



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

February 5, 2019

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

Subject: Midterm Completion Response, UtahAmerican Energy, Inc., Horse Canyon Mine, C/007/0013, Task #5842

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 by no later than March 5, 2019.

If you have any questions, please call me at (801) 538-5350.

Sincerely,

Steve Christensen
Permit Supervisor

SKC/sqs

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Technical Analysis and Findings
Utah Coal Regulatory Program

PID: C0070013
TaskID: 5842
Mine Name: HORSE CANYON MINE
Title: MIDTERM COMPLETION RESPONSE

General Contents

Violation Information

Analysis:

The midterm completion response meets 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 been updated 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 application meets the State of Utah R645 requirements for statement of interest in contiguous lands, because Chapter 1 Section 112.800 provides such a statement.

pburton

Permit Application Format and Contents

Analysis:

The midterm completion response meets 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. Chapter 1 page 10, Chapter 4 page 2 and Plate 5-4 have been corrected with the total acreage of 5549.01 acres.

ssteab

Operation Plan

Topsoil and Subsoil

Analysis:

The application meets the State of Utah R645 requirements for operating in accordance with the mining plan

(R645-300-141), because the cover letter (dated 1/3/2019) states that a berm between the coal stockpile and the undisturbed ground is under construction, in accordance with Section 234.220 and Section 333.300 of the MRP (pp. 2-16 and 3-22), which state 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.

The application meets the requirements of R645-301-234.230, because Section 234.230 of the MRP specifies November 30, as an annual date by which topsoil stockpiles will be seeded.

Spring 2018 construction of the New Storage Pad (shown on Map 5-2) produced 3,258 CY of topsoil which was placed on the South side of the topsoil stockpile. The Available Soil Resources table (Chap 2, p. 9) has been modified to account for the additional soil and to account for the area of salvage and the BLM ROW UTU-91789 along the county road to the West. The additional soil was seeded with the mix shown in Table 3-4 in November 2018. The total volume of topsoil in the stockpile is now 69,495 CY. The total acreage salvaged is 33.39 acres. The total acreage planned for salvage is 40.11 acres within the disturbed area bounded by BLM ROW UTU-91789 and UTU-77122 (Dwg 5-2). Thus there are 6.72 acres of undisturbed ground within the disturbed area.

pburton

Hydrologic Diversion General

Analysis:

The amendment meets the State of Utah R645 requirements for Diversions.

The amendment updates the permit to the true as-built values for diversions, watersheds and sediment pond sizes. Appendix 7-4 in the MRP included the original designs and calculations for diversions, watersheds and sediment ponds sizes for the initial permitting of the Lila Canyon mine. The actual as-built size of these structures had not been updated within this appendix.

The amendment updates tables containing the sizing and calculations for disturbed watershed parameters, runoff calculations, drainage paths/sediment control structures, disturbed ditch designs and sediment pond sizing. The updated values are slightly smaller or larger than the original permitted values or within the tolerances of the original designs so no additional hardening of diversions or increased sizing of treatment structures is necessary.

kstorrar

Hydrologic Sediment Control Measures

Analysis:

The amendment meets 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 were necessary to control coal fines and prevent offsite impacts. The conveyor belt running from the portal to the Upper Pad had a buildup of coal fines at its last support base, located directly above and adjacent to the Upper Pad. The area was sloped and draining toward the undisturbed area to the south. The Permittee was instructed to clean up the coal fines, install a sediment control structure at the edge of the disturbance and update the MRP accordingly.

Since the time of the inspection the Permittee has cleaned up the coal fines and addressed drainage and sediment control issues at this location. The Division's inspector has verified an earthen berm sediment control structure four to six feet high is installed along the disturbance boundary. The amendment updates 'Plate 7-5 Sediment Control' to show the location of the earthen berm running along the southern disturbed area. The berm will now segregate disturbed area runoff directing it to flow north onto the Upper Pad and undisturbed area runoff to flow south away from the site.

kstorrar

Maps Facilities

Analysis:

The application meets the State of Utah R645 requirements of R645-301-141, because the cover letter (dated 1/3/2019)

states that all maps (including Plates 5-2 Surface Facilities and Plate 7-5 Proposed Sediment Control and Plate 8-1 Proposed Surface Facilities) will be submitted in their original size to achieve the correct scale (1:1,200 or 1" = 100 ft), when printed.

pburton

Maps Facilities

Analysis:

The amendment meets the State of Utah R645 requirements for Sediment Control Structures.

Lila Canyon mine's 'Proposed Sediment Control' Drawing 7-5 shows the location of an earthen berm running along the southern boundary of the disturbed area. This berm will segregate runoff between the disturbed and undisturbed areas by directing disturbed runoff to flow north onto the upper pad and undisturbed runoff to flow south into the undisturbed ephemeral wash.

kstorrrar

Reclamation Plan

General Requirements

Analysis:

The MRP meets the requirements of R645-301-511, General Reclamation plan, because Appendix 5-7 has been updated with current plans for reclamation. Plate 5-6 provides cross-section locations. Plate 5-7a provides a longitudinal cross section showing the pre-mining, mining, and reclamation profiles. Plates 5-7b-1 through 5-7b-6 provide cross-sections with the profile information at 100 foot intervals from West to East.

pburton

Topsoil and Subsoil

Analysis:

The application does not meet the R645-301-121.200, clear and concise requirements, the reclamation plan for underground development waste is unclear in Appendix 5-7.

An outline shown on Dwg 5-2 shows the final placement location for the estimated 37,500 CY of waste to be buried on site at reclamation in an area approximately 1 acre in size. Dwg 5-7a and 5-7b1 through 5-7b6 illustrate the final placement of the waste. The narrative in paragraph 2 of "General" information in Appendix 5-7 should be revised to state that an as-built survey determined that 37,500 CY of rock slope (underground development) waste was placed in the upper pad. The statement about construction of the shop/warehouse on the rock waste should be removed, as it did not occur. The third paragraph of "General" information in Appendix 5-7 should clearly state that the middle pad is constructed of subsoil. Further that the sub-contract coal on top of the pad is fed by a conveyor and is regularly blended into the product.

Testing of the waste is described in Appendix 5-7. Appendix 5-7 incorrectly states that the results of 1 sample are found in Appendix 6-2, however the results of four samples taken at intervals during construction are found at the end of Appendix 6-2. These results indicate that the underground development waste will require 4 feet of cover, due to selenium and SAR values. At final reclamation, the final graded surface of the underground development waste could be sampled at foot intervals to a depth of two feet to determine whether lesser cover could be applied. (i.e. If two feet of the underground development waste are non-toxic and non-acid forming than only two feet of cover would be required.)

Based on the final volume of waste (37,500 CY) and 1 acre burial between Sta 15+ to 18+ on Dwg 5-6, it is estimated that the waste will be 23 feet deep. Cross Sections for Sta 15+ are found on Dwg 5-7b-4; Sta 16+ to 19+ are on Dwg 5-7b-5; Sta 20+ - 22+ are on Dwg 5-7b-6. Based on the available information, it's estimated that 6,453 CY of subsoil and topsoil will be required, if testing indicates that four feet of cover is required.

The total disturbed area requiring soil replacement is expected to be 40.11 acres (Available Resources Table), but only

39.11 acres have been disturbed thus far. There is currently 69,495 CY of topsoil and subsoil stockpiled. After utilizing 6,453 for cover over the 1 acre of waste, there will be 63,042 CY remaining for 39.11 acres. That is an average depth of 11 inches topsoil for the remainder of the site.

Chapter 2 Section 242.100 (p. 18) states that efforts will be taken to replace varying depths of topsoil to resemble the original soil depths. Plate 2-3 shows the original soil depths by soil type. They vary from 8 inches to 18 inches. A quick assessment of this map indicates that the lower half of the site was designated to receive 18 inches at final reclamation and the upper half, 12 inches at final reclamation. At present, there is not adequate amount of soil in the stockpile to meet this commitment. There is however adequate soil to replace a twelve inch depth of topsoil over the entire site. And it should be noted that more topsoil will be recovered from the remaining six acres to be developed which could bring the average replacement depth above twelve inches.

Deficiencies Details:

The application does not meet the R645-301-121.200, clear and concise requirements. The following deficiency must be addressed prior to final approval:

R645-301-121.200. Please revise the narrative in Appendix 5-7 "General" paragraph 2 to state that an as-built survey determined that 37,500 CY of rock slope (underground development) waste was placed in the upper pad. The statement about construction of the shop/warehouse on the rock waste should be removed, as it did not occur. The third paragraph of "General" information in Appendix 5-7 should clearly state that the middle pad is constructed of subsoil. Further that the sub-contract coal on top of the middle pad is fed by a conveyor and is regularly blended into the product.

R645-301-121.200. Please correct the statement in Appendix 5-7 "Testing of the Rock Slope Material" to state that the results of four samples taken at intervals during construction of the rock slope are found at the end of Appendix 6-2.

pburton

Bonding Determination of Amount

Analysis:

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

During the Midterm review conducted in October 2018 it was determined that after applying the requisite 5 year escalation rate of 1.78% the bond liability would exceed the posted bond by \$18,000. An increase of exactly \$18,000 would be needed in order to maintain the Permittee's reclamation bond adequately funded. Included in this amendment is a bond rider for an increase of \$18,000 that was sent by the Permittee on November 28, 2018 and received by the State of Utah on December 6, 2018. The posted reclamation bond has been increased from \$1,799,000 to \$1,817,000.

However, a recent change to Appendix 5-7 has indicated that the volume of rock slope material generated by construction of rock slopes was determined to be 37,500 cubic yards - 9,500 cubic yards more than previously indicated in the MRP. The volume was surveyed just after placement years ago, but the calculations required to determine the exact volumes weren't executed until just recently. Since there will be more volume to reclaim, it follows that the earthwork portion of the reclamation bond will also need to be increased accordingly. This was communicated to the Permittee during a meeting on the afternoon of Wednesday, January 30, 2019, and all parties were in agreement.

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 make changes to the earthwork portion of the reclamation bond to account for the increase of 9,500 cubic yards of material above what was previously documented in the MRP.

jeatchel