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# State of Utah

DEPARTMENT OF NATURAL RESOURCES

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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070011  
**TaskID:** 4646  
**Mine Name:** HIAWATHA MINE  
**Title:** MIDTERM PERMIT REVIEW

#### General Contents

#### Reporting of Technical Data

##### Analysis:

On August 4th the Division informed Elliot Finley of the commencement of the Division's Mid-Term review. This analysis will include a review of the following items:

A. Review of the Plan to ensure that the requirements of all permit conditions, division orders, notice of violations (NOV), abatement plans, and permittee-initiated Plan changes approved subsequent to permit approval or renewal (whichever is the most recent) are appropriately incorporated into the Plan document.

Analysis: There are no outstanding permit conditions or commitments, division orders, notice of violations (NOV), abatement plans, or permittee-initiated Plan changes.

B. Ensure that the Plan has been updated to reflect changes in the Utah Coal Regulatory Program which have occurred subsequent to permit approval or renewal.

Analysis: There have been no changes in the Utah Coal Regulatory Program subsequent to permit approval or renewal.

C. Review applicable portions of the permit to ensure that the Plan contains commitments for application of the best technology currently available (BTCA) to prevent additional contributions of suspended solids to stream flows outside of the permit area.

D. Evaluate the compliance status of the permit to ensure that all unabated enforcement actions comport with current regulations for abatement; verify the status of all finalized penalties levied subsequent to permit issuance or permit renewal, and verify that there are no demonstrated patterns of violation (POV). This will include an AVS check to ensure that Ownership and Control information is current and correct.

E. Evaluate the reclamation bond to ensure that coverage adequately addresses permit changes approved subsequent to permit approval or renewal, and to ensure that the bond amount is appropriately escalated in current-year dollars.

F. Evaluate the permit for compliance with variances or special permit conditions.

Analysis: There are no outstanding variances or special permit conditions.

G. Optional for active mines, mandatory for reclamation only sites: conduct a technical site visit in conjunction with the assigned compliance inspector to document the status and effectiveness for operational, reclamation, and contemporaneous reclamation practices undertaken on predetermined portions of the disturbed area to minimize, to the extent practicable, the contribution of acid or toxic materials to surface or groundwater, and to otherwise prevent water pollution.

Analysis: A mine site visit was conducted on September 24th. Areas visited included the sediment controls for the refuse piles and slurry ponds and the surface facilities at the middle and south forks of Miller canyon.

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## Operation Plan

### Mining Operations and Facilities

*Analysis:*

A site visit was conducted on 9/24/14 as part of the midterm review process. The site continues to experience landslides in the middle fork section due to heavy rains in the area. Current mine operations include clearing away and maintaining these facilities in a prudent manner. Berms, roads and ponds were inspected for any sign of destabilization.

The berms around the disturbed boundary were stable and sufficient as depicted in the MRP. Berms appeared stable only showing minor rill, none of which are to the extent of needing repairs. Some sections of the berm along the boundary require cleaning maintenance due to recent rain events, specifically along the Eastern boundary near Sediment pond 006, where the berm has filled over 75% with sediment.

All of the ponds were inspected and did not show any signs of structural instability such as: cracks on the crest or slopes, sloughing or bulging on the slopes, or sloughing or bulging at the toe. Two ponds had very little standing water at time of inspection. There wasn't any sign of major erosion that would endanger the integrity of the embankments or significant boils or seepages that would remove soil material.

The inlets and outlets were also inspected for stability and function. There were no signs of piping or seepage occurring around the systems of any of the decant in Pond 006. Pond 006 was scheduled to be cleaned and the outlet could not be located to inspect for sediment clogging at the time of the inspection. The decant in Pond 004 could not be located at the time of inspection. All the observed decants, inlets and spillways showed no signs of damage that would prevent proper discharge.

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### Topsoil and Subsoil

*Analysis:*

The Sealy fire coupled with reoccurring precipitation events has resulted in the deposition of considerable amounts of suitable growth media (Topsoil) on the pad, in the sediment pond and in the ditches and over the old haul road of the Middle Fork surface facilities. The majority of the material will most likely be used by the surface owner (ANR) to develop food plots for wildlife and repair the access road located in the watershed above the Middle Fork surface facilities. Hiawatha Coal Co. will retain small amounts of the material for minor erosion repairs (Personal conversation with Charles Reynolds 10/09/2014). The Division is requesting that the permittee provide a commitment in the MRP to include the intended uses and protect (berm, rock & seed) any suitable growth media material that has been deposited from precipitation events or will remain in the Hiawatha permit area. The commitment should also include a description of where the material is located and estimated volumes.

*Deficiencies Details:*

The Sealy fire coupled with reoccurring precipitation events has resulted in the deposition of considerable amounts of suitable growth media (Topsoil) on the pad, in the sediment pond and in the ditches and over the old haul road of the Middle Fork surface facilities. The majority of the material will most likely be used by the surface owner (ANR) to develop food plots for wildlife and repair the access road located in the watershed above the Middle Fork surface facilities. Hiawatha Coal Co. will retain small amounts of the material for minor erosion repairs (Personal conversation with Charles Reynolds

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## Road System Plans and Drawings

### Analysis:

All roads appeared stable with minor head cutting in the shoulder of the asphalt up east fork due to recent rain events overland flow. Drainage off the roadways into the appropriate storm collection systems appeared functional.

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## Hydrologic Diversion General

### Analysis:

During the September 24, 2014 inspection, diversions and ditches were inspected throughout the facility. Berms along the east side of slurry pond 5 were in need of maintenance, and the permittee was informed. The 48" by-pass culvert in the middle fork facilities has been impacted by the mudslides coming off the burn scar in the watershed above the site. The culverts have been blocked up to 100' below the inlet and the permittee has been working throughout the summer to clear the culvert. The permittee is continuing to keep the culvert functioning as much as possible.

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## Hydrologic Discharge Structures

### Analysis:

During the September 24, 2014 mid-term inspection, sediment ponds were inspected. Specifically, primary and secondary spillways, inlets, and sediment level markers. Overall ponds appeared to be in good condition. Sediment pond 006 had a lot of sediment built up and is scheduled to be cleaned-out. The outlet to the primary outlet (pipe) could not be located and appears to have been buried during maintenance work. The Permittee indicated that work will be done to fix this. Sediment pond 004 was inspected and only the emergency spillways was observed, the decant pipe, as detailed in Exhibit VII-9 of the approved MRP, should be re-established. The middle fork surface facilities, have been heavily impacted by mud slides from the Seeley Fire burn scar in the watershed above the site. Sediment pond 008 has been cleaned out and re-filled with mud multiple times throughout the year. During the inspection the pond was partially clear of sediment, and the outlets appeared to be in working condition.

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## Reclamation Plan

### Bonding Determination of Amount

#### Analysis:

#### Deficiencies Details:

Please submit updated bond information that is escalated to 2014 dollars.

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