State of Utah
DEPARTMENT OF NATURAL RESOURCES

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July 18, 2013

Kirk Nicholes
Alton Coal Development, LLC
463 North 100 West, Suite 1
Cedar City, Utah 84720

Subject: Revised DD 1 and Sediment Impoundment 4, Alton Coal Development, LLC, Coal Hollow Mine, C/025/0005, Task ID #4369

Dear Mr. Nicholes:

The Division has completed a review the revised ditch DD1 and sediment pond #4 that was received on April 3, 2013. There were issues raised that need to be addressed before approval. The plans as submitted are denied and are being returned along with a copy of the technical review. Please note that the berm adjacent to DD#1 need not be roughened or mulched, but must be seeded in accordance with Utah Coal Rule 244.100.

Please resubmit the entire application by no later than August 19, 2013. If you have any questions, please call me at (801)538-5325.

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/PWB/ss
Enclosures
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Deficiency List

Task No.4369

Revised Ditch DD#1 and Sediment Pond #4

The members of the review team included the following individuals:

Priscilla Burton [PWB]
Joe Helfrich [JCH]
Pete Hess [PHH]
Ken Hoffman [KMH]

R645.301.742.331 Chapter 7 Section 742.331 states "Diversion ditch 4 is planned to direct water from disturbed areas into sediment impoundment Pond 4", this statement is inconsistent with the MRP and needs to be corrected. [KMH]

R645.301.742.331 Inconsistencies exist in the MRP Appendix 5-2 as follows:
--Page 2 Watershed Table: Watershed 4 remains 256 acres. The Permittee is not alternating the watershed just the flow paths. The text describes this table as the full watershed.
--Page 6 Diversion Watersheds: Ditch 1 watershed acreage does not match Drawing 5-27 (160 acres verse 158 acres, respectively). In addition, it seems peculiar that the Permittee's resulting peak flow (14.8 cfs) for Pond 4 (96 acres) and Ditch 1 watershed (160 acres) are the same. It is recommended the Permittee review their calculation. [KMH]

R645.301.742.111 The amendment does not include any conveyance structures to deliver disturbed area flows to Pond 4. The amendment must be updated to demonstrate it will control disturbed area runoff and prevent it from runoff outside of the permit area. If a exclusionary berm is to be used it must be designed or if a diversion ditch will be used it must be designed. [KMH]

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 17, 2013

TO: Internal File

THRU: Priscilla Burton, En Sci III, Soils, Team Lead

FROM: Ken Hoffman, Hydrologist

RE: Revised DDI & Sediment Impoundment 4, Alton Coal Development, LLC, Coal Hollow Mine, C/025/0005, Task ID #4369

SUMMARY:

The Division received a permit amendment application to make some minor hydrologic changes to ditch DD1 and Sediment Pond #4 on June 7, 2013. The submittal contains the following items for replacement into the currently approved MRP:

1) Vol. 3, Chapter 5, Sediment Impoundment and Diversion Structure Analysis
2) Vol. 3, Drawing 5-3, Facilities and Structures Layout
3) Vol. 5, Diversion Ditch Watersheds
4) Vol. 5, Drawing 5-31, Sediment Impoundment 4 Details
5) Vol.5, Drawing 5-33, Diversion Ditch 1 Details
6) Vol.7, Chapter 7, Pages 7-66, 7-67, 7-75, 7-76, 7-78, and 7-93.

This memo will address the changes requested to the Chapter 7, Hydrology section of the R645 Coal Mining Rules. The application is not recommended for approval until the following issues are resolved:

R645.301.742.331 Chapter 7 Section 742.331 states "Diversion ditch 4 is planned to direct water from disturbed areas into sediment impoundment Pond 4", this statement is inconsistent with the MRP and needs to be corrected.

R645.301.742.331 In consistencies exist in the MRP Appendix 5-2:

-Page 2 Watershed Table: Watershed 4 remains 256 acres. The permittee is not alternating the watershed just the flow paths. The text describes this table as the full watershed.

-Page 6 Diversion Watersheds: Ditch 1 watershed acreage does not match Drawing 5-27 (160 acres verse 158 acres, respectively). In addition, it seems peculiar that the permittee's resulting peak flow (14.8 cfs) for Pond 4 (96 acres) and Ditch 1 watershed (160 acres) are the same. It is recommended the permittee review their calculation.

R645.301.742.111 The amendment does not include any conveyance structures to delivery disturbed area flows to Pond 4. The amendment must be updated to demonstrate it will control disturbed area runoff and prevent it from runoff outside of the permit area. If a exclusionary berm is to be used it must be designed or if a diversion ditch will be used it must be designed.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

CLIMATOLOGICAL RESOURCE INFORMATION

Regulatory Reference: 30 CFR 779.18, 783.18; R645-301-724.

Analysis:

The MRP addresses climatic information and the change in drainage does not affect this information.

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Analysis:

Sampling and Analysis

The MRP addresses sampling and analysis and the change in drainage does not affect this information.

Baseline Information

The MRP addresses baseline information and the change in drainage does not affect this information.

Baseline Cumulative Impact Area Information

The MRP addresses baseline cumulative impact area and the change in drainage does not affect this information.

Probable Hydrologic Consequences (PHC)

The MRP addresses the probable hydrologic consequences and the change in drainage does not affect this information.

Groundwater Monitoring Plan

The MRP addresses a groundwater monitoring plan and the change in drainage does not affect this information.

Surface-Water Monitoring Plan

The MRP addresses surface-water monitoring plan and the change in drainage does not affect this information.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Monitoring and Sampling Location Maps

The MRP addresses monitoring and sampling location maps and the change in drainage does not affect this information.

Subsurface Water Resource Maps

Map 2.3.5.2-1 has been updated to include the subsurface water resources in the proposed change in drainage.

Surface Water Resource Maps

Map 2.3.5.1-1 has been updated to include the surface water resources in the proposed change in drainage.

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

Groundwater Monitoring

The MRP addresses groundwater monitoring and the change in drainage does not affect this information.

Surface Water Monitoring

The MRP addresses surface water monitoring and the change in drainage does not affect this information.

Acid- and Toxic-Forming Materials and Underground Development Waste

The MRP addresses acid and toxic forming materials and the change in drainage does not affect this information

Transfer of Wells

There are no wells being transferred as part of this amendment.

Discharges Into an Underground Mine

There are no underground mines in the area

Gravity Discharges from Underground Mines

There are no underground mines in the area

Water-Quality Standards and Effluent Limitations

The MRP addresses compliance with water quality standards and effluent limitations and the change in drainage does not affect any treatment of disturbed area flow treatment.

Diversions: General

The amendment proposes to discharge undisturbed area flows to Sink Valley from Diversion Ditch 1 and no longer report this flow to Sediment Pond 4 and will no longer collect any disturbed area flows. In addition, Ditch 1 will have a berm on the western edge. There is no design standard included for the construction of the exclusionary berm.

Appendix 5-2 has been updated in relation to the new design however a few inconstancies exist:

-Page 2 Watershed Table: Watershed 4 remains 256 acres. The permittee is not alternating the watershed just the flow paths. The text describes this table as the full watershed.

-Page 6 Diversion Watersheds: Ditch 1 watershed acreage does not match Drawing 5-27 (160 acres verse 158 acres, respectively).

-It seems peculiar that the permittee's resulting peak flow (14.8 cfs) for Pond 4 (96 acres) and Ditch 1 watershed (160 acres) are the same. It is recommended the permittee review their calculation.

In Chapter 7 Section 742.331 states "Diversion ditch 4 is planned to direct water from disturbed areas into sediment impoundment Pond 4" this statement is in disagreement with the amendment and needs to be corrected.

Stream Buffer Zones

The MRP addresses compliance with stream buffer zones and the change in drainage does not affect this information.

Sediment Control Measures

The amendment proposes to discharge undisturbed area flows to Sink Valley from Diversion Ditch 1 and exclude the disturbed area drainage in Watershed 4 with an exclusionary berm on the edge of Ditch 1. Drawing 5-33 includes a typical cross section for Ditch 1 and defines the exclusionary berm as "construct a berm from excess material on west side ditch".

Siltation Structures

The amendment proposes to discharge undisturbed area flows to Sink Valley from Diversion Ditch 1 and no longer report this flow to Sediment Pond 4. The amendment includes a ditch inlet into Pond 4 but no ditches connect to Pond 4 anymore.

Discharge Structures

The amendment proposes the addition of rip rap to UPDES discharge location 004. This addition should only add in the control and minimization of discharge of suspended solids.

Impoundments

No impoundments are included as part of the amendment.

Ponds, Impoundments, Banks, Dams, and Embankments

The amendment proposes alteration to the design of Pond 4. The amendment removes a inlet and adds rip rap to the spillway. These alterations will not have any adverse impacts to the function of the sediment pond.

Findings:

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiencies must be addressed prior to the Division approval of the application:

R645.301.742.111 The amendment does not include any conveyance structures to delivery disturbed area flows to Pond 4. The amendment must be updated to demonstrate it will control disturbed area runoff and prevent it from runoff outside of the permit area. If a exclusionary berm is to be used it must be designed or if a diversion ditch will be used it must be designed.

R645.301.742.331 Chapter 7 Section 742.331 states "Diversion ditch 4 is planned to direct water from disturbed areas into sediment impoundment Pond 4", this statement is inconsistent with the amendment and needs to be corrected.

R645.301.742.331 In consistencies exist in the MRP Appendix 5-2:

-Page 2 Watershed Table: Watershed 4 remains 256 acres. The permittee is not alternating the watershed just the flow paths. The text describes this table as the full watershed.

-Page 6 Diversion Watersheds: Ditch 1 watershed acreage does not match Drawing 5-27 (160 acres verse 158 acres, respectively). In addition, it seems peculiar that the permittee's resulting peak flow (14.8 cfs) for Pond 4 (96 acres) and Ditch 1 watershed (160 acres) are the same. It is recommended the permittee review their calculation.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Monitoring and Sampling Location Maps

As part of the amendment two maps were submitted Drawing 5-31 and 5-33. Drawing 5-31 is of Pond 4. Drawing 5-33 is of Diversion Ditch 1 in plan view, Division Ditch 1's typical cross section and Division Ditch 1's terminus in plan view. Drawing 5-33 is unclear and needs revision, changes shall be made to the plan view of the Ditch's terminus with the addition of "PLAN VIEW" to be placed at the top or bottom of the view, the note "Rock to be…" shall be moved to where it is legible, and the survey distances of 59+71 and 59+81 shall be added the view. In addition, Drawings 5-3, 5-22, and 5-27 show Diversion Ditch 1 and must also be updated with the new alignment.

Findings:

Contents and information provided are not sufficient enough to meet the minimum requirements of this section of the Utah Coal Mining Rules. The following deficiencies must be addressed prior to the Division approval of the application:

R645.301.731.720 Drawing 5-33 is unclear and needs revision, changes shall be made to the plan view of the Ditch's terminus with the addition of "PLAN VIEW" to be placed at the top or bottom of the view, the note "Rock to be…" shall be moved to where it is legible, and the survey distances of 59+71 and 59+81 shall be added the view. Also the Required Storage Volume shall be updated. Drawings 5-3 and 5-27 shall be updated with the new alignment of Diversion Ditch 1.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT (CHIA)

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

The amendment will not result in any changes to the CHIA.

RECOMMENDATIONS:

The application is not recommended for approval until the deficiencies are addressed.

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