



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

November 1, 2018

Karin Madsen, Resident Agent
UtahAmerican Energy, Inc.
P.O. Box 90
East Carbon, Utah 84520-0910

Subject: Completion of Midterm Review, Task #5739, UtahAmerican Energy, Inc., Horse Canyon Mine, C/007/0013

Dear Ms. Madsen:

On September 14, 2018, UtahAmerican Energy, Inc. was informed that the Division of Oil, Gas and Mining (the Division) had commenced a midterm permit review for the Horse Canyon Mine.

The midterm review has now been completed and will now be closed; however, the Division has identified deficiencies that must be addressed. The deficiencies have been included with this letter (See Attached). The name of the author for each of the respective deficiencies has been provided.

Your response to these deficiencies will need to be submitted as an amendment to your MRP and will be processed as a separate task. Please submit the required amendment with the accompanying C1 and C2 forms by no later than December 3, 2018.

If you have any questions regarding these requirements or the Midterm Review process, please don't hesitate to call me at 801-538-5325.

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs
O:\007013.HOR\WG5739 MIDTERM\MidtermCompletion.doc





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

Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070013
TaskID: 5739
Mine Name: HORSE CANYON MINE
Title: MIDTERM PERMIT REVIEW

General Contents

Identification of Interest

Analysis:

The midterm permit review meets the State of Utah R645 requirements for Ownership Information. R645-301-112:

Appendix 1-1 Ownership information in the MRP was updated on February 13, 2018 and remains current.

ssteab

Violation Information

Analysis:

The midterm permit review does not meet the State of Utah R645 requirements for Violation Information. R645-301-113.300:

An AVS Permit Evaluation Report was generated for the Horse Canyon Mine C/007/0013 on September 19, 2018. There were no violations retrieved by the system.

Appendix 1-3 Violation Information has not been updated since April 2009. Appendix 1-3 requires an update to include any State or Federal violations received in the last three years by the permittee, affiliate, or persons controlled by or under control with the permittee.

Deficiencies Details:

The midterm permit review does not meet the State of Utah R645 requirements for Violation Information. R645-301-113.300:

Appendix 1-3 Violation Information has not been updated since April 2009. Appendix 1-3 requires an update to include any State or Federal violations received in the last three years by the permittee, affiliate, or persons controlled by or under control with the permittee.

ssteab

Legal Description

Analysis:

The MRP does not provide current information as required by R645-301-112.800. Mine development depicted on the

2017 Annual Report Mine Map is shown South of the current leases outlined in Table 1 of the MRP. Plates 1-1 Permit Area, Plate 5-5 Mine Map, and Plate 5-4 Coal Ownership do not show right of entry to panels 16 - 33 on the 2017 Mine Map. Please update Section 112.800 of the MRP to reflect current interest in adjacent areas.

Deficiencies Details:

The application does not meet the R645-301-118 and R645-301-121.100, current information requirements. The following deficiency must be addressed prior to final approval:

R645-301-118, Mine development depicted on the 2017 Annual Report Mine Map is shown South of the current leases outlined in Table 1 of the MRP. Plates 1-1 Permit Area, Plate 5-5 Mine Map, and Plate 5-4 Coal Ownership do not show right of entry to panels 16 - 33 on the 2017 Mine Map. Please update Section 112.800 of the MRP to reflect current interest in adjacent areas.

pburton

Permit Application Format and Contents

Analysis:

The midterm permit review does not meet the State of Utah R645 requirements for Format and Contents. R645-301-114:

Table 1-1 (Federal Coal Leases Held by Permittee), located in Chapter 1 of the MRP, lists six leases with a total acreage of 5549.01 acres. However, Chapter 1 page 10, Chapter 4 page 2, reference a total lease acreage of 5544.01 acres. The discrepancy of 5 acres is the lease #SL-066490. In Table 1-1, this lease has a total of 2445.00 acres, on Plate 5-4, lease #SL-066490 contains 2440.00 acres.

Update Table 1-1, lease #SL-066490 to 2440.00 acres and a total of 5544.01 acres, or update Plate 5-4, Chapter 1 page 10, Chapter 4 page 2 to 5549.01 acres whichever is correct.

Deficiencies Details:

The midterm permit review does not meet the State of Utah R645 requirements for Format and Contents. R645-301-114:

Table 1-1 (Federal Coal Leases Held by Permittee), located in Chapter 1 of the MRP, lists six leases with a total acreage of 5549.01 acres. However, Chapter 1 page 10, Chapter 4 page 2, reference a total lease acreage of 5544.01 acres. The discrepancy of 5 acres is the lease #SL-066490. In Table 1-1, this lease has a total of 2445.00 acres, on Plate 5-4, lease #SL-066490 contains 2440.00 acres.

Update Table 1-1, lease #SL-066490 to 2440.00 acres and a total of 5544.01 acres, or update Plate 5-4, Chapter 1 page 10, Chapter 4 page 2 to 5549.01 acres whichever is correct.

ssteab

Environmental Resource Information

Maps Vegetation Reference Area

Analysis:

The midterm review meets the State of Utah R645 requirements for "Vegetation Reference Area Maps".

The information in the MRP, (Chapter three plate 3-2 and the two maps in appendix1 of chapter 3 delineate the location and types of vegetation in the reference area.

The permittee has provided the Division with a draft of updates to these maps. GPS coordinates will be added to the maps after the qualitative assessment of the reference area.

jhalfric

Operation Plan

Topsoil and Subsoil

Analysis:

The Permittee is not in compliance with Section 234.220 or Section 333.300 of the MRP (pp. 2-16 and 3-22), which states that "in the event coal dust is observed on undisturbed soils [in close proximity to coal mining activities], water sprays...or alternative measures such as wind fence or broadening of the topsoil salvage area will be employed to control the dust and fines.

During the midterm inspection of the site on October 16, 2018, coal fines were noted accumulating on the undisturbed land South of the upper coal stockpile (Plate 5-2). A vacuum truck was on hand to remove these coal fines, which extend across the mine discharge (in the formerly dry wash) to the edge of the disturbed area boundary. These coal fines were deposited to a depth of approximately 2 inches in the vicinity of the mine discharge flow. There was evidence that this flow had carried coal fines off-site. The Permittee has received two previous citations for coal fine deposition in this same location: NOV 10122 on March 18, 2013 and NOV 10097 on July 11, 2012.

Construction of an earthen berm and installation of a drop chute on the conveyor were discussed during the inspection as methods of control for this situation. Alternatively, soils could be retrieved from this location and the mine water discharge could be placed in a pipe.

The application does not meet the requirements of R645-301-234.230, because Section 234.230 of the MRP does not specify an annual date by which topsoil stockpiles will be seeded. Recent (Spring 2018) construction of the New Storage Pad (shown on Map 5-2) produced an unknown volume of topsoil which was placed on the South side of the topsoil stockpile. The volume of this additional soil will be reported in the 2018 annual report. The additional soil will be seeded with the mix shown in Table 3-4. It has not been seeded as of this date. Rather than wait for snowfall, which may not come, the Permittee is advised to seed by November 31 of each year, because some of the seed placed on the stockpile requires a 90 day moist stratification period. Seeds must absorb moisture to begin this stratification. That may be achieved by the accumulation of dew on the soil, as well as by monsoon rains and melting snows in the Fall.

Table 3-3, timing of reclamation upon cessation of operations, referenced in Section 341.100 states seeding will be completed in October (p. 3-15).

Deficiencies Details:

The application does not meet the requirements of R645-301-234.220 and R645-301-234.230, prompt establishment of vegetation on the topsoil stockpile. The following deficiencies must be addressed prior to final approval:

R645-301-301-220, In addition to the sediment control requested under R645-301-732, the Permittee must employ alternative measures such as water sprays, wind fence or a drop chute to control the coal dust and fines South of the upper coal pad. Construction of an earthen berm and installation of a drop chute on the conveyor were discussed during the inspection as methods of control for this situation. Alternatively, soils could be retrieved from this location and the mine water discharge could be placed in a pipe.

R645-301-234.230, Section 234.230 of the MRP should include a deadline date by which topsoil stockpiles and other interim reclamation will be seeded. The Division recommends seeding by November 30 of each year, because some of the seed placed on the stockpile requires a 90 day moist stratification period. Seeds must absorb moisture to begin this stratification. That may be achieved by the accumulation of dew on the soil, as well as by monsoon rains and melting snows in the Fall.

pburton

Hydrologic Sediment Control Measures

Analysis:

The Mining and Reclamation Plan does not meet the State of Utah R645 requirements for Sediment Control Measures.

The Division conducted a Midterm Review inspection at the Lila Canyon mine on October 16, 2018 and determined additional sediment control measures are necessary to control coal fines and prevent offsite impacts. The conveyor belt running from the portal to the Upper Pad has a buildup of coal fines at its last support base, located directly above and adjacent to the Upper Pad. The buildup of coal fines is sloping to the south, but this area should drain to the north as

shown on Sediment Control Drawing 7-5. A sediment control structure such as a berm, silt fence, drainage ditch, etc. must be installed along the disturbed area boundary, just south of the conveyor support, to direct all runoff northward towards the Upper Pad. Without a sediment control structure along this southern disturbed area boundary there is potential for coal fines to be washed offsite in the undisturbed ephemeral channel to the south.

Deficiencies Details:

The Mining and Reclamation Plan does not meet the State of Utah R645 requirements for Sediment Control Measures. The following deficiency must be addressed before final approval of the Midterm Review:

R645-301-732: The Permittee must install a sediment control structure (such as an earthen berm, silt fence, drainage ditch, etc.) along the disturbed area boundary south of the upper conveyor belt to direct all runoff northward back onto the Upper Pad.

kstorrar

Maps Facilities

Analysis:

The MRP does not meet the mapping requirements of R645-301-141, because Plates 5-2 Surface Facilities and Plate 7-5 Proposed Sediment Control and Plate 8-1 Proposed Surface Facilities were submitted as an 11X 17 pdf format, but to achieve the correct scale (1:1,200 or 1" = 100 ft), the maps must be printed as a 28 X 40 inch size. Please resubmit Plates 5-2 and 7-5 in the original size for the Division to scan to allow printing to scale. Please ensure that all ditch and culvert numbers are legible on the map when printed to scale.

Deficiencies Details:

The application does not meet the R645-301-121.100, current information requirements. The following deficiency must be addressed prior to final approval:

R645-301-121.100, Please resubmit Plates 5-2, Plate 7-5, and Plate 8-1 in the original size for the Division to scan to allow printing to scale. Please ensure that all ditch and culvert numbers are legible on the map when printed to scale.

pburton

Maps Facilities

Analysis:

The Mining and Reclamation Plan does not meet the State of Utah R645 requirements for Sediment Control Structures.

Lila Canyon mine's 'Proposed Sediment Control' Drawing 7-5 needs to be updated to reflect the sediment control structures that will be implemented to meet the Sediment Control Measure deficiency. If an earthen berm is to be installed along the southern boundary of the disturbed area, the map should show the berm clearly separates runoff between the disturbed and undisturbed areas.

Deficiencies Details:

The Mining and Reclamation Plan does not meet the State of Utah R645 requirements for Sediment Control Structures. The following deficiency must be addressed before final approval of the Midterm Review:

Lila Canyon mine's 'Proposed Sediment Control' Drawing 7-5 needs to be updated to reflect the sediment control structures that will be implemented to meet the Sediment Control Measure Deficiency. If an earthen berm is to be installed along the southern boundary of the disturbed area, the map should show the berm clearly separates runoff between the disturbed and undisturbed areas.

kstorrar

Reclamation Plan

General Requirements

Analysis:

The MRP does not contain current information as required by R645-301-121.100, because the facilities has expanded

since the reclamation plan was written. Please review and update the underground development waste reclamation plan in App. 5-7, if necessary. At the end of 2010, 29.48 acres were disturbed. By the end of 2014, the disturbed acreage was 31.02. Land designated undisturbed on the southern permit boundary was disturbed to widen the upper warehouse pad. At the end of 2015, the disturbed acres were 31.88 and a storage yard was created West of the parking area. An additional 1.09 acres was proposed for disturbance for drainage control in 2015. An additional 3.02 acres was disturbed for the upper storage pad in 2018.

Please confirm the current disturbed acreage. Please confirm the volume of rock slope waste on the site as stated in Appendix 5-7 and on Plate 5-2. Also confirm whether or not the rock slope material extends beyond the area outlined on Plate 5-2 to the full extent of the ROM coal stockpile. Based on the final topography, ensure the final contours shown on Plates 5-7C, and Plates 5-7A1 to 5-7B3 are accurate and update, as necessary.

Based on the final volume of waste placed in the upper and lower pads, evaluate the volume of subsoil and topsoil cover required to place four feet over the refuse and update the bond accordingly.

Correct the disturbed area on all reclamation maps listed above and on Plate 5-6 Post-Mining Topography and Plate 5-8, Coal Handling facilities. Update the disturbed area acreage in Appendix 5-8, Reclamation Plan. Restore Figures 1 and 2 to Appendix 5-7, as referenced in Appendix 5-8 or correct the reference.

Deficiencies Details:

The application does not meet the R645-301-121.100, current information requirements. The following deficiency must be addressed prior to final approval:

R645-301-121.100,

Please confirm the current disturbed acreage. Please confirm the volume of rock slope waste on the site as stated in Appendix 5-7 and on Plate 5-2. Also confirm whether or not the rock slope material extends beyond the area outlined on Plate 5-2 to the full extent of the ROM coal stockpile. Based on the final topography, ensure the final contours shown on Plates 5-7C, and Plates 5-7A1 to 5-7B3 are accurate and update, as necessary.

Based on the final volume of waste placed in the upper and lower pads, evaluate the volume of subsoil and topsoil cover required to place four feet over the refuse and update the bond accordingly.

Correct the disturbed area on all reclamation maps listed above and on Plate 5-6 Post-Mining Topography and Plate 5-8, Coal Handling facilities. Update the disturbed area acreage in Appendix 5-8, Reclamation Plan. Restore Figures 1 and 2 to Appendix 5-7, as referenced in Appendix 5-8 or correct the reference.

pburton

Revegetation Standards for Success

Analysis:

The midterm review meets the State of Utah R645 requirements for "Standards for Success". Appendix 3 in chapter three of the MRP includes quantitative and qualitative vegetation sampling for the reference area. A qualitative assessment of the vegetation in the reference area is scheduled for October 23rd of 2018. Results of the assessment and overall condition of the reference area will be provided in a report submitted in the 2019 annual report.

jhefric

Bonding Determination of Amount

Analysis:

The application does not meet the State of Utah R645 requirements for Determination of Bonding Amount.

According to Division records, the current surety bond posted totals \$1,799,000, and is held through Indemnity National Insurance Company, an A- rated company.

A recent review of the reclamation bonding calculations revealed that O&P has been added to the direct costs, and the entire bond updated and escalated to 2021. Upon midterm review, the reclamation bond should be escalated to the next midterm year, which in this case would be 2023. The total calculated bond liability amounts to \$1,664,000, and

escalating that amount to 2023 by the current year's escalation rate (1.78%) requires that an additional \$153,000 be added to the bond. Taking into account that the current posted bond exceeds the bond liability by \$135,000, the total amount required to maintain the bond current and escalated for the next five year term is \$18,000.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Determination of Bonding Amount. The following deficiency must be addressed prior to final approval:

R645-301-830: Permittee must post an additional \$18,000 to maintain the reclamation bond adequately funded and escalated for the duration of the next permit term. Permittee must also replace the reclamation bond estimate (page 17) in Chapter 8 of the Mining and Reclamation Plan to reflect the changes proposed in this deficiency.

jeatchel