



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

March 6, 2019

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

Subject: Conditional Approval of Midterm Completion Response, UtahAmerican Energy, Inc., Horse Canyon Mine, C/007/0013, Task #5858

Dear Ms. Madsen:

The above-referenced amendment is approved conditioned upon receipt of 2 clean copies prepared for incorporation. Please submit these copies by April 5, 2019. Once we receive these copies, final approval will be granted.

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

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: 5858
Mine Name: HORSE CANYON MINE
Title: MIDTERM COMPLETION RESPONSE

General Contents

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

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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

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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.

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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.

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Topsoil and Subsoil

Analysis:

The MRP meets the requirements of R645-301-240, soil redistribution 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.

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 states that an as-built survey determined that 37,500 CY of rock slope (underground development) waste was placed in the upper pad. The sub-contract coal on top of the middle pad is fed by a conveyor and is regularly blended into the product. Not stated, but confirmed with P.J. Jensen and Karin Madsen was the fact that the middle pad is constructed of subsoil (communication on 1/29/2019).

Testing of the waste is described in Appendix 5-7. Appendix 6-2, has 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 Sta15+ 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.

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Bonding Determination of Amount

Analysis:

The amendment meets the State of Utah R645 requirements for Determination of Bonding Amount.

The application satisfies the minimum application requirements for the State of Utah as per R645-301-830. A midterm review initiated in October of last year identified two items in the reclamation bond that needed to be adjusted to maintain adequacy. An increase of 9,500 cubic yards of material in Appendix 5-7 required that the earthwork portion of the reclamation bond also be increased. The increased earthwork volume was not the result of recent activity within the disturbed area. Rather, it was the result of an as-built survey that was conducted of the underground development waste generated from the construction of rock slopes early on in the mine's development. The additional 9,500 cubic yards of earthwork addressed in Appendix 5-7 increased the bond calculations by \$39,000 from \$1,664,000 to \$1,703,000.

Additionally, the bond needed to be adjusted to account for the requisite 5-year escalation. 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. Even though the reclamation liability has increased, Permittee maintains a bond surplus because the posted bond is greater than the calculated liability by \$114,000.

jeatchel