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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

BRIAN C. STEED  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

March 26, 2020

Elliot Finley, Resident Agent  
Hiawatha Coal Company  
P.O. Box 1240  
Huntington, Utah 84528

Subject: Conditional Approval of Midterm Completion Response, Hiawatha Coal Company, Hiawatha Mine, C/007/0011, Task #6078

Dear Mr. Finley:

The Division has reviewed the Hiawatha Mine's midterm completion response. The revisions to the Mining and Reclamation Plan (MRP) and bond cost estimates have been conditionally approved. Final approval will be granted with the following conditions have been met:

- 1) Provide two clean copies prepared for incorporation. A stamped incorporated copy will be returned to you for inclusion into your copy of the Mining and Reclamation Plan (MRP).
- 2) The current bond held by the Division is \$1,708,000. An increase in the bond amount of \$232,000 for a total of \$1,940,000.

Please submit the two clean copies and posted bond increase by April 27, 2020.

If you have any questions, please call me at (385) 290-9937 or Suzanne Steab, Bond Coordinator at (801) 538-5265.

Sincerely,

Steve Christensen  
Coal Program Manager

SKC/sqs  
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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070011  
**TaskID:** 6078  
**Mine Name:** HIAWATHA MINE  
**Title:** MIDTERM COMPLETION RESPONSE

#### General Contents

##### Identification of Interest

*Analysis:*

The amendment meets the State of Utah R645-301-112 requirements for Identification of Interests. HCCI and ANR are listed as entities with interest in the property, ANR as the land and lease owner and HCCI as the operator. The MRP states that neither HCCI nor ANR have any owners with a 10% or greater interest in the company and there are no parent companies. Required officer and agent information is included for both companies.

tmiller

##### Violation Information

*Analysis:*

The amendment meets the State of Utah R645-301-113 requirements for Violation Information. No current violation information is known to the Division at this time. Current officer and agent contact information is included in the amendment.

tmiller

##### Right of Entry

*Analysis:*

The amendment meets the State of Utah R645-301-114 requirements for Right of Entry. The amendment clarifies, in Section R645-301-112, the current status of the leases owned by ANR. Those leases, namely SL-025431, SL-069985, U026583-058261, and U-51923, are currently counted toward the Bear Canyon LMU and will remain as such until the expiration of the ANR/Castle Valley Mining agreement in 2024.

tmiller

##### Legal Description

*Analysis:*

The application meets the State of Utah R645 requirements for Permit Application: Content and Format.

This amendment accounts for 190.12 disturbed acres (MRP Chap 2, p. 2-35 and Table 11-13 Reclamation Area Acres and Topsoil Volumes). The Permittee stated that 190.12 acres disturbed is the most accurate disturbed acreage figure. The Division's record of 197 disturbed acres should be adjusted accordingly. (The Task 6078 cover letter/response to the legal description deficiency provides an historical account of how the road acreage was the source of the discrepancy noticed during the mid-term review.)

Table II-13 Reclamation Area Acreage and Topsoil Volumes table is an excellent resource. This table breaks down the acreage by type of disturbance, locations and acres of bond release. Table II-13 lists 95.27 acres that have received Phase III bond release. **Table II-13 sums the remaining 190.12 total disturbed acres as follows:**

134.69 Hiawatha + 28 roads + 12.63 South Fork + 14.8 Middle Fork = 190.12 ac. disturbed

A table on p. 2-37 also states disturbed and reclaimed acres for selected (but not all) reclamation areas in Hiawatha. This table states 146.09 total acres and a Total Remaining [disturbed yet to be reclaimed] acres of 57.42 acres in the Hiawatha area.

The MRP Section 333 (p. 3-36) reports 366.89 total permit acres, of which, 81.5 acres comprise the town and railroads that will not be reclaimed (Sec. 333, p. 3-36), another 27 acres are borrow areas that may not be disturbed. Therefore  $366.89 - 81.5 - 27 = 285.39$  acres will be restored to the post mining land use. Those 285.39 acres includes roads. Of those 285.39 acres, 93.27 acres have already received Phase III bond release (including 5.1 acres of roads).

**Therefore,  $285.39 - 93.27 = 192.12$  acres disturbed (including 28 acres roads) remain to be reclaimed.**

The minor difference between Section 333 and Chap. 2 Table II-13 remaining disturbed might be explained by the accuracy of the original description of RA-1, where a difference of 1.6 acres was corrected during the process of bond release (Task 6078 cover letter/response to legal description deficiency). **If that is the case, then  $192.12 - 1.6 = 190.52$  acres yet to be reclaimed.**

pburton

## Operation Plan

### Topsoil and Subsoil

#### *Analysis:*

The Mining and Reclamation Plan meets the requirements of the Utah R645 requirements for Soil: Operation Plan.

The two remaining topsoil stockpiles (South Fork and Middle Fork piles) are described in Chap II Section 231.400, p. 2-31. Chap II, Table II-12, Topsoil and Topsoil Borrow Volumes, shows the location and volume of the two remaining topsoil storage piles at the site. There is 354 CY in the Middle Fork stockpile and 1,206 CY in the South Fork stockpile (p 2-33, e-p 39).

The Middle Fork stockpile is further described on p. 2-26 and p.2-31. The circular Middle Fork stockpile is 50 ft. in diameter and four feet high. Protection of the pile is described in MRP Section 231.400, p. 31 (e-MRP Chap II p. 37). The pile is protected by a berm/ditch.

South Fork stockpile is described on p. 2-31, where it is described as three adjacent piles. Dimensions of each are provided. However, during the mid-term inspection, the three units of the stockpile were not distinct. Exhibit II-2 shows the stockpile as anvil shaped. The pile is protected by a berm/ditch.

Stockpiles were vegetated with the interim mix found in Attachment 1 of App. III-4 (p. 2-31, e-p 37)). [Attachment 1 could not be found, but a long list of seed mixes are described in Appendix B of App. III-4.] The Chap III, Section 331, p. 3-23 (e- p. 29) describes a simple mix of intermediate wheat grass and alfalfa for topsoil stockpiles. During the mid-term inspection on 9/4/2019, the South Fork topsoil stockpile was observed to be a vegetated with climax vegetation of sagebrush. Both South Fork and the Middle Fork had been heavily grazed.

An uncertain volume of flood wash sediments are stockpiled at the angle of repose in Middle Fork (Chap II, p. 2-4). The stockpile is bermed and was seeded in the Fall of 2018. The topsoil is not designated topsoil at this time (Chap 2, p. 2-4). However this may be the best available material in the permit area for vegetation growth (R645-301-233.100).

Substitute topsoil locations are outlined on Exhibits II-4A (Hiawatha Processing plant & Waste Disposal Areas), II-4B (South Fork), II-4C (Middle Fork) and II-5. The volume of substitute topsoil from each location is stated in Table II-12. Substitute topsoil characteristics are described in Appendix II-3. During the mid-term inspection, it was noted that Middle Fork substitute topsoil location B (0.6 acres) was severely eroded, and its projected volume of 1,596 CY diminished.

Soil borrow areas are shown on Ex. II-4A and described on p. 2-38, 2-40 through 2-44. One such borrow area is RA-13,

the Upper Rail Yard (URY), which will be the source of 75,543 CY of borrow soil for reclamation of refuse. During the mid-term inspection it was noted that the URY is being used as a gun range. The effect of the gun range use on the substitute topsoil will be evaluated and analyzed in the Spring of 2020 (p. 2-5). This evaluation will be undertaken to ensure protection of the upper 1.5 feet of substitute topsoil in the URY as described in Chap 2, p. 2-38.

pburton

## Reclamation Plan

### General Requirements

#### *Analysis:*

The application meets the State of Utah R645 Coal Rules for General Reclamation Requirements.

The application satisfies the General Reclamation requirements within the Utah Coal Rules because the narrative describes the reclamation plans for a section of disturbed area within the vicinity of Middle Fork. Approximately 2,800 cubic yards of flood wash sediments are stockpiled and bermed within Middle Fork and are currently being used by ANR Company, Inc., the surface owner in this part of the permit. Page 2-25 states that the 2,800 cubic yards of flood wash sediments will be available for use as additional topsoil material to assist in the reclamation of 9.4 acres in Middle Fork. Bonding tables on page 8-63 indicate that the reclamation bond has been supplemented to account for the handling of an additional 2,800 cubic yards of flood wash sediments.

jeatchel

### Topsoil and Subsoil

#### *Analysis:*

The Mining and Reclamation Plan meets the state of Utah R645 requirements for Soils: Redistribution Plan.

Table II-13(p. 2-42) is a complete and detailed listing of the remaining area to be reclaimed (190.12 acres), source and volume of substitute topsoil and topsoil replacement depths. Table II-13 final totals are 95.27 acres reclaimed (Phase III bond release) and 190.12 acres remaining disturbed.

Table II-12 (p. 2-33) keeps an accounting of topsoil and substitute topsoil available and redistributed.

Substitute topsoil locations are shown on Ex. II-4B & C and Ex II-5. The quality of the substitute topsoil is described in Appendix II-3.

Section 231.400 itemizes the topsoil stockpiles that remain and those that have been consumed in reclamation.

Chapter II, Section 241 describes the remaining reclamation:

**Middle Fork.** Table II-13 itemizes the 14.8 acres in RA- 22 to RA-25, and states that 7,583 CY of substitute topsoil will be recovered from locations A, B & C (shown on Ex II-5) to cover the 14.8 acres with 6 inches. Together these fill areas are 4.39 acres. These borrow areas could potentially yield 10,620 CY (MRP Section 231.200 Table II-8). However, only 7,583 CY are required to provide a six inch cover depth (Table II-13). An additional 2,800 CY may be available from the flood wash sediments, pending third party use (p. 2-25).

**South Fork.** Excluding the haul road, there are 12.63 acres to be reclaimed (Ex. II-13 and p. 2-36, e-p.42). Table II-13 itemizes the source of cover material for RA 17 through RA 21 in South Fork. There are two sources of substitute topsoil in South Fork (sites A & B) which are shown on Ex. II-5. Together sites A & B equal approximately 2.62 acres. Salvage of 1.5 feet from South fork sites A & B could yield 6,339 CY to provide six inches of cover over the King VI pad area (6.38 acres) in South Fork (Table II-11). However, only 5,417 CY is required to achieve a six in cover (Table II-13). In addition, the Middle Fork topsoil stockpile will be used to reclaim South Fork (p. 2-31).

Sediment ponds will be reclaimed using their embankments. Similarly, the conveyor will be reclaimed with the adjacent embankment. The water tank will be reclaimed with in situ soil. The 1,206 CY South Fork stockpile will be redistributed over the coal stockpile and truck loadout (1.94 acres in RA 17).

**Hiawatha Area.** The current Hiawatha disturbed area is 134.69 acres and the area reclaimed area to date is 88.67

acres (Ex. II-13 p 2-37, e. p. 43). Ex II-13 is a complete listing of Hiawatha reclamation areas RA 1 – RA-15. Exhibit II-4A shows the locations of these areas. The table on p. 2-37 is a partial list of acreage in RA -1 through 7. The table lists 27.47 disturbed acres in RA-1; 18.36 acres in RA-7 (preparation plant area); 11.59 in RA-4 (Borrow Area A). These acreages are illustrated on Ex. II-4A.

Coal storage areas are shown on Plate V-5. During final reclamation of these areas, coal fines will be placed either in slurry pond #1 or in Slurry pond #5A (pp. 5-104 and 5-106 of Sec. 541). The proposed reclamation of Slurry Ponds 1 and 5A is described on pages 2-39 through 2-42. After grading the refuse will be ripped to a depth of 18 – 24 inches. Sampling of the graded refuse/slurry is stated on page 2-40 for acid/toxic forming materials in Slurry Pond 1 and for nutrient content in both Slurry pond 1 and Slurry pond 5A.

Sixteen inches of substitute topsoil cover will be placed over the refuse and slurry. The substitute topsoil cover may be disked or scarified. Random samples will be collected for nutrient analysis. Seed will be followed by 1 T/ac mulch either crimped into the soil or spread with a binding agent. (p. 2-40).

Reclamation Plan-Substitute Topsoil Requirements section, p. 2-41, states that cover material for slurry ponds and refuse and miscellaneous piles will come from the Lower Preparation Plant (LPP, 40 inch cut yielding 24,300 CY), the Upper Rail Yard (URY, approx. 5 ft cut yielding 75,543 CY) shown on Ex II-4A. The quality of the LPP and URY borrow soil is described in Appendix II-4. In the course of investigating the quality of the Upper Rail Yard soils, the Division noted that Attachments A, B & C are missing from Appendix II-4, soils report. This information has been restored with this submittal. Table II-13 summarized the volume needed to reclaim refuse areas as 97,230 CY.

Reclamation of RA-1 non-refuse areas (sediment ponds, borrow areas, affected area and the remaining preparation plant area) is described on p. 2-38, 2-40 through 2-44.

Slurry pond 5A is used for run-off control (pg. 5-64) and will be the last structure to be reclaimed (pg. 5-78).

pburton

## **Bonding Determination of Amount**

### *Analysis:*

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

The amendment satisfies the State of Utah R645 rules for Determination of Bonding Amount because the submittal includes a detailed breakdown of all costs related to the reclamation of all disturbed areas of the permit. A previous deficiency identified an arithmetic error within the earthwork calculations which has been corrected in the current submittal. Additionally, the earthwork section in the previous submittal did not address the cost of handling 2,800 cubic yards of flood wash sediments in Middle Fork. The earthwork calculation table on page 8-63 of the current submittal gives an accounting of the costs required to reclaim the 2,800 yd<sup>3</sup> of flood wash sediments.

The currently posted bond amounts to \$1,708,000, but the proposed changes to the bonding calculations as well as escalation will increase the current bond amount to \$1,940,000, an increase of \$232,000.

jeatchel