GARY R. HERBERT
Governor
SPENCER J. COX
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

August 2, 2016

Karin Madsen, Resident Agent
UtahAmerican Energy, Inc.
P.O. Box 910
East Carbon, Utah 84520-0910

Subject: IBC for New Ventilation Breakout, UtahAmerican Energy, Inc., Horse Canyon Mine, C/007/0013, Task ID #5197

Dear Ms. Madsen:

The Division has reviewed your application. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. The plans as submitted are denied. Please resubmit the entire application.

If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs
O:\007013.HOR\WG5197 IBC\Deficiencies.doc

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UTAH DNR OIL, GAS & MINING

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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070013
TaskID: 5197
Mine Name: HORSE CANYON MINE
Title: IBC FOR NEW VENTILATION BREAKOUT

General Contents

Legal Description

Deficiencies Details:

The amendment does not meet the State of Utah 645 requirements for providing a correct legal description and acreage for the permit area.

R645-301-112.800: The Permittee must correct or clarify the legal description of lands described in the Permit. Remove Lila Canyon Permit Area A from the legal description, or provide clarification that Area A has received phase III bond release and has been removed from the permit area.
The Permittee must correct acreages, as described in the analysis of this section, on Plates 1-1 and Section 116 and any other areas of the MRP that identify acreage under the permit.
The Permittee must clarify disturbed acreage so it is clear and concise.

lreinhart

Operation Plan

Fish and Wildlife Protection and Enhancement Plan

Deficiencies Details:

The information is not adequate to meet this section of the regulations. Prior to approval the following information is required in accordance with R 645-301-333; It is recommended that Volume 2, chapter three, Section 333.300 #7 should be revised to include to a commitment to avoid disturbance associated with the portal breakout during the Bighorn rut and lambing seasons, November 15th to December 15th and May 1st to June 15th. A commitment should also be made to contact the Division and DWR if water is discharged in appreciable amounts that could be provided for wildlife. [JCH]

jhelfric

Reclamation Plan

Bonding Determination of Amount

Deficiencies Details:

R645-301-830.140: The Permittee shall submit detailed line item estimates of reclamation for the surface disturbances

associated with the breakout pad. The estimate should be in 2013 Dollars and include any grading of the berms/portals and seal construction associated with the breakout.

cparker

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Technical Analysis and Findings

Utah Coal Regulatory Program

August 2, 2016

PID: C0070013
TaskID: 5197
Mine Name: HORSE CANYON MINE
Title: IBC FOR NEW VENTILATION BREAKOUT

General Contents

Legal Description

Analysis:

The amendment does not meet the State of Utah 645-301-112.800 requirements for providing a correct legal description and correct acreage for the permit area.

Area A of the legal description was added into Chapter 1, under legal description. This causes unnecessary confusion since Area A has received phase III bond release and is no longer included in the Permit. Therefore, it should not be included in the legal description of the MRP. If the Permittee wishes to retain the information for a historical record, a narrative should be provided to clarify Area A is no longer included in the permit area. It appears paragraph 4 on page 15 was added for explanation of Area A vs. Area B but the paragraph causes confusion and should be removed or revised for clarity. The Permittee should also confirm that acreage of leased area is correct as the Division assumes the federal leases have not been relinquished since they have not been notified of such.

The acreage provided on Plate 1-1 is not correct. It appears to still contain acreage from Area A. The Division has estimated the correct acreage to be +/-4,688 acres. With the addition of the 40 acres proposed, the total acreage should be approximately 4,728 acres. These are estimates only and it is the responsibility of the Permittee to confirm the correct acreage held under the permit. Additionally, section 116 on page 13 shows the incorrect acreage contained within the permit area and requires correction. The Permittee must correct acreage of the permit area and also redline the proposed extra 40 acres. The paragraph regarding disturbed acres is confusing and must be clarified pursuant to R645-301-121.

Deficiencies Details:

The amendment does not meet the State of Utah 645 requirements for providing a correct legal description and acreage for the permit area.

R645-301-112.800: The Permittee must correct or clarify the legal description of lands described in the Permit. Remove Lila Canyon Permit Area A from the legal description, or provide clarification that Area A has received phase III bond release and has been removed from the permit area.
The Permittee must correct acreages, as described in the analysis of this section, on Plates 1-1 and Section 116 and any other areas of the MRP that identify acreage under the permit.
The Permittee must clarify disturbed acreage so it is clear and concise.

lreinhart

Environmental Resource Information

Permit Area

Analysis:

The amendment meets the State of Utah R645 requirements for the Permit Area.

The amendment meets the minimum requirements of R645-301-521.140 due to information stated in the mine plan details and plates which match the provided legal description of the mine boundary. The Incidental Boundary Change (IBC) would allow for the development of a new ventilation breakout to the coal outcrop for the life of the Lila Canyon Mine just north of the Central Graben Fault. The IBC will add forty acres to the permit area, which is less than 1% of the currently approved permit area of 5,992 acres. The new total permit area would be 6,032 acres.

cparker

Historic and Archeological Resource Information

Analysis:

The application includes a cultural resource inventory conducted by Montgomery Archaeological Consultants in March of 2016. The inventory did not find any cultural resources. The full report is included in the Appendix as Attachment 4. DOGM will need to provide this information to the SHPO for concurrence. The information is adequate to meet the requirements of this section of the regulations. [JCH]

jhelfric

Vegetation Resource Information

Analysis:

The current mining and reclamation plan includes vegetation surveys for the permit area that are located at the same elevation and aspect as the portals at the main surface facilities. From Chapter 4 page 5 of the MRP """"Lila Canyon lies within a region identified by the BLM as the Range Valley Habitat Management Plan area(U-6-WHA-T4). This region was designated as such by a technical committee comprising state, federal, local government agencies and private citizens. This area was established in 1991 to provide management for the wildlife species of the area, including federally protected wildlife and plant species"""". The information in the current MRP is adequate to address this section of the regulations. The Threatened and endangered plant and animal surveys for this type of area did not reveal any threatened or endangered plant or animal species. [JCH]

jhelfric

Maps Affected Area Boundary Maps

Analysis:

The amendment meets the State of Utah R645 requirements for Affected Area Boundary Maps.

The amendment meets the minimum requirements of R645-301-521.100 through-521.130 by updating all the relevant maps for the entire area shown on the mine plan as detailed on Plates 1-1, 2-1, 3-1A through 3-1D, 3-2, 4-1 through 4-4, 5-1, 5-2a, 5-3, 5-4, 5-5, 6-1 through 6-5, 7-1, 7-1A, 7-3, and 7-4.

cparker

Maps Existing Surface Configuration

Analysis:

The amendment meets the State of Utah R645 requirements for Existing Surface Configuration Maps.

The amendment meets the minimum requirements of R645-301-521.150 as it includes a drawing or plate that clearly calls out the existing surface on Plate 1-1. The ventilation breakout is not projected to occur under the nearby ephemeral

drainage channels and will not disturb the nearby Big and Little Stinky Springs.

cparker

Maps Mine Working

Analysis:

The amendment meets the State of Utah R645 requirements for Mine Workings Maps.

The amendment meets the minimum requirement of R645-301-521.140 which require maps that clearly show all mine plans. Plate 5-2a depicts the projected location of the breakout to the coal outcrop as the actual location of the breakout may vary from the drawing due to geologic conditions that may be encountered during the underground mine operations. The breakout is intended to be located as near as practical to the Central Graben Fault. Plate 5-5 is unclear to similar colored projected mining panels.

cparker

Maps Permit Area Boundary

Analysis:

The amendment meets the State of Utah R645 requirements for the Permit area and Boundary maps.

The amendment meets the minimum requirements of R645-301-521.140 as Plates were updated within the amendment to detail the new permit boundary, lease boundary, and adjacent areas to the current mine plan. Plates 1-1, 2-1, 3-1A through 3-1D, 3-2, 4-1 through 4-4, 5-1, 5-2a, 5-3, 5-4, 5-5, 6-1 through 6-5, 7-1, 7-1A, 7-3, and 7-4 were updated within the amendment to reflect the additional forty acres to the Permit Area.

cparker

Maps Surface and Subsurface Manmade Features

Analysis:

The amendment meets the State of Utah R645 requirements for preexisting Surface and Subsurface Manmade features maps.

The amendment meets the minimum requirement of R645-301-521.122 as it includes a drawing or plate that clearly calls out the existing surface and subsurface man made features within, passing through, or passing over the permit area. R645-301-521.120 through-521.125 requires maps to clearly show there are no existing surface and subsurface facilities at the project point of the breakout.

cparker

Operation Plan

Mining Operations and Facilities

Analysis:

The amendment meets all the State of Utah R645 requirements for Mining Operations and Facilities.

The amendment meets the minimum requirements of R645-301-521 by adding detailed ventilation breakout information in Appendix 5-9. The appendix contains all the typical portal sections, reclaimed slope stability analysis required for the Graben breakout to meet R645-301-523, -526, and 528 by including a description of the mining operation, method of coal mining, engineering techniques, anticipated annual and total production of coal by tonnage, and major equipment to be used for all aspects of those operations proposed to be conducted during the life. Longwall mining is not currently planned to be associated with this IBC, the development of the new ventilation breakout is critical to future longwall mining projected in the general area of the mine.

cparker

Coal Recovery

Analysis:

The amendment meets the State of Utah R645 requirements for Coal Recovery.

The amendment meets the minimum requirements of R645-301-522 due to a discussion of the measures to be used to maximize the use and conservation of the coal resources. As detailed previously, all of the surface and coal resources within this IBC are owned by the Bureau of Land Management (BLM), and are currently lease to Utah American Energy, Inc under Federal Lease #SL-066490 in an area recently approved R2P2 to allow development of the new ventilation breakout. Longwall mining is not currently planned to be associated with this IBC, the development of the new ventilation breakout is critical to future longwall mining projected in the general area of the mine. The graben breakout itself will consist of two openings at the surface, accessed and installed completely from underground. A metal canopy will be constructed at each of the two openings, measuring approximately eighteen feet wide by approximately eight feet high and extending approximately fifteen feet out from the intersection of the top of the coal seam and the talus slope above the coal seam. The entire disturbance will be approximately 800 square feet total for both portals.

cparker

Subsidence Control Plan Renewable Resource

Analysis:

The amendment meets the State of Utah R645-301-525.130 requirements for Subsidence Control Plan with a renewable resources survey.

The minimum requirements of R645-301-525.130 are met in the amendment as the Permittee presented a clear subsidence plan for protected areas. Development mining for the new ventilation breakout will be performed in less than 700 feet of cover. Longwall mining is not currently planned to be associated with this IBC, the development of the new ventilation breakout is critical to future longwall mining projected in the general area of the mine. As detailed on Plate 5-3 no subsidence is projected for the IBC area at this time.

cparker

Subsidence Control Plan Subsidence

Analysis:

The amendment meets the State of Utah R645-301-525.400 requirements for Subsidence Control Plan.

The minimum requirements of R645-301-525.400 are met in the amendment as the Permittee presented a clear subsidence plan for protected areas. Development mining for the new ventilation breakout will be performed in less than 700 feet of cover. Longwall mining is not currently planned to be associated with this IBC, the development of the new ventilation breakout is critical to future longwall mining projected in the general area of the mine. As detailed on Plate 5-3 no subsidence is projected for the IBC area at this time.

cparker

Subsidence Control Plan Slides and Other Damage

Analysis:

The amendment meets the State of Utah R645 requirements for Slides and Other Damage.

The amendment meets the minimum requirements of R645-301-515.100 with procedures already described within the existing MRP detailing the emergency contact procedures in the event of a slide. Development mining for the new ventilation breakout will be performed in less than 700 feet of cover. Longwall mining is not currently planned to be associated with this IBC, the development of the new ventilation breakout is critical to future longwall mining projected in the general area of the mine. As detailed on Plate 5-3 no subsidence is projected for the IBC area at this time. Plate 5-2A shows a slope profile view of the expect breakout profile detailing a slope at an approximate elevation of 6280 ft. The breakout pad will be constructed from the inside of the mine workings. Two ASCA will be installed to control sediment runoff from leaving the permit area untreated. A slope stability analysis was conducted on the breakouts and contained within Appendix 5-9.

cparker

Fish and Wildlife Protection and Enhancement Plan

Analysis:

On April 14, 2016 Joe Helfrich met with Brad Crompton and Daniel Eddington from DWR to determine if there were any closure periods or mitigation required for the portal breakout near Stinky springs. The proposed breakout is located in critical Bighorn sheep habitat and will be excavated from inside the mine. Recommendations included:
Avoiding the breakout during the Bighorn rut and lambing seasons, November 15th to December 15th and May 1st to June 15th and;
A commitment to contact the Division and DWR if water is discharged in appreciable amounts that could be provided for wildlife.
No additional mitigation was recommended. [JCH]

Deficiencies Details:

The information is not adequate to meet this section of the regulations. Prior to approval the following information is required in accordance with R 645-301-333; It is recommended that Volume 2, chapter three, Section 333.300 #7 should be revised to include to a commitment to avoid disturbance associated with the portal breakout during the Bighorn rut and lambing seasons, November 15th to December 15th and May 1st to June 15th. A commitment should also be made to contact the Division and DWR if water is discharged in appreciable amounts that could be provided for wildlife. [JCH]

jhelfric

Topsoil and Subsoil

Analysis:

Analysis:
The information meets the requirements of R645-301-232.200, because approximately 175 CY of subsoil will be salvaged from the 2 portal openings to be used at final reclamation of the breakouts. Topsoil, which is limited in the Rock outcrop-Atchee-Rubbleland soil, will not be separately salvaged. Each opening will be approximately 18 ft wide x 8 feet high and 15 ft deep. The breakouts will be developed from the inside. Approximately 800 sq ft will be disturbed for both portals (Appendix 5-9 Introduction). The breakout is located on a talus slope of 65% (approaching 1.5h:1v). The salvaged subsoil will be stored inside the mine. The soil within the mine will be protected from erosion due to its location.

Additional subsoil will be used to create a berm (30 inches high x 18 feet long) along the outer edge of the each breakout (Appendix 5-9 Chapter 5). This soil will be protected with a silt fence and seeded. Appendix 5-9 Figures 1 and 2 provide illustrations of the breakout development and reclamation plan.

pburton

Hydrologic Ground Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Ground Water Monitoring.

The report in Appendix 5-9 clearly describes the location of the proposed breakouts in relation to springs and water rights. There will be no disturbance that could affect springs. The springs near the breakouts are regularly monitored and are located below the coal seam. The nearest water rights are more than a mile from the breakouts.

Additional ground water monitoring is not required for these breakouts.

adaniels

Hydro Surface Water Monitoring

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Surface Water Monitoring.

There are no drainages, either ephemeral or perennial, near the proposed breakouts. the breakouts are located on steep grades and drainage patterns in the area will not be affected by the portals.

Additional surface water monitoring for these breakouts is not required.

adaniels

Hydrologic Gravity Discharge From Underground Mine

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Gravity Discharge From Underground Mines.

The proposed graben breakouts are located at an elevation of 6200', with the coal seam sloping down approximately 12% from the outcrop. The water levels in area are at an approximate elevation of 5990'. From the given information, the Permittee has stated that discharge from these portals will not be a factor.

adaniels

Hydrologic Exemptions

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Exemptions.

The proposed graben breakouts will, according to the Permittee, have very little surface disturbance. Each portal breakout will have only approximately 400 square feet of disturbance. Due to the small nature of the disturbance, these areas will be treated as ASCAs. The portals will not disturb natural drainage patterns in the area. Detailed drawings of the breakouts are provided in Appendix 5-9. These breakouts are located on steep slopes and the breakouts themselves will be accessed and installed completely from underground. The breakouts will not require and new surface roads, pads, or electrical lines.

adaniels

Support Facilites and Utility Installations

Analysis:

The amendment meets the State of Utah R645 requirements for Support Facilities and Utility Installations.

The amendment meets the minimum requirements of R645-301-521.180 and -526 the require the description, plans, and drawing for each support facility to be constructed, used, or maintained within the proposed permit area. The new ventilation breakout will have a small surface disturbance, similar the existing South Breakout, as all work will be performed through the underground mine workings. No surface roads or power lines will be required for the breakout.

The amendment included changes to the Chapter 5, Section 521.121 and 521.124 clarifying there are no buildings or existing areas of spoil, or waste within 1000 feet of the permit area that are not already approved structures associated with the Lila Canyon Mine.

cparker

Maps Affected Area

Analysis:

The amendment meets the State of Utah R645-301-521.100 requirements for Affected Area Maps.

The amendment meets the minimum requirements of R645-301-521.100 through-521.130 by updating all the relevant maps for the entire area shown on the mine plan as detailed on Plates 1-1, 2-1, 3-1A through 3-1D, 3-2, 4-1 through 4-4, 5-1, 5-2a, 5-3, 5-4, 5-5, 6-1 through 6-5, 7-1, 7-1A, 7-3, and 7-4.

cparker

Maps Certification Requirements

Analysis:

The amendment meets the State of Utah R645-301-512Certification Requirements.

R645-301-512 minimum requirements are met as all mine drawings and plates are stamped by David Hibbs, a Utah certified

professional engineer with experience in underground mining operations.

cparker

Reclamation Plan

General Requirements

Analysis:

The amendment meets the State of Utah R645 requirements for Reclamation Activities.

The minimum requirements of R645-301-540 are met within the amendment as Appendix 5-9 contains reclamation details associated with the Graben breakout.

cparker

Approximate Original Contour Restoration

Analysis:

The amendment meets the State of Utah R645 requirements for Approximate Original Contour Restoration.

The amendment meets the minimum R645-301-512.200 ,-553.110 through -553.150, and -302-270 due to narrative with the MRP Appendix 5-9 detailing how the proposed breakout pad will be reclaimed. The Permittee clarified in Chapter 3 of appendix 5-9 how the blockwall and backfill will be graded at final reclamation of the site.

AOC as defined by R645-301-553.100 through -553.150 is achieved when the final grade closely resembles the general surface configuration of the land prior to mining activities and provides a subsurface foundation for vegetative cover capable of stabilizing the surface from erosion.

The amendment meets the minimum R645-301-512.200 and -553.110 as the amendment includes narrative how the approximate original contours detailed on Figure 3 of appendix 5-9 will be reclaimed to a stable slope.

cparker

Backfill and Grading General

Analysis:

The amendment meets the State of Utah R645 requirements for Backfill and Grading.

The amendment meets the general requirements of R645-301-553 by updating the reclamation plan detailing a general backfill. The grading plan details how disturbed areas will be backfilled and graded to achieve the approximate original contour, eliminate all highwalls, spoil piles, and depressions, and achieve a postmining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long term static safety factor of 1.3 and to prevent slides, minimize erosion and water pollution both on and off the site, and support the approved postmining land use. To minimize the disturbance area and increase the chances of reclamation the breakout pad will be reached from within the mine workings. This limits the size of the breakout area to reasonable small and minimal backfilling will be required at reclamation of the area. Figure 3 show reclamation slope at final abandonment of the site.

cparker

Mine Openings

Analysis:

The amendment meets the State of Utah R645 requirements for Mine Openings.

The minimum requirements of R645-301-513.500, R645-301-529, R645-301-542.700, and R645-301-551 are met within the amendment to updated narrative in Chapter 3 of Appendix 5-9 within the MRP sealing of mine openings at the time of final reclamation. The breakout will be reclaimed in a similar fashion to the South breakout. Appendix 5-6 and 5-8 detail the typical sealing of mine openings and Figure 2 in Appendix 5-9 show the Graben breakout reclamation profile.

cparker

Topsoil and Subsoil

Analysis:

Analysis:
The information provided meets the reclamation requirements of R645-301-240 reclamation plan, because 175 CY of subsoil will be pushed outward from the mine to block the two portal openings. (Each opening requires approximately 80 CY, being 18 ft wide x 8 ft high x 15 ft deep) The subsoil will be spread on the surface no steeper than 2h:1v using hand tools and will be seeded with the seed mix described in Table 3.4/3.5 of the MRP (MRP Appendix 5-9 Chapter 3). Figure 2 of Appendix 5-9 illustrates the operational and final final topography.

pburton

Hydrological Information Reclamation Plan

Analysis:

The amendment meets the State of Utah R645 requirements for Hydrologic Information, Reclamation Plan.

The proposed graben breakouts will be back filled back to original contour. The proposed reclamation plan appears to return the slope to a stable slope face and should have minimal erosion.

adaniels

Maps Bonded Area

Analysis:

The amendment meets the State of Utah R645 requirements for Bonded Area.

The minimum requirements of R645-301-800 are meet within the amendment as the bonded area map was updated on Plate 1-1 and Plate5-2a. Other plates updated include Plate 5-1, 5-3, 5-4 and 5-5 to include the additional 40 acres associated with the Graben breakouts.

cparker

Bonding Determination of Amount

Analysis:

The amendment does not meet the State of Utah R645 requirements for Determination of Bond Amount.

The amendment meets the minimum requirements of R645-301-830.140 as the Permittee did not submit detailed bond information in regards to the amendment of sealing the breakout portals.

Deficiencies Details:

R645-301-830.140: The Permittee shall submit detailed line item estimates of reclamation for the surface disturbances associated with the breakout pad. The estimate should be in 2013 Dollars and include any grading of the berms/portals and seal construction associated with the breakout.

cparker