



OGMCOAL DNR &lt;ogmcoal@utah.gov&gt;

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## Lila Canyon- PBH 1-3 Boreholes (Task #21854)

1 message

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**Steve Christensen** <stevechristensen@utah.gov>

Thu, Nov 17, 2022 at 2:31 PM

To: Jesse Candelaria &lt;jesseccandelaria@acnrinc.com&gt;

Cc: OGMCOAL DNR &lt;ogmcoal@utah.gov&gt;, Justin Eatchel &lt;jeatchel@utah.gov&gt;, Kim Betcher &lt;kimbetcher@acnrinc.com&gt;

Good afternoon Jesse,

The Division has completed its review of the aforementioned amendment. The cover letter and findings document are attached. No hardcopy to follow.

Regards,  
Steve

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### Steve Christensen

Coal Program Manager

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Utah Department of Natural Resources

Division of Oil, Gas &amp; Mining

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State of Utah

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Lieutenant Governor

Department of Natural Resources  
Division of Oil, Gas and Mining

JOEL FERRY  
Executive Director

JOHN R. BAZA  
Division Director

November 17, 2022

Emery County Coal Resources, Inc.  
Jesse Candelaria, Acting Resident Agent  
P.O. Box 910  
East Carbon, Utah 84520-0910

Subject: PBH-1 thru PBH-3 Boreholes, Emery County Coal Resources, Inc., Lila Canyon Mine, C/007/0013, Task #T-21854

Dear Mr. Candelaria:

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 by no later than December 19<sup>th</sup>, 2022.

If you have any questions, please call me at (801) 538-5350.

Sincerely,

Steve Christensen  
Coal Program Manager





State of Utah

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Division of Oil, Gas and Mining

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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070013  
**TaskID:** T-21854  
**Mine Name:** LILA CANYON MINE  
**Title:** PBH-1 thru PHB-3 Boreholes  
**Findings Report Date:**

#### General Contents

##### Right of Entry

###### *Analysis:*

The application does not meet the State of Utah R645 requirements for Right-of-Entry.

The amendment does not meet the requirements of R645-301-114.100 because the Right-of-Entry information on Page 1-6 of Chapter 1 has not been revised to include the addition of Federal ROW UTU-96032.

Table 1-1 of Chapter 1 has been revised to contain Right-of-Entry information for Federal ROW UTU-96032, but the Permittee must also revise the narrative on Page 1-6 to include Federal ROW UTU-96032 as well.

The Bureau of Land Management Right-of-Way/Temporary Use Permit documentation for Federal ROW UTU-095176 has been included in this amendment.

###### *Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Right-of-Entry. The following deficiency must be addressed prior to final approval:

R645-301-114.100: The Permittee must revise the Right-of-Entry information on Page 1-6 of Chapter 1 to include Federal ROW UTU-96032.

Justin Eatchel

## **Permit Term**

*Analysis:*

The application meets the State of Utah R645 requirements for Permit Term.

The amendment meets the requirements of R645-301-116.100 because the acreages reported in Chapter 1 have been revised to be consistent with the disturbed acres proposed in Appendix 7-12.

The redline strikeout on Page 1-10 of Chapter 1 indicates that the addition of the boreholes will increase the total affected acreage from 37.02 acres to 37.49 acres, a total of 0.47 acres. Table 1 of Appendix 7-12 shows that the total anticipated acreage for wells PBH-1, PBH-2, and PBH-3 is 0.47 acres. The reported acreages have been increased to account for the access roads to the PBH-1 and PBH-3 drill pads.

Justin Eatchel

## **Permit Application Format and Contents**

*Analysis:*

The application meets the State of Utah R645 requirements for Permit Application Format and Contents.

The application meets the State of Utah requirements for R645-301-121.200 because the previous acreage inconsistencies in Chapters 1, 5, and Appendix 7-12 have been revised and corrected.

Justin Eatchel

## **Environmental Resource Information**

### **Historic and Archeological Resource Information**

*Analysis:*

The application does not meet the State of Utah R645-301-411 requirements for Historic and Archeological Resource Information.

The application does not meet the requirements because it is missing cultural resource information.

Appendix 7-12, Attachment B of the application states that the full cultural resource inventory is provided in confidential files but no such information could be located in the submittal. SHPO concurrence should be obtained from the BLM as they likely have received it by now.

*Deficiencies Details:*

The application does not meet the State of Utah R645-301-411 requirements for Historic and Archeological Resource Information. The following deficiency must be addressed prior to final approval:

R645-301-411: The Permittee must provide all available information regarding cultural resources in the disturbed area. SHPO concurrence must be obtained from the BLM, if available.

Todd Miller

**Vegetation Resource Information**

*Analysis:*

The application meets the State of Utah R645-301-320 requirements for Vegetation Resource Information.

The application meets the requirements because all necessary vegetation information is provided.

The application includes an updated Plate 3-2 indicating the location of the boreholes. PBH-1 is located in grassland/shrub habitat, PBH-2 is located in pinyon-juniper habitat, and PBH-3 is located in sagebrush/grass habitat. Threatened and endangered plant species are discussed in Appendix 7-12, Attachment C, Table 3 which states the Permittee's consultant, SWCA, performed field suitable habitat surveys for three plant species of concern: Jones cycladenia, Ute-ladies tresses, and Horse Canyon stickleaf. The survey did not find suitable habitat for any of the three species in the disturbed or adjacent areas.

Todd Miller

**Fish and Wildlife Resource Information**

*Analysis:*

The application meets the State of Utah R645-30-322 requirements for Fish and Wildlife Resource Information.

The application meets the requirements because all necessary information is provided.

Appendix 7-12, Attachment C provides biological surveys. This report includes U.S. Fish & Wildlife Service listed species, BLM sensitive species, and Utah Natural Heritage Program sensitive species.

The USFWS IPaC list includes the following federally listed threatened or endangered species: Mexican spotted owl, bonytail chub, Colorado pikeminnow, humpback chub, razorback sucker, Jones cycladenia, and Ute-ladies tresses. Suitable habitat was not located for any of these species. The BLM sensitive species list added one additional species: Horse Canyon stickleaf. The Utah Natural Heritage Program included six additional species: Peregrine falcon, golden eagle, burrowing owl, ferruginous hawk, Townsend's big-eared bat, and the white-tailed prairie dog. Of these species, field surveys were performed for: Mexican spotted owl, monarch butterfly, Jones cycladenia, Ute-ladies tresses, Horse Canyon stickleaf, and white-tailed prairie dog. No suitable habitat for any of these species was located in the disturbed or buffer areas.

Todd Miller

## Maps Surface and Subsurface Ownership

### *Analysis:*

The application does not meet the State of Utah R645 requirements for Surface Ownership Maps.

The amendment does not meet the requirements of R645-301-521.130 thru -521.132 because Plate 4-1 Surface Ownership contains permit area boundary information that has not yet been approved.

The redline strikeout on page 1-4 of Chapter 1 indicates that Bronco Coal Company is no longer a surface owner of record for lands contiguous to the permit area. A revised version of Plate 4-1 Surface Ownership has been provided that shows the current owners of record for lands within and adjacent to the permit area boundary. Additionally, the permit area boundary for the Lila Canyon Mine in Plate 4-1 has been revised to appear more distinct.

However, the permit area boundary that is illustrated on Plate 4-1 has been drawn to include Federal Lease #UTU-014218 Tract #2 and #UTU-0126947 Tract #2 even though those leases have not yet been approved and assimilated into the current MRP. Leases UTU-0126947 and UTU-014218 are currently proposed for inclusion into the permit under Task T-21793 (Add Lease Modifications Turtle Canyon). Any plate that portrays the current permit area boundary must omit Federal Leases #UTU-014218 Tract #2 and #UTU-0126947 Tract #2 until Task T-21793 has been approved. Consequently, the permit area boundary in Plate 4-1 must be redrawn to only show what has been approved.

### *Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Surface Ownership Maps. The following deficiency must be addressed prior to final approval:

R645-301-521.130 thru -521.132: The Permittee must revise the permit area boundary in Plates 4-1 and 3-2 to only show areas that are currently approved.

Justin Eatchel

## Operation Plan

## Mining Operations and Facilities

### *Analysis:*

The application meets the State of Utah R645 requirements for Mining Operations and Facilities.

The amendment meets the requirements for R645-301-521 and -526 because a narrative has been provided along with accompanying maps explaining the construction, use, and removal of three water monitoring boreholes in the northern part of the Williams Draw area within the Lila Canyon Mine permit boundary. The majority of the project description may be found in Appendix 7-12.

Conventional truck-mounted drilling is proposed for two boreholes (PBH-1, PBH-3), while a third will be drilled using a helicopter drill rig (PBH-2). Once the core holes are completed, the holes will be converted to water monitoring piezometers and the drill pads reclaimed. Access to the sites may be achieved via the existing Turtle Canyon Road for holes PBH-1 and PBH-3. Since there will be no road to PBH-2, access may only be achieved by ATV or on foot via the Williams Draw channel. The drill pads for PBH-1 and PBH-3 will be 100' X 100', while the PBH-2 helicopter drill pad will be approximately 35' X 80' (Appendix 7-12, p.7).

The Permittee estimates that the entire process to prepare drill pads, mobilize equipment, complete the drilled boreholes, and reclaim the drill pads will take approximately 6 weeks (Appendix 7-12, p.5).

The drilling procedure calls for continuous core drilling from the surface to total depth. Water required for drilling activities will be provided by the Lila Mine site hydrant and trucked directly to PBH-1 and PBH-3. Water will be provided to PBH-2 via a temporary flexible hose laid in the bottom of the Williams Draw channel (Appendix 7-12, p.6). A typical plan view of the conventional drill site layout and helicopter drill site layout are shown in Appendix 7-12, Figures 2 and 3, respectively. A section view of the anticipated piezometer completion column is found in Appendix 7-12 Figure 5, page 14. A reclamation plan for the boreholes is provided in Appendix 7-12, pages 11 thru 13.

Justin Eatchel

## Relocation or Use of Public Roads

### *Analysis:*

The application meets the State of Utah R645 requirements for Relocation or Use of Public Roads.

The amendment satisfies the requirements of R645-301-521.161 thru -521.163 and R645-103-224.400 because the application contains maps showing the proposed drill pad locations in relation to the Turtle Canyon Road right-of-way.

Appendix 7-12, Figure 2 shows a plan view of a typical 100 X 100 drill site layout. Figures 1A and 1B illustrate how the proposed drill pads will be configured in relation to the adjacent Turtle Canyon Road right-of-way. The drill pads will be constructed slightly beyond 100 feet from the Turtle Canyon Road right-of-way, thus satisfying the requirements of R645-103-224.400.

Figures 1A and 1B clearly show the configuration of the drill pads as well as the distance from the Turtle Canyon Road right-of-way to the nearest edge of the pad. The approximate location and orientation of the access road from the pad to the public road is also indicated in the figures.

The narrative on Page 2 of Appendix 7-12 provides a description of the location and orientation of the proposed drill pads, and clarifies that the drill pads will not be constructed within 100 feet of Turtle Canyon Road.

Justin Eatchel

## **Topsoil and Subsoil**

### *Analysis:*

The application does not meet the State of Utah R645 requirements for Soils: Operation Plan.

The plan does not describe the removal of topsoil from the drill pads. The R645 Rules require that topsoil is removed from the area to be disturbed unless the disturbance is for a small structure such as a powerpole, a sign or a fenceline; and the disturbance will not destroy the existing vegetation and will not cause erosion (R645-30-1-232.400). As described, the disturbance is larger than a small structure and the disturbance will remove vegetation and the disturbance requires silt fencing for erosion control.

The details of the exploration plan outlined in Appendix 7-12 differ from those outlined in correspondence between UEI and SITLA, which indicates that topsoil would be salvaged and stockpiled from a 100 x 100 ft area. The correspondence also states that the pad will be rough graded for drainage control and surrounded by silt fences; and that cuttings and fluids would be contained in a mut pit that may be excavated or portable (7-12 Attachment A, Notice of Intent Letter from Matthew Efaw, UEI, to Mr. Thomas B. Faddies, SITLA, 1/21/2019).

Due to the amount of equipment to be stored and the fact that grubbing of vegetation is involved, the R645Coal Rules require that topsoil is salvaged from sites PBH-1 and PBH-3. Based on the soil survey, the topsoil A horizon is 5 inches thick at PBH-1 and PBH-3. Utah Coal Rule R645-301-232.300 states that where the topsoil horizon is less than six inches, a combined topsoil and subsoil layer six inches thick will be salvaged. If six inches is salvaged, the volume of topsoil/subsoil to be salvaged from each pad would be approximately 185 CY. This volume could be placed in a windrow along the far side of the pad, extending the pad somewhat.

### *Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Soils Operation Plan. The following deficiencies must be addressed prior to final approval:

R645-301-231.100, Methods of removing and storing topsoil must be described.

R645-301-232.100: Topsoil must be salvaged prior to any grading of the 100 x 100 ft pad sites.



R645-301-232.300, The plan must state that a mixture of topsoil and subsoil six inches thick will be salvaged.

R645-301-234: Topsoil protection measures must be described.

Priscilla Burton

## **Vegetation**

### *Analysis:*

The application meets the State of Utah R645-301-331 requirements for Vegetation.

The application meets the requirements because a suitable revegetation plan is included.

Appendix 7-12, pages 11-13 of the application discuss reclamation procedure following completion of drilling activities. Page 11 states reclamation will take place as soon as is practicable and will include broadcast seeding with the approved final reclamation seed mix.

Todd Miller

## **Hydrologic General**

### *Analysis:*

The application meets the State of Utah R645 requirements for Hydrologic General.

The Permittee is proposing 3 exploration boreholes with the intent to convert the boreholes to piezometers. These boreholes, PBH-1, PBH-2, and PBH-3 will be screened in the Sunnyside sandstone formation below the coal. PBH-1 will be 975 feet deep, PBH-2 will be 1745 feet deep, and PBH-3 will be 1040 feet deep. These piezometers will be located near the northern areas of the Williams Draw lease. PBH-1 and PBH-3 will be drilled with a conventional truck-mounted drill rig, and PBH-2 which is in a more remote location will be drilled with a helicopter drill rig. The supporting equipment necessary for the PBH-2 hole will be brought in with ATVs or walked in and a temporary flexible hose will be used to supply water to this location. Water necessary for drilling equipment will be brought in from a clean water fire hydrant source at the Lila mine surface facilities.

Amanda Daniels

## **Hydrologic Transfer Wells**

### *Analysis:*

The application meets the State of Utah R645 requirements for Hydrologic Transfer Wells.

The 3 proposed piezometers will be reclaimed as outlined in Appendix 7-12. This appendix details the piezometers will be plugged and abandoned with cement and/or bentonite to full depth in accordance with the Utah Division of Water Rights rules. After plugging the surface casing will be removed to a depth of 2 feet below the ground surface.

Amanda Daniels

## Hydrologic Sediment Control Measures

### *Analysis:*

The application does not meet the State of Utah R645 requirements for Hydrologic Sediment Control Measures.

The application states, in Appendix 7-12 that sediment controls will be provided at each drill site by installation of silt fence around the perimeter of each site. Figure 4 of Appendix 7-12 shows a typical installation guide for the silt fence material. Water bars will be installed at any break in the silt fences (drill pad access points) to prevent any runoff from entering or leaving the drill pad. Figure 2 and Figure 3 give typical drill pad configurations for the truck-mounted drill rig pads and the helicopter accessed drill pads. However, the current application submittal has added two short access roads to PBH-1 and PBH-3. The Permittee must clearly state that the silt fences will be used along these access roads in addition to the drill pads to prevent additional suspended solids from leaving the disturbed area. Reclamation of the drill pads will occur as soon as possible following the completion of drilling activities. The reclamation activities are detailed in section R645-202-240 of Appendix 7-12.

### *Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Hydrologic Sediment Control Measures. The following deficiency must be addressed:

R645-301-742 The current application submittal has added two short access roads to PBH-1 and PBH-3. The Permittee must clearly state that silt fences will be used along these access roads in addition to the drill pads to prevent additional suspended solids from leaving the disturbed area.

Amanda Daniels

## Reclamation Plan

### General Requirements

### *Analysis:*

The application does not meet the State of Utah R645 General Reclamation Requirements.

The amendment does not satisfy the requirements of R645-301-542.200 because the application does not contain adequate reclamation plans. Additionally, the reclamation plans provided in Appendix 7-12 differ from what is described in the attached SITLA correspondence.

The narrative in Appendix 7-12 states that there will be no topsoil salvage efforts at PBH-1 and PBH-3 because all soils would be covered with a Brattice cloth prior to drilling (Appendix 7-12, p.10). However, correspondence between Matthew Efau and Tom Faddies states that the 100' x 100' drill pads would have topsoil salvaged and stockpiled prior to drilling activities (Notice of Intention Letter to Thomas Faddies, January 21, 2019, PDF pgs. 62-63).

Since the planned drill pads will disturb approximately 10,000 square feet, there should be a plan in place to salvage and stockpile topsoil as originally proposed. The reclamation plan on Appendix 7-12 Page 13 currently proposes to rip and seed the pads. The narrative could be amended to include the replacement of topsoil immediately following soil-ripping activities. Appendix 7-12 Figure 2 should be amended to include the placement of a topsoil stockpile.

*Deficiencies Details:*

The application does not meet the State of Utah R645 General Reclamation Requirements. The following deficiency must be addressed:

R645-301-542.200: The Permittee must amend the reclamation plan in Appendix 7-12 to include the salvage, stockpile, and replacement of topsoil at drill pads PBH-1 and PBH-3. Figure 2 should be amended to show the interim placement of a topsoil stockpile.

Justin Eatchel

**Topsoil and Subsoil**

*Analysis:*

The application does not meet the State of Utah R645 requirements for Soils: Reclamation Plan

The drilling disturbance at each site will last approximately 1.5 months (App. 7-12, Section R645-201-224, p. 5). All three drill holes will be retained as water monitoring wells. The drill pads will be reclaimed once piezometers are installed (Appendix 7-12 Section R645-202-240).

Equipment will be removed. The soils will be ripped. Seed will be broadcast. (Appendix 7-12 Section R645-202-240, p. 13). At the end of the monitoring period, the surface casing will be removed to a depth of 2 feet below the surface and the wells will be plugged as shown in App. 7-12 Figure 5 (App. 7-12, p. 13-14).

The contents of the portable mud pits will be hauled to Pond #1 at the Lila Canyon Mine (App. 7-12, Section R645-301-742.410 thru 42.420, p. 15).

*Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Soils Reclamation Plan. The following deficiencies must be addressed prior to final approval:

R645-301-242, The plan must include redistribution of topsoil.

Priscilla Burton

## Maps Bonded Area

### *Analysis:*

The application does not meet the State of Utah R645 requirements for Bonded Area Maps.

The amendment does not satisfy the requirements of R645-301-820.113 because a map showing the areas where the proposed disturbance will be located is not found. Since the proposed drill pads are adding 0.47 acres of new disturbance acreage to the permit area, Plate 1-2 Disturbed Area Map must be revised accordingly.

Table 1 Appendix 7-12 gives an acreage breakdown for all proposed drill pads. The dimensions of pads PBH-1 and PBH-3 are shown in Figures 1A and 1B respectively. The acreages for PBH-1 and PBH-3 reported in Table 1 are slightly higher than what is required to build the drill pads. The disturbed acreage needed to build access from Turtle Canyon Road to the drill pad amounts to approximately 0.02 acres, which has been accounted for in the disturbed area acreage given in Table 1.

### *Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Bonded Area Maps. The following deficiency must be addressed prior to final approval:

R645-301-820.113: The Permittee must update Plate 1-2 to account for the additional acreage associated with drill pads PBH-1 thru PBH-3 plus the access roads.

Justin Eatchel

## Bonding Determination of Amount

### *Analysis:*

The application does not meet the State of Utah R645 requirements for Determination of Bond Amount.

The amendment does not satisfy the requirements of R645-301-830 because the bonding calculations do not account for the reclamation of roads accessing drill pads PBH-1 and PBH-3 from Turtle Canyon Road. The revised bonding calculations were included in a separate amendment (Task T-21755 Update Surface Facilities), which was conditionally approved on September 1, 2022. The bonding calculations

were increased by \$3,533 to account for the demolition of the riser pipes and well screens and the reclamation and seeding of the drill pads.

However, there must be an increase in the reclamation bond to account for the regrading and revegetation of the access roads between Turtle Canyon Road and PBH-1 and PBH-3.

*Deficiencies Details:*

The application does not meet the State of Utah R645 requirements for Determination of Bond Amount. The following deficiency must be addressed prior to final approval:

R645-301-830: The Permittee must increase the reclamation bond to account for the regrading and revegetation of the access roads between Turtle Canyon Road and PBH-1 and PBH-3.

Justin Eatchel