



# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

February 26, 2015

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

Subject: Underground Mining, Alton Coal Development, LLC, Coal Hollow Mine, C/025/0005, Task ID #4786

Dear Mr. Nicholes:

The Division has reviewed your application. The Division has identified deficiencies that must be addressed before final approval can be granted. The deficiencies are listed as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. The plans as submitted are denied. Please resubmit the entire application.

If you have any questions, please call me at (801) 538-5325.

Sincerely,

Daron R. Haddock  
Coal Program Manager

DRH/sqs  
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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0250005  
**TaskID:** 4786  
**Mine Name:** COAL HOLLOW  
**Title:** UNDERGROUND MINING

#### General Contents

##### Permit Term

###### *Deficiencies Details:*

R645-301-121.200, All drawings submitted with this application correctly identify the the new shape of the disturbed area. However, Dwg 2-2, 3-7 and 5-38 indicate the disturbed area is 346 acres rather than 342 acres. Please make the appropriate corrections.

pburton

#### Environmental Resource Information

##### Historic and Archeological Resource Information

###### *Deficiencies Details:*

The information in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with R645-301-411.141 and .142;

The Cultural and Historic Use information in chapter 4 of the current MRP needs to include a statement relevant to underground mining to denote that mining activities are not just limited to the surface mining of the coal resource. It is suggested that paragraph 1, sentence 1 on page 4-5 of chapter 4 be revised to include the following or similar text.

Procedures for ground disturbing activity from surface and underground mining mining activities as described in sections 521 and 523 and shown on drawing 5-10 of the MRP will follow the Cultural Resources Data Recovery Plan for the Alton Coal LLC, Coal Hollow Project in Kane County.

jhefric

#### Fish and Wildlife Resource Information

###### *Deficiencies Details:*

The information in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with R645-301-333;

The current monitoring plan (most recent sage grouse monitoring report) for vegetation and bird use needs to be revised to

include the proposed underground mining development area. Chapter 3, Page 3-43 section 332 of the application needs to include a commitment to monitor the vegetation and sage grouse occupancy in accordance with the approved monitoring plan and mitigate any impacts to the grouse or their habitat for each of the four panel areas. The plan should also include a commitment to collect base line noise levels near the portal area.

jhelfric

## Land Use Resource Information

### Deficiencies Details:

The information in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the applicant must provide the following information in accordance with the requirements of R645-301-400 through 411.130 and 412.100 through 414.300.

The Land Use information in chapter 4 of the current MRP needs to include a statement relevant to underground mining to denote that mining activities are not just limited to the surface mining of the coal resource. It is suggested that paragraph 2, sentence 2 on page 4-1 of chapter 4 be revised to include the following or similar text. Surface and underground mining activities as described in sections 521 and 523 and shown on drawing 5-10 of the MRP will be conducted on and beneath lands that are lands mainly used for grazing and native wildlife habitat.

jhelfric

## Operation Plan

### Mining Operations and Facilities

#### Deficiencies Details:

Per the Division Order, DO-15A, and various state regulations R645-301-121.100, R645-301-521.140, R645-301-521.162, R645-301-533, & R645-301-830.410 the Permittee should describe a single operation and reclamation scenario.

1. Text in section 521.141 describes two options of reclamation. The permittee will only describe one mining operation and the relevant reclamation scenario. Pursuant to section 521.141 the Permittee will edit text and drawings to remove all references to scenarios that include the federal lease, often called the "Preferred plan". Relevant sections that need to be edited in MRP include but are not limited to sections:

- \* 521.141 - the third, fourth, and fifth paragraph

- \* Current Drawing 5-37, and 5-37A will replace 5-35 and 5-36 respectively. The text will address the rehandling of much of the fill above original contour to fill in the final pits (R645-301-533.100)

- \* 521.143 will be updated to reflect the excess spoil pile without the federal coal reserves to meet R645-301-553.100 in Pits 9, 10, and all Highwall Trenches.

- \* Subsections within this section detailing the various features of the excess spoil pile will need to be updated to reflect the remaining volume after all pits and trenches have been returned to approximate original contours.

- \* 523, page 5-26 - the last three paragraphs need to be edited to remove any accounting of the federal lease. All pits will be restored to approximate original contour upon cessation of underground mining according to R645-301-553.100. The variance was granted due to the additional excess spoil associated with the LBA.

- \* 528.200 - the paragraph spanning pages 5-44 to 5-45 needs to be edited to remove any accounting of the federal lease. The highwall and all pits will be restored to approximate original contour upon cessation of underground mining according to R645-301-553.100.

- \* 528.200 - the table on page 5-46 needs to be edited to reflect the current leased coal and overburden removal and all calculations based on the federal coal lease need to be removed. The paragraph following the table must also be edited to reflect the changes in the table.

The Permittee currently does not have approval to mine the Federal coal reference in the "preferred scenario" and the detail information describing such a scenario is not included within the MRP which is outlined in the regulations under R645-301-520,-522,-523,-524,-528,-530,-534,535, and -540.

In the event the Permittee receives approval of the LBA of the federal coal, the Permittee may submit an amendment to change the MRP and file an adequate bond Per R645-301-820 with the Division to reflect the reclamation under that scenario.

2. Text in section 528.200 lists Pits 28-23 in the first paragraph on page 5-44 of the amendment application, omitting currently mined pits.

\* The Permittee will edit the text to reflect actual site pits developed and detailed in the drawings which includes pits 28-20 in first paragraph on page 5-44 of the application.

cparker

## Air Pollution Control Plan

### Deficiencies Details:

The information in the application is not adequate to meet the requirements of this section of the regulations. Prior to approval the following information must be provided in accordance with R645-301-411.420;

The application needs to include a revised Approval Order and air pollution control plan (Chapter 4, Appendix 4-5) from the Division of Air Quality that includes the equipment required for the underground operation.

jhelfric

## Coal Recovery

### Deficiencies Details:

The application is deficient in this section according to R645-301-121.200 plans need to be clear and concise. Per the Division Order, DO-15A, and various state regulations R645-301-121.100, R645-301-521.140, R645-301-521.162, R645-301-533, & R645-301-830.410 the Permittee should describe a single operation and reclamation scenario.

1. Section 522, page 5-22 - third paragraph text needs to be removed as it only mentions an open pit and is repeated twice in the section. The paragraph clarifies that drawing 5-9 summarizes the coal extraction for the permit area for all mining methods.

\* The Permittee will review the text in this section for clarity and remove extraneous or redundant paragraphs.

2. Text in section 522 describes two options of reclamation. The permittee will only describe one mining operation and the relevant reclamation scenario. Pursuant to this scenario the Permittee will edit the text and drawings to remove all references to scenarios that include the federal lease, often called the "Preferred plan". Relevant sections that need to be edited in the MRP include but are not limited to sections:

\* The first paragraph on page 5-23 needs to be removed as it is relevant only to the LBA.

cparker

## Subsidence Control Plan Subsidence

### Deficiencies Details:

The application does not meet the minimum requirements of R645-301-521.142, -525. The Permittee is missing a method to establish a baseline survey over the extent of the proposed underground mining. As per precedent set at Lila Canyon and Emery Deep, prior to first mining of underground operations a baseline survey study was generated. The burden of proof rests on the Permittee to be able to establish that no subsidence has occurred. A baseline survey study may consist of either an high definition aerial or survey to establish markers.

cparker

## Subsidence Control Plan Notification

### Deficiencies Details:

Once the underground mining plan is approved the subsidence control plan requires notification per R645-301-525.700: At least 6 months prior to mining, or within that period if approved by the Division, the underground mine operator shall mail a notification to all owners and occupants of surface property and structures above the underground workings. The notification shall include, at a minimum, identification of specific areas in which mining will take place, dates that specific areas will be undermined, and the location or locations where the operator's subsidence control plan may be examined.

cparker

## Topsoil and Subsoil

### Deficiencies Details:

R645-301-534.150 and R645-301-244.100, The disturbed area around Pit #10 (laid back alluvial slopes) will require stabilization. The mining plan must be amended to describe the practices to be used to stabilize cut and fill slopes around pit 10.

pburton

## Road System Plans and Drawings

### Deficiencies Details:

Per Division order DO-15A, requiring the Permittee to submit a clear description of mining operations and reclamation activities, and R645-301-830.410, sections 521.123, 527.200,-521.170 & -830.140 . & 534.100-200 need to be updated to show a single reclamation design reestablishing road K3900.

1. The Permittee will select one of the two alignments currently outlined in the MRP that matches current mining reclamation activities.

\* DO-15A , R645-301-830.140, competing alternatives create a conflict between site conditions and the MRP. Various alternatives lead to difficulty and discrepancies in determining an accurate bond amount.

\* The Permittee will remove the drawings and text associated with the alternative alignment from the MRP. i.e. sections 521.170 and 527.200

2. The text in sections 521.170 and 527.100-200 describing the two primary mine haul roads was left unchanged in the amendment submittal, however the two said haul roads alignment was changed in the new drawing 5-22.

\*The Permittee will submit new text in sections 521.170 page 5-20 the third bullet, 527.100-200 page 5-41 the third bullet, 534.100-200 page 5-60 the third bullet, and 542 page 5-69 the third bullet, and 742.423 page 7-90 the third bullet detailing the specifics of the new alignment of the two primary haul roads as described in the new drawing 5-22 and clarify if the profiles shown in drawing 5-23 are still relevant to the roads as depicted in drawing 5-22.

3. The new underground haul and portal access road meets the description of Primary road in R645-301-527.120-.122 but is not included in the first bullet in the listed section.

\* The Permittee will update text throughout sections 521.170 and 527.100-200 to reflect the three primary haul roads.

o R645-301-521.170 & -830.140 Accurate and detailed road information is required to calculate a bond amount.

cparker

## Spoil Waste Excess Spoil

### Deficiencies Details:

The application is deficient in this section according to R645-301-121.200 plans need to be clear and concise. Per the Division Order, DO-15A, and various state regulations R645-301-121.100, R645-301-521.140, R645-301-521.162, R645-301-533, & R645-301-830.410 the Permittee should describe a single operation and reclamation scenario.

1. In section 521.143 the Permittee added the use of the disposal sites of excess spoil generated by surface and underground operations. The excess spoil footprint references Drawing 5-35 and 5-36 which includes excess spoil from the federal coal mining operations. These operations are not currently discussed in adequate detail in the current version of the MRP to be justified and bonded.

\* Drawings 5-35 and 5-36 will be updated to show the footprint of the excess spoil accumulated in currently approved mining operations (currently drawings 5-37 and 5-37A) within the permit area. The drawings should also include any additional underground development waste that may be stored at the site. (DO-15A)

\* Text within sub section -528.310 of section 521.143 also needs to be updated to reflect the correct placement of the excess spoil over mined areas and non-mined areas, spoil height, and estimated excess fill (R645-301-830.140).

cparker

## Hydrologic Discharge Into an Underground Mine

### Deficiencies Details:

The application does not meet the minimum Hydrologic-Balance Protection requirements per R645-301-731.111. A detailed plan to prevent ponding in the bottom of Pit 10 by proactively managing surface-runoff and groundwater discharge to the pit during temporary cessation is required.

kstorrar

## Hydrologic Sediment Control Measures

### Deficiencies Details:

On the paragraph spanning from page 15 to 16 in Chapter 7 of Appendix 7-15, the application is deficient per R645-301-731.720 in not providing certified cross-sections and maps of the proposed water conveyance system from Pit 10 to Sediment Pond 3.

The paragraph spanning pages 16 to 17 in Chapter 7 Appendix 7-15 needs a detailed narrative of the supplemental containment and settlement pond(s) their location(s) and certified drawings and cross-sections per R645-301-743, R645-301-732.100, and R645-301-732.210 or the sentence should be removed.

kstorrar

## Maps Affected Area

### Deficiencies Details:

Per Division order DO-15A, requiring the Permittee to submit a clear description of mining operations and reclamation activities, and R645-301-830.410:

1. The followings edits need to be made to the listed drawings:

\* 5-35: The drawing was updated to reflect the incidental boundary change that expanded the permit boundary in 2014. The topography used as the base map is the incorrect topography of the excess spoil pile as it includes the overburden from the federal coal lease. This drawing needs to be removed from the MRP.

\* 5-36: The drawing was updated to reflect the incidental boundary change that expanded the permit boundary in 2014. The topography used as the base map is the incorrect topography of the excess spoil pile as it includes the overburden from the federal coal lease. This drawing needs to be removed from the MRP.

\* 5-37: The drawing was updated to reflect the incidental boundary change that expanded the permit boundary in 2014. The base map on this drawing shows the proper excess spoil pile footprint without the federal coal lease. This drawing will replace drawing 5-35.

\* 5-37A: The drawing was updated to reflect the incidental boundary change that expanded the permit boundary in 2014. The base map on this drawing shows the proper excess spoil pile footprint without the federal coal lease. This drawing will replace drawing 5-36.

\* 5-38: This drawing must be updated not to include the federal coal lease.

2. Section 521.162 references a drawing 5-2A removed in this amendment and discusses alternative scenarios, which DO-15A requested be removed for clarity purposes.

\* The Permittee will remove the text discussing alternative methods and removed Drawing 5-2A

\* R645-301-121.200 plans need to be clear and concise.

3. Section 521.165 references drawings 5-18 and 5-19 which were removed in this amendment.

\* The Permittee will edit the sections text to reference only appropriate drawings

\* R645-301-121.200 plans need to be clear and concise.

4. Chapter 5 Table of Contents List of Drawings shows drawing 5-17 be removed, however the text in section 521.143, sub paragraph 512.210 references drawing 5-17 as well as a new drawing 5-17 being submitted with the application.

\* The Table of Contents will be updated to reflect the 5-17 drawing.

\* R645-301-121.200 plans need to be clear and concise.

5. The Permittee supplied an update to Drawing 5-3 that shows the main facilities area that matches the layout as seen at the site since February 2015. Drawings 5-4, 5-5 and 5-8B/C show a different plan view location of various facilities such as Hot Start Plug posts, conveyor alignment, raw coal storage location, shop, water tanks, etc.

- \* The Permittee will submit updated drawings 5-4, 5-5, and 5-8B/C that match the current site layout.
  - o DO-15A requires the MRP be updated for clarity purposes to match the site conditions.

cparker

## Reclamation Plan

### Approximate Original Contour Restoration

#### Deficiencies Details:

With the removal of the Federal coal scenario the Division requests that the Permittee demonstrate that they are meeting R645-301-553.110 and R645-301553.800 with the excess spoil pile of 1.8 million cubic yards.

cparker

### Backfill and Grading General

#### Deficiencies Details:

Per the Division Order, DO-15A, and various state regulations R645-301-121.100, R645-301-521.140, R645-301-521.162, R645-301-533, & R645-301-830.410 the Permittee should describe a single operation and reclamation scenario.

1. Text in section 553 describes two options of reclamation. The permittee will only describe one mining operation and the relevant reclamation scenario. Pursuant to this scenario the Permittee will edit the text and drawings to remove all references to scenarios that include the federal lease, often called the "Preferred plan". Relevant sections that need to be edited in MRP include but are not limited to sections:

- \* All of section 553 text needs to be reviewed to remove any references to the federal coal lease.

2. Text on page 5-79 needs to include Pit 20 and various highwall trenches detailed on Drawing 5-10, according to DO-15A.

cparker

### Topsoil and Subsoil

#### Deficiencies Details:

R645-301-231.300, The topsoil and subsoil sampling plan described in MRP Section 232.500 and must be revised to include the remaining reclamation areas and the reclamation of the underground mining.

R-645-301- 244.200, Mulching follow topsoil placement, and be accomplished before seeding. This section should be updated accordingly.

pburton

### Cessation of Operations

#### Deficiencies Details:

R645-301-515.310-.311 Temporary abandonment will not relieve a person of his or her obligation to comply with provisions of the approved permit. This section needs more clarification as how effective support and maintenance of the access to underground openings.

\* The Permittee will address specific stormwater concerns, such as pumping, to keep Pit 10 free of water during temporary cessation. Designs to control stormwater must be engineered and stamped by a UT certified PE.

cparker

### Maps Affected Area Boundary

#### Deficiencies Details:

Per the Division Order, DO-15A, and various state regulations R645-301-121.100, R645-301-521.140, R645-301-521.162, R645-301-533, & R645-301-830.410 the Permittee should describe a single operation and reclamation scenario.

1. All drawings that reference the LBA must be corrected or removed.
2. Page 5-68 of section 542 the first paragraph after the bullets erroneously states that Pit 10 will be left open for access to the Highwall Trench and underground, however, the grading shown in Drawing 5-3B clearly shows that Pit 10 will be graded for only underground access.
  - \* The Permittee will correct the text to accurately describe access to Pit 10 and the Highwall Trench.R645-301-553.100 requires all disturbed areas to be backfilled.

cparker

## Bonding and Insurance General

### Deficiencies Details:

No information provided in submittal. The Permittee must submit changes to Chapter 8 Bonding that include the additional insurance and bonding information required per R645-301-800.

cparker

## Bonding Form of Bond

### Deficiencies Details:

No information provided in submittal. R645-301-860  
The Permittee must submit changes to Chapter 8 Bonding that include the additional cost of reclamation for the underground.

cparker

## Bonding Determination of Amount

### Deficiencies Details:

No information provided in submittal. R645-301-830.140.  
The Permittee must submit changes to Chapter 8 Bonding that include the additional cost of reclamation for the underground, including details of the portal face demolition, fan and generators to be removed upon reclamation so that the bond amount can be determined accurately:  
-Generator watts, engine type, and weight in tons (RS Means 26 32 13-, 230505.10 3600)  
-Fan watts, engine type, and weight in tons  
-Port Face shotcrete details including reinforcement, fencing details, any rockfall/slope stabilization measures to be constructed.

cparker

## Bonding Terms and Conditions Liability Insurance

### Deficiencies Details:

No information provided in submittal. R645-301-890.

cparker