



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

## Lila Canyon: PBH-1 thru PBH-3 Boreholes (Task #21945)

1 message

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

Thu, Dec 22, 2022 at 3:49 PM

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

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

Hi Jesse,

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

We are aware of the time-constraints in getting this amendment to approval and will do everything we can to try and accommodate your tight schedule. A few minor housekeeping type deficiencies/issues were identified that should be easy to resolve.

Starting tomorrow, I will be out of the office until January 3rd. However, Justin will be working next week starting on Tuesday the 27th. Justin will follow-up with you then to go over the deficiencies and provide clarification.

Regards,  
Steve

p.s. I hope you and yours have a fun and relaxing holiday season.

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### Steve Christensen

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**12202022.21945.DefLtr.Findings.pdf**

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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*

December 22, 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-21945

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 January 23, 2023.

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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Governor

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Lieutenant Governor

Department of Natural Resources  
Division of Oil, Gas and Mining

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## Technical Analysis and Findings

### Utah Coal Regulatory Program

**PID:** C0070013  
**TaskID:** T-21945  
**Mine Name:** LILA CANYON MINE  
**Title:** PBH-1 thru PBH-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 legal description for the permit area within the Right-of-Entry section on Page 1-10 of Chapter 1 has not been revised to account for boreholes PBH-1 and PBH-2.

Table 1-1 of Chapter 1 has been revised to contain Right-of-Entry information for Federal ROW UTU-96032, and the Permittee has revised 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.

However, the legal description of the permit area on Page 1-10 has not been revised to account for the addition of boreholes PBH-1 and PBH-2. The current legal description on Page 1-10 already accounts for PBH-3, but not PBH-1 and PBH-2. The legal description must be revised to include PBH-1 and PBH-2.

Additionally, the total permit area acreage provided at the top of page 1-10 (4,664.32 acres) must be increased by the amount of additional acreage introduced with boreholes PBH-1 and PBH-2 (i.e., the portion of the total 0.47 acres for all three boreholes minus the acreage of PBH-3).

*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 legal description for the permit area on page 1-10 to account for boreholes PBH-1 and PBH-2.

R645-301-114.100: The Permittee must revise the total permit area acreage on Page 1-10 of Chapter 1 by the addition of boreholes PBH-1 and PBH-2.

Justin Eatchel

**Permit Term**

*Analysis:*

The application does not meet the State of Utah R645 requirements for Permit Term.

The amendment does not meet the requirements of R645-301-116.100 because the acreage information in the Permit Term Section 1.1.6 on Page 1-10 of Chapter 1 is incorrect.

The narrative on Page 1-10 states that the anticipated total acreage to be affected during the permit term is 37.49 acres. However, Exhibit "A" of the current Lila Canyon Reclamation Agreement identifies a bonded/disturbed area of 42.6 acres. With the addition of the three boreholes, the bonded/disturbed area will need to be increased by 0.47 acres within the Reclamation Agreement as well as in the Mining and Reclamation Plan (MRP). The disturbed acreages within the MRP and Reclamation Agreement must be consistent. Therefore, the Permittee must revise the anticipated total acreage to be affected in Section 1.1.6 on page 1-10 of Chapter 1 to 43.07 acres (i.e., current Reclamation Agreement disturbed acreage of 42.6 acres plus 0.47 acres).

*Deficiencies Details:*

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

R645-301-116.100: The Permittee must revise the anticipated total acreage to affected in Section 1.1.6 on page 1-10 of Chapter 1 to 43.07 acres (i.e., current Reclamation Agreement disturbed acreage of 42.6 acres plus 0.47 acres).

Justin Eatchel

**Environmental Resource Information**

**Historic and Archeological Resource Information**

*Analysis:*

The application meets the State of Utah R645-301-411 requirements for Historic and Archeological Resource Information.

The application meets the requirements because cultural resource information, including BLM acknowledgement, is included in the confidential section of the application.

Appendix 7-12, Attachment B of the confidential portion of the application contains a June 2022 cultural resource report titled "Class III Archaeological Resources Survey for the Lila Canyon Mine Borehole and Access Route Project, Emery County, Utah" by SWCA. According to the report, one new archeological site was recorded, 42EM5609, and one isolated find, IF-01, was located. Neither was recommended for inclusion in the National Register of Historic Places. SWCA recommends a finding of "No Historic Properties Affected" for the proposal. Also included in the application is a BLM Summary Report of Cultural Resources Inspection concurring with the determinations of eligibility and effect which SWCA proposed. This form is used by DOGM in the absence of SHPO concurrence due to the BLM's small scale programmatic agreement with SHPO.

Todd Miller

## Soils Resource Information

### *Analysis:*

The application meets the State of Utah R645 requirements for Soils: Environmental Description.

The general elevation is 6,700 to 6,900 ft in pinyon -juniper and open mixed-shrub habitats (App. 7.12, Appendix C, Section 1.2 p. 1 and Summary p. 5). Dominant vegetation is pinyon, juniper, big sagebrush and rubber rabbitbrush. Cryptobiotic soil crusts are present throughout the juniper stands (App. 7-12, Attach C, Section 1.2, p. 1). The annual precipitation is 12-16 inches with a frost free period of 85-120 days (App. 7-12 Attach. D, Soil Map Unit Setting).

The location of the three exploratory drill holes is shown on Figure A-1 Project Location in Attach. C of Appendix 7-12. The three drill holes will be accessed from the Turtle Canyon Road (a dirt road) accessed from county road 124. Drill holes PBH-1 and PBH 3 will be more than 100 feet from the Turtle Canyon Road. PBH-2 is located 1.5 miles up the Right Fork of Williams Draw (a dry wash bed) (App. 7.12, Appendix B, Sec. 1.1 p.1).

Environmental soils resource information for the three well sites is found in Attachment D of Appendix 7-12 Notice of Intent to Conduct Minor Coal Exploration, PBH-1, -2, AND -3. The wells are in the Williams Draw Lease Area (Chap. 2, Section 222.200, p. 5).

Attachment D Soils Information provides an Order 3 soil survey evaluation of the soils from the NRCS Web Soil Survey online tool. Soils in the vicinity of PBH-1 and PBH-3 are in soil map unit 089 which is Lilapoint fine sandy loam, 1 to 5% slopes. On average, this soil has a five-inch A horizon. This soil series has prime farmland potential, if irrigated. However, these are State lands that have never been cleared, plowed or irrigated. The ecological site is Loamy bottom (Big Sagebrush). The hydrologic soil group is B, meaning moderate runoff (infiltration rate = 0.15 - .30 in/hr. The land capability classification is 6e, meaning it is unsuitable for cultivation, primarily due to its susceptibility to erosion.

PBH-2 is located 2 miles East and ½ mile North of PBH-1 (Plate 1) in soil map unit 137 which is an association of the Rangecreek-Skein-Rabbitex soil series on 6-45% slopes. These are not prime farmland soils. These soils are a thin cover over bedrock on mountain slopes. This soil has a two-inch A horizon. Depending on the soil series, bedrock may be encountered between 10 inches (Skein soil) and 46 inches (Rabbitex). The ecological site is Upland Shallow Clay Loam (Utah Juniper-Pinyon). The hydrologic group is D, meaning very high runoff potential (infiltration rate = 0.0 - 0.05 in/hr. The land capability class is 7e, meaning it's use is limited to grazing, forestland, or wildlife, primarily due to its susceptibility to erosion.

Photographs of the proposed disturbed areas are found in Appendix B, page B-1 through B-3.

Priscilla Burton

## Maps Permit Area Boundary

### *Analysis:*

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

The application does not satisfy the requirements of R645-301-521.141.

PBH-1 and PBH-2 are located outside of the currently approved permit area depicted on Plate 1-1 of the currently approved MRP and Plate 1-2A (provided with this amendment). Any disturbance associated with a coal mining and reclamation operation must be contained within the permit area boundary.

The Permittee must revise Plate 1-1 in the current MRP and Plate 1-2A (proposed with this amendment) to include PBH-1 and PBH-2 in the permit area.

This could be conveyed within the legend. A note on the plate would also be helpful to convey that PBH-1 and PBH-2 are part of the permit area.

### *Deficiencies Details:*

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

R645-301-521.141: The Permittee must revise Plates 1-1 and 1-2a to convey that the disturbance proposed for holes PBH-1 and PBH-2 will occur within an approved permit area.

Justin Eatchel

## Maps Surface and Subsurface Ownership

### *Analysis:*

The application meets the State of Utah R645 requirements for Surface Ownership Maps.

The amendment meets the requirements of R645-301-521.130 thru -521.132 because Plates 4-1 and 3-2 Surface Ownership contain the correct permit area boundary information.

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.

Previously the permit area boundary illustrated on Plate 4-1 was 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. That has been revised and the correct permit area boundaries are currently displayed. Leases UTU-0126947 and UTU-014218 are currently proposed for inclusion into the permit under Task T-21793 (Add Lease Modifications Turtle Canyon).

Justin Eatchel

## Operation Plan

### Topsoil and Subsoil

#### *Analysis:*

The application meets the State of Utah R645 requirements for Soils: Operation Plan.

The plan includes the removal of six inches of the surface soil from the access spur road and drill pads at sites PBH-1 and PBH-3 prior to construction (App. 7-12 Section R645-201-225 and R645-202-223). These drill pads will be approximately 100 x 100 feet. Salvaged soil will be protected with a silt fence or berm (App. 7-12 R645-202-223). Figure 2 shows the typical layout for PBH- 1 and PBH-3.

At remote drill pad PBH-2, the vegetation and soil will be covered with brattice cloth. This drill site will be 35 ft x 80 ft. A helicopter will deliver equipment to this site. Figure 3 shows the typical layout for site PBH-2.

Priscilla Burton

### 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 2 monitoring wells and 1 piezometer. These boreholes, PBH-1, PBH-2, and PBH-3 will be screened in the Sunnyside sandstone formation just below the coal seam. Previous iteration of this proposed amendment proposed that all three holes would be completed as 2 inch piezometers; however, now the Permittee has proposed that PBH-1 and PBH-3 will be drilled with a nominal 8-inch hole and will be completed with a 4-inch diameter steel casing. This will allow for water quality sampling to take place

with these holes. PBH-2 will still be completed as a 2-inch piezometer. PBH-2 will be drilled with a helicopter drill rig. The supporting equipment necessary for this hole will be brought in with ATVs or walked in and a temporary flexible hose will be used to supply water to this location. PBH-1 will be 975 feet deep, PBH-2 will be 1745 feet deep, and PBH-3 will be 1040 feet deep.

Amanda Daniels

## Hydrologic Transfer Wells

*Analysis:*

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

The 3 proposed PBH holes will be reclaimed as outlined in Appendix 7-12. This appendix details the holes 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 meets the State of Utah R645 requirements for Hydrologic Sediment Controls 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, like drill pad access points, to prevent any runoff from entering or leaving the drill pad. The application has been updated to state that silt fences will also be installed along the approximate 100 feet long access roads to pads PBH-1 and PBH-3. Figure 2 and Figure 3 give typical drill pad configurations for the truck-mounted drill rig pads and the helicopter accessed drill pads.

Amanda Daniels

## Reclamation Plan

### General Requirements

*Analysis:*

The application meets the State of Utah R645 General Reclamation Requirements.

The amendment satisfies the requirements of R645-301-542.200 because the application has been revised to describe reclamation plans for the proposed boreholes.



The narrative in Appendix 7-12 states that topsoil will be salvaged and stockpiled at PBH-1 and PBH-3. The PBH-2 drill pad will be significantly smaller and will be covered with a Brattice covering to protect the soils at that location. The topsoil stockpiles will be bermed to prevent off-site sediment transport (Appendix 7-12, p.10-11). This narrative concurs with correspondence between Matthew Efau and Tom Faddies stating 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. 67-68).

The reclamation plan on Appendix 7-12 Page 13 proposes to rip pads PBH-1 and PBH-3 prior to spreading the stockpiled topsoil. At PBH-2 the Brattice covering will be removed and the soils roughened. All three sites will be seeded with the final reclamation seed mix provided in Table 3.4/3.5 of the approved MRP.

Upon completion of drilling, the borings will be converted to water monitoring piezometers. Once no longer needed for monitoring, the wells will be plugged and abandoned with a cement or bentonite slurry to full depth in accordance with DOGM and DWRi regulations. The surface casing will be removed to a depth of 2 feet below the surface and a cement plug installed.

Appendix 7-12 Figure 2 has been amended to include the placement of a topsoil stockpile.

Justin Eatchel

## **Topsoil and Subsoil**

### *Analysis:*

The application does 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. Trash hauled away. Soils will be ripped and then stockpiled soil will be redistributed at PBH-1 and PBH-3. (The soils will be roughened at PBH-2). The final seed mix, listed on Tables 3.4 and Table 3.5 in the Lila Canyon MRP, 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).

Priscilla Burton

## **Maps Bonded Area**

### *Analysis:*

The application meets the State of Utah R645 requirements for Bonded Area Maps.

The amendment satisfies the requirements of R645-301-820.113 because the amendment contains a map showing the areas where the proposed disturbance will be located. Since the proposed drill pads are adding 0.47 acres of new disturbance acreage to the permit area, the supplemental Plate 1-2a Permit Area Map has been submitted to show all disturbance within the permit area boundaries. The map shows the locations of proposed drill pads PBH-1 thru PBH-3, the location of the surface facilities, and the permit area boundaries. Only PBH-3 resides within the current permit area boundaries. The other holes PBH-1 and PBH-2 reside on SITLA lands outside of the permit area boundaries. The reclamation bond has been augmented to account for the reclamation of all three boreholes.

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 increased acreage accounts for the construction of access roads from Turtle Canyon Road to the drill pads.

Justin Eatchel

## **Bonding Determination of Amount**

### *Analysis:*

The application meets the State of Utah R645 requirements for Determination of Bond Amount.

The amendment satisfies the requirements of R645-301-830 because the bonding calculations have been revised to account for the reclamation of roads accessing drill pads PBH-1 and PBH-3 from Turtle Canyon Road. The bonding calculations have been increased to account for the topsoil distribution at PBH-1 and PBH-3 and overall topsoil roughening at all three pads, including access roads.

Overall, the amendment proposes to increase the bond by \$7,000 from \$2,319,000 to \$2,326,000. Since the posted bond amounts to \$2,335,000 there will be a bond surplus of \$9,000, and the Permittee is not required to post additional bond with this task.

Justin Eatchel