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**Technical Analysis and Findings**  
**Utah Coal Regulatory Program**

June 9, 2015

**PID:** C0250005  
**TaskID:** 4894  
**Mine Name:** COAL HOLLOW  
**Title:** POND 1 AND WATER VALVE

**General Contents**

**Maps and Plans**

*Analysis:*

**Analysis:**  
R645-301-121.200. Clear and concise. The application provides an as-built/amendment to Pond 1 in Drawing 5-28. The narrative in the center of the drawing titled, "Geotechnical Report Appendix F, RECOMMENDED EARWORK SPECIFICATIONS" discusses compaction specifications the spoil pile. Given this is a drawing of a sediment pond; the discussion should be based on this sediment pond and should not a narrative referring to the spoil pile.

**Finding:**  
The application does not meet the minimum requirement of R645-301-121.200. Clear and concise in Drawing 5-28.

*Deficiencies Details:*

**Deficiency:**  
R645-301-121.200. Clear and concise. The Drawing 5-28 is of Sediment Impoundment Pond 1. The narrative in the center of the document should only refer to design specifications regarding Sediment Impoundment Pond 1. Remove any narrative that is not directly related to Sediment Impoundment Pond 1.

kstorrar

**Operation Plan**

**Hydrologic Impoundments**

*Analysis:*

**Analysis:**  
Cheryl Parker of the Division staff has addressed the incorrect storage volume computations found in the Drawing 5-28 table labeled 'Sediment Impoundment Pond 1 STORAGE VOLUME COMPUTATIONS'. Correct calculations of the storage size of Pond 1 are needed in order to insure the pond meets the minimum 10 yr, 24 hr design storm requirements. In addition to addressing this deficiency the application needs to address:  
R645-301-733.130. Upon updating the values in the table 'Sediment Impoundment Pond 1 STORAGE VOLUME COMPUTATIONS' the Permittee needs to update the narrative supporting these numbers in Appendix 5-2 in the MRP.

**Findings:**

The Permittee does not meet the minimum requirements of providing an updated narrative on the Sediment Impoundment Pond 1 STORAGE VOLUME COMPUTATIONS.

*Deficiencies Details:*

R645-301-733.130. In addition to updating Sediment Impoundment Pond 1 STORAGE VOLUME COMPUTATIONS, the application will need to update the narrative in Appendix 5-2 in the MRP supporting these computations.

kstorrar

## **Support Facilities and Utility Installations**

*Analysis:*

The application includes updates to As-builts of Pond 1 and as-built pipeline/valve locations due to maintenance on a leaking valve at the facilities. The application also includes updates to drawings that were missed in the underground amendment, Drawings 5-8C and 5-28. The drawings illustrate the location of all the fresh water pipelines, valves, and addition of water tanks.

The plan view of Drawing 5-8C shows an underground pipeline that connects a tank to the well, the pipeline then continues west into Pit 10. Site inspection show that the pipeline running to the underground operations is an above ground pipe not buried. Two details are shown below the plan view on Drawing 5-8C. The application is unclear as to which tanks each of the two details shown in 5-8C apply to. The details show that a series of tanks will be connected by a six inch underground pipe line to "North Tank" and "South Tank." There are no labels on any of the tanks shown on drawing 5-8C that call out a "North Tank" or "South Tank".

Chapter 5 was edited during the underground amendment but did not include details as to the total number of tanks or length of pipes within Section 526. Text within Chapter 5 that details the specific number of tanks and length of pipe are required per R645-301-526.200.

The current MRP version of drawing 5-8C is outdated as the locations of site facilities do not match the location of facilities observed during site inspections. Drawing 5-8C updates the location of the water tanks in the vicinity of the facilities area which matches the locations observed during site inspections. The MRP and old drawing 5-8C detail that the facilities will have two 16,000 gallon water tanks associated with operations for duct control systems. Section 526 within Chapter 5 of the MRP states that one tank will be used solely for filling the water truck for dust control operations in the active mine area. The MRP also states that the second tank is located at the facilities area to provide water supply to the facilities for non-portable uses. The updated Drawing 5-8C matches site observations of the location of several tanks but the application Drawing 5-8C is unclear on the number of tanks present at the facilities location.

The updated Drawing 5-8C details several sets of underground six inch pipelines that will be utilized for dust control operations on facilities equipment as well as fill water tanks. The underground amendment added text stating the underground operations include water systems but did not clarify the number or purpose. The application does not include any text edits the Chapter 5 section 526 under dust control structures or underground facilities. Text should be added to this section detailing the corresponding pipelines and tanks.

The application included an update to sediment impound Pond 1 details, Drawing 5-28 to show the as-built location of the outlet and grading of the inlet. The updated Pond 1 details vary from the initial shape and dimensions, however, the storage volume computations remain unchanged from the original Pond 1 Drawing 5-28.

The application does not meet the minimum requirements of R645-301-526.220, -531, -532, &-742.220.

*Deficiencies Details:*

R645-301-526.220 requires a facilities description that states how the support facilities will be operated in accordance with a permit issued for the mine; this includes plans and drawing for each:

- The application does not include any changes to the text within Chapter 5 section 526 where the Permittee should detail: the number and size of tanks at each location, what each tank will be used for in mine operations, length and purpose of pipelines, and to what extent the various parts of the water plan will be reclaimed or left in place. The details say the pipelines to the underground and buried while site inspections show that the pipeline is on the surface. In the event any of the tanks or pipelines will remain in place there must be a validation to meet R645 rules.

- There is no discussion of the tanks pads that should be included as it is relevant to bond estimates at final reclamation. The Permittee should detail how each of the respective tanks is secured, i.e. concrete pads either within Chapter 5 or on

Drawing 5-8c. If the tanks are mounted on mobile equipment it needs to be clarified as such within the text.

R645-301-531, -532,-533, & -742.220 requires certified detailed design plans for siltation structures and impoundments that meet 10 yr, 24 hr design storm. The updated Pond 1 has different dimensions from the original Pond 1 but the storage volume computations remain unchanged. The storage volume computations need to be updated for the as-built Pond 1.

cparker

## Maps Facilities

### Analysis:

The amendment included an updated Facilities and Structures water plan Drawing 5-8C. The map is missing details, since there is no text discussion, of the foundations for the tanks, i.e. concrete pads. The tank symbol is clearly repeated near the facilities area, but it is unclear how many tanks are being represented. The details of the two tanks are located below the plan view of the site on drawing 5-8C. The first detail calls out a tank receiving water from the well and an outlet line to "North Tank". There is no tank labeled North Tank on drawing 5-8C. The second detail appears to be the connection from "South Tank. There is no tank labeled South Tank on drawing 5-8C. The application does not meet the minimum requirements of R645-301-521.161.

### Deficiencies Details:

R645-301-521.161 and -301-121.200 requires maps of the proposed features that clearly show buildings, utility corridors, and facilities to be used. The current application drawing 5-8C does not meet the minimum requirements of the above rule as the drawing is not clear and concise and missing information:

- A call out of concrete pads or other means of stabilization/foundations for the tanks
  - The map is missing details, since there is no text discussion, of the foundations for the tanks, i.e. concrete pads.
- A call out for the number of tanks present at the facilities area
  - The tank symbol is clearly repeated near the facilities area, but it is unclear how many tanks are being represented.
- A call out for a presumed "North Tank" and "South Tank", based on details shown below the plan view of the site on Drawing 5-8C
  - The details of the two tanks are located below the plan view of the site on drawing 5-8C. The first detail calls out a tank receiving water from the well and an outlet line to "North Tank". There is no tank labeled North Tank on drawing 5-8C. The second detail appears to be the connection from "South Tank. There is no tank labeled South Tank on drawing 5-8C.

The Permittee will supply a corrected Drawing 5-8C that details the dimensions of the foundations for the respective tanks or add text to Chapter 5 including such details, clarify where the South and North Tank are located, and call out the number of tanks present at the facilities area.

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## Maps Certification Requirements

### Analysis:

The amendment cover letter states that upon final approval the Permittee will supply two clean hard copies of certified drawings for insertion into the MRP. The current application was submitted by pdf through the Division's website and includes an electronic PE stamp of Dan Guy. The application meets the minimum requirements of R645-301-512.

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## Reclamation Plan

### General Requirements

### Analysis:

The application is the result of the April 2015 monthly inspection (Inspection Report 4176) which detailed the need for a repair to a valve associated with the process facilities as well as As-Built details for Pond 1. The Permittee removed the coal fines to clear the inlet and addressed the broken valve near the coal stockpile facilities. The Permittee also took the opportunity to update the facility water plan, Drawing 5-8C, to show the addition of water tanks west of the well site at the facilitates and above Pit 10 for underground mining and propose a new configuration for the inlet to Pond 1.

The application did not include any changes to Chapter 5 section 541 and 542 which states that all structure and support facilities will be reclaimed. The current bond accounts for off-site disposal but ACD has communicated that there may be some onsite disposal. Clarification is required in the event ACD contemplates disposing of any of the pipeline, concrete pads, or tanks within the backfilling process of Pit 10. In the event of the disposal of any non-coal mine waste R645-301-542.730 and R645-301-542.742 must be met and on site disposal line items need to be added to the reclamation bond estimate.

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## **Bonding Form of Bond**

### *Analysis:*

ACD currently maintains a surety bond of \$12,750,000 held by Ironshore Indemnity Inc as of 1/2/15. The application meets the minimum requirements of R645-301-860.100

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## **Bonding Determination of Amount**

### *Analysis:*

The application does not include any changes to Chapter 8 on the associated appendices. Within the current MRP ACD is only bonded for the removal of two 16,000 above ground water tanks. The application does not meet the minimum requirements of R645-301-830 as the Permittee did not supply line item updates for the additional tank removal, concrete demolition, pipeline removal, and updated earthwork regrading for backfilling of Pond 1.

### *Deficiencies Details:*

The application does not meet the minimum requirements of R645-301-830 as the Permittee did not supply update reclamation cost for the additional line items updated within the application, such as the additional tank removal, concrete demolition, pipeline removal/backfill, and updated earthwork regrading for backfilling of Pond 1

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## **Bonding Terms and Conditions Liability Insurance**

### *Analysis:*

ACD maintains insurance for the Coal Hollow Mine through American Mining Insurance Co., effective from 12/10/14 to 12/10/15. ACD maintains insurance that covers Acord/Marsh form, explosives, and claims made per occurrence. The application meets the minimum requirements of R645-301-840.

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