



## Technical Analysis and Findings

### Utah Coal Regulatory Program

May 22, 2015

**PID:** C0070011  
**TaskID:** 4872  
**Mine Name:** HIAWATHA MINE  
**Title:** MIDTERM COMPLETION RESPONSE

### Operation Plan

#### Topsoil and Subsoil

##### *Analysis:*

##### Analysis:

The MRP Chap III reports a total of 360 disturbed acres, of which, 250 acres will be reclaimed to wildlife and range habitat and the remaining acreage comprises the town, roads, and railroads that will not be reclaimed (Sec. 333, p. 36, dated 07/11/08). Section 333 also states that 53 acres may be disturbed for topsoil borrow operations. This update to the MRP states that some flood wash sediments carried into the Middle Fork disturbed area will be used as substitute topsoil. This is a positive action to reduce the number of borrow acres necessary at final reclamation.

Hiawatha Coal Company Inc.'s parent company, ANR, will utilize this material in the Spring of 2015 to restore the off-site impacts of the flooding that produced the sediments. A commitment is included in the MRP to place any remaining soil in the Middle Fork Topsoil Stockpile and protect it as described. The volume placed in the pile will be reported and the material will be sampled in accordance with the parameters outlined in Tables 3 and 7 of the 2008 Division Guidelines for Topsoil and Overburden.

MRP Chap II Page 2-26 (e-MRP p. 32) describes a small stockpile located at the junction of the Middle Fork and North Fork roads. The circular stockpile is 50 ft. in diameter and four feet high. It presently holds 354 cu yds. 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 and is vegetated with the interim mix found in Attachment 1 of App. III-4. Attachment I could not be found, but a long list of seed mixes are described in Appendix B of App. III-4. The MRP Section 331, p. 3-23 (e-MRP Chap III p 29) describes a simple mix of intermediate wheat grass and alfalfa for topsoil stockpiles. So it is recommended that the Division be consulted prior to purchasing the seed mix for stabilizing the additional topsoil on the the Middle Fork stockpile and at that time, the statements in the MRP about the seed mix should be revised to indicate what was actually seeded.

The MRP Section 231.200 p. 2-25 (e-MRP p. 31) describes the use of substitute topsoil to reclaim Middle Fork.

Information on access to Borrow Areas has been updated on p. 5-107 to state that Conoco Philips has installed a permanent concrete crossing to provide access to methane gas wells. This access will be used to gain entry to Borrows area D.

The information provided meets the requirements of the Utah Coal Rule R645-301-233, Topsoil Substitutes and Supplements. The Division should be consulted prior to purchasing the seed mix for stabilizing the additional topsoil on the the Middle Fork stockpile and at that time, the statements in the MRP about the seed mix should be revised to indicate what was actually seeded.

## Reclamation Plan

### Bonding Determination of Amount

#### Analysis:

The Permittee provided an update to all of the bond sheets that included the line item increase for all demolition, earthwork, and revegetation cost estimates. The Permittee obtained a cost estimate for concrete demolition conducted by a local contractor. The permittee included a copy of the cost estimate within their application thus satisfying the Division's requirements of proof of any cost utilized outside of the standardized cost estimator references. The final bond amount was determined to be \$1614,000 in 2019 Dollars. The bond amount posted in 2008 was \$2,128,000. The bond amount currently posted is adequate by 32%. The application does not meet the minimum requirements of R645-301-800 due to a couple error on the bond summary sheet:

1. For clarity text should be added to the total cost line stating "Total Cost in 2014 Dollars"
2. The Division Escalation Memo Escalation factor, states that 2014 escalation rate was 1.019. The escalation rate for 2015 is 1.012 but since the midterm was initiated in 2014 the Division standard is to keep the escalation rate of the review year.
3. There is a typo on the line titled Bond Amount (rounded to the nearest \$1,000) as it should be 2019 Dollars not 2009 Dollars.
4. The second Quarterly 2015 Bond review conducted by Suzanne shows that Hiawatha's current posted bond amount is \$2,128,000 as of 5/5/10 escrow agreement held by Bank of Utah not \$3,005,000.
5. There is an error in the % calculation when an escalation factor of 1.9 is utilized the escalated bond amount should be \$1,614,000 (\$144,977 in escalation for 5 years). The % should reflect the difference between cost estimate and bond.

#### Deficiencies Details:

As per R645-301-30.410 the Division has selected the midterm review as appoint to reassess and update the bond estimates. The Permittee provided the corrected line item updates but had several errors on the Bond Summary page:

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