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

R645-301-112.900, The Permittee must, as applicable, update, correct or indicate that no change has occurred in the information previously submitted under R645-301-112.100 through R645-301-112.800.

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.

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, The Permittee must provide violation history for the three years prior to the date of this application.

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 are a critical part of the basis for establishing the location and acreage affected by the post mining land use change, but they could not be found within the MRP at either the Price Field Office or the Salt Lake Office. Consequently, the Permittee resubmitted Plates II-4A through II-4G and pages II-38 and II-39. They were received in the Division offices on September 3, 2003.

Findings:

The information provided meets the requirements of the 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 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. When this acreage is transferred to CEU ownership and removed from the permit area, pages II-38 and II-39 of the MRP must be revised.

Findings:

When the permit acreage is transferred to CEU ownership and removed from the permit area, pages II-38 and II-39 of the MRP must be revised. Presently, 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 location and acreage affected by the post mining land use change is established on Plates II-4A through II-4G.

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.

As stated in the findings above, this reduction in permit area should be reflected in pages II-38 and II-39 of the MRP.

Findings:

The information provided meets the requirements of the Regulations.

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. They have not been evaluated for their historic value, because at the time of initial permit issuance, they were not sufficiently aged. 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 is requested as per 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. The narrative will also describe coordination efforts with, and present evidence of, clearances by SHPO.

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). The SAR values of the surface soils are generally good in pits 1-3, with the exception of Test Pit 3 below 50 inches. SAR values are elevated at all depths in Test Pit 4 and in the top 22 inches of Test Pit 5. Native soil was encountered in Test Pit 5 at 22 inches, as reflected by the lower SAR value and the higher nitrate-N value.

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. Backfill for the underground rock dust bin is not identified. The volume of material required for backfill is not calculated.

ENVIRONMENTAL RESOURCES INFORMATION

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, The Permittee must identify the overburden materials to be substituted for topsoil in the reclamation of the portal and rock dust bin and demonstrate that the soil medium will be the best available material.

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

No map provided. Such maps were requested under Permit Application Form and Contents, R645-301-121.100.

Cultural Resource Maps

No map provided. Such maps were requested under Environmental Resources Cultural and Historic Information.

Existing Structures and Facilities Maps

No map was provided showing the existing structures since bond release. Plate II-1B does show the facilities and structures pre-reclamation. From this plate, one can tell the location of the structures mentioned in the proposal.

Existing Surface Configuration Maps

No map provided.

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:

R645-301-521.121, The Permittee must provide a map showing the existing location of the buildings with identification of the buildings.

R645-301-521.150, The Permittee must provide a map showing existing land surface configuration (topography) for the 16.18 acres that has not been reclaimed.

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, although a map designating the location of these facilities was requested under Maps and Plans and Cross Sections of Resource Information above.

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

OPERATION PLAN

Historical Preservation Office (SHPO). Exhibit E also encourages CEU to contact SHPO prior to rehabilitation of the buildings (or demolition).

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

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 of its central location to several unique locations. Geologic formations are well exposed in southeastern Utah, revealing a long history of depositional environments. 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. Several unique land features, paleontological sites, and archeological areas can be seen and visited in a few hours travel from Horse Canyon.

The area surrounding the proposed science camp also contains mineral 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 San Rafael Swell producing uranium, and in the Henry Mountains producing gold.

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 this post mining land use 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 three feet 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 due 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

RECLAMATION PLAN

portal area was viewed. It was the consensus of those present that once the concrete and metal were removed and the remaining concrete was covered with three feet of cover material that the area would reflect the surrounding terrain and slopes in accordance with the regulations for approximate original contour. This perspective conforms with the intent of Directive Number: Tech-002, effective July 1, 1977.

Findings:

The application does not specify where the three feet of cover material will be obtained, however conversations with the operator indicate that the cover material will come from the pad area adjacent to the portals. The cover material resource area needs to be identified in the application with an approximate volume.

Exhibit A-3 is a plate that depicts the portal area. This exhibit is contained in Appendix X-4 of the application. Exhibit A-3 has the contour lines identified in 10' increments with intermittent 2' increments shown in specific areas. Contour lines contained on Exhibit A-3 currently do not depict the fill material against the portals. In addition contour 6340 needs to be revised to depict the pad area and not a slope.

R645-301-553 - The backfilling and grading plan to cover the remaining concrete liner with 3' of cover material needs to be described in the application, specifically where the material is coming from and final surface configuration. Vegetation or stabilization methods of fill needs to be identified.

R645-301-542.200 – The anticipated final surface configuration needs to be shown on Exhibit A-3 for the portal area.

R645-301-512 – The maps in the application are P.E. stamped, but also require a signature and date.

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 reclamation work proposed for the post mining land use change will totally eliminate future access to these portals.

TOPSOIL AND SUBSOIL

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

Analysis:

Redistribution

No plan was provided.

Findings:

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

R645-301-541.400, R645-301-241, The Permittee must describe the plan for reclamation of the portal and the rockdust bin (see also deficiency written under R645-301-553.

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

RECLAMATION PLAN

residential/recreational. The post mining land use application will be located in Appendix X-4 upon approval.

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 will be used by the new owner.

UtahAmerican holds a UPDES permit associated with Sedimentation Pond #2. The Utah Division of Water Quality will not release UtahAmerican's UPDES permit unless they first have confirmation that one of the following activities occurs before they agree to the release:

- 1) The new owner applies for a UPDES permit if the sedimentation pond is to remain with a discharge mechanism; or
- 2) The decant should be either removed or permanently sealed; or
- 3) The sedimentation pond embankment be removed, regraded and revegetated.

The applicant needs to identify which option would best fit the reclamation program from the options above. The first option would require contacting CEU to find out if they would apply for a UPDES permit. If they do, then the post mining land use would change from wildlife/recreation to wildlife/recreation and industrial. The second option would require plans to show how the decant structure would be reclaimed. The second option may require a water right if removing the decant causes water to be stored in the sedimentation pond. The applicant should check with the Utah Division of Water Rights to find out if a water right needs to be filed.

Findings:

R645-301-761, The Permittee should identify which option for resolution of the UPDES permit would best fit the reclamation plan for Sediment Pond #2 and submit plans for that option.

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:

Revegetation: General Requirements

No plan was presented.

Revegetation: Mulching and Other Soil Stabilizing Practices

No plan was presented.

Findings:

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

R645-301-341, The Permittee must describe the revegetation plan for reclamation of the portal and the rockdust bin (see also deficiencies written under R645-301-553 and R645-301-541.400, R645-301-241.

STABILIZATION OF SURFACE AREAS

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

Analysis:

No plan was presented for stabilization of areas to receive reclamation.

RECLAMATION PLAN

Findings:

The information provided does not meet the Stabilization of Surface Areas requirements of the regulations. Prior to approval, the Permittee must provide the following in accordance with:

R645-301-244.200 and R645-301-355, The Permittee must describe the stabilization plan for reclamation of the portal and the rockdust bin.

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.

Findings:

The information provided does not adequately address the requirements of R645-301-541. Further information is requested under previous sections of this TA, concerning the permanent reclamation of the portal, the UPDES discharge point, and the rock dust bin.

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

Maps showing the bonded area and the area that received Phase II bond release are outlined on Plates II-4A through Plate II4G (received September 3, 2003).

Reclamation Backfilling And Grading Maps

Maps were requested under the Reclamation Approximate Original Contour section of this TA, R645-301-542.200.

Reclamation Facilities Maps

In a previous section the applicant is asked to provide information about the final disposition of the UPDES discharge point at sedimentation pond #2. Final reclamation maps and cross-sections should accompany the proposed option.

Certification Requirements.

Requirements of R645-310-512 are requested under the Approximate Original Contour Section of this TA.

Findings:

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

R645-301-731, The Permittee shall submit final reclamation maps and cross-sections for the reclamation of the UPDES discharge point at Sediment Pond #2 (see also deficiency under R645-301-761).

RECLAMATION PLAN

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.

Page 26
C/007/0013
Task ID #1630
September 3, 2003

RECLAMATION PLAN

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

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

Analysis:

The CHIA will be changed to reflect final changes accepted by DOGM.

Findings:

No changes to the existing findings have been made at this date.