



GARY R. HERBERT  
Governor

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Lieutenant Governor

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

July 18, 2018

Mr. Bryant Bunnell  
Fossil Rock Resources, LLC  
597 South SR24  
Salina, Utah 84654

Subject: Remaining Deficiencies in Midterm Review, Fossil Rock Resources, LLC, Fossil Rock Mine, C015/0009, Task #5599

Dear Mr. Bunnell:

The Division has conducted a midterm review of the Fossil Rock mine plan and has been working with you to correct deficiencies that were identified. You should recall that due to overlapping amendments (specifically the Legal Description and Boundary Change amendment), the requirements of the midterm were put on hold so that the amendments could be processed and resolved prior to being confused with the midterm. The Legal Description and Boundary Change amendment was finally approved on June 27, 2018. On July 12, 2018, we met with you and Chris Hansen to discuss the midterm items that remain to be resolved. We agreed to provide you a list of the remaining midterm issues to be addressed. The deficiencies are listed in the Technical Analysis and Findings provided as an attachment to this letter.

The deficiencies authors are identified so that your staff can communicate directly with that individual should questions arise. Please provide a response to the deficiencies by no later than August 17, 2018.

You should note that the deficiency associated with bonding calculations has now been addressed and we are returning the stamped "incorporated" clean copies to you for your files. Based on the revised bond calculations, the Fossil Rock mine reclamation liability has increased to \$1,168,000. Consequently, the posted bond must be increased by \$14,000. Please contact Suzanne Steab at (801)538-5265 to acquire the paperwork necessary to update your Reclamation Agreement. This should also be accomplished by the August 17, 2018 date.

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

Sincerely,

Daron R. Haddock  
Coal Program Manager

DRH/sqs  
Attachment  
O:\015009.FR\Midterm Deficiencies.doc





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**Technical Analysis and Findings**

**Utah Coal Regulatory Program**

**PID:** C0150009  
**TaskID:** 5599  
**Mine Name:** FOSSIL ROCK MINE  
**Title:** MIDTERM COMPLETION RESPONSE

**General Contents**

**Violation Information**

*Analysis:*

The application meets the State of Utah R645 requirements for Violation Information. R645-301-113.300: An AVS Permit Evaluation Report was generated for the Fossil Rock Mine C/015/0009 on January 17, 2018. The report listed 12 violations. The violations are coded "conditional" indicating a settlement, payment plan, or pending challenge.

ssteab

**Operation Plan**

**Topsoil and Subsoil**

*Analysis:*

The Fossil Rock Waste Rock MRP does not meet the requirements of R645-301-231.400 and R645-301-234, because the volume, storage location and protection of the topsoil and subsoil recovered from the contemporaneously reclaimed waste rock cells has not been described. During a site visit on May 16, 2017, topsoil and subsoil stockpiles were stockpiled in the remaining area. The volume of the recovered soil remains unknown. Seeding of the resource had not been completed. During that site visit, we discussed amending the topsoil storage location, provided an amendment to the plan is filed.

Fossil Rock MRP Vo. 4. Section 200 Soils p. 4 states that within six months of the completion of the mining of the pile, an as-built drawing and salvaged soil quantities will be incorporated into the permit. Section 231.100 further explains that during remaining, the expectation is for 673 CY of topsoil to be salvaged from the reclaimed waste rock outslope and placed on the West end of topsoil stockpile #2. About 1,347 CY of subsoil will be removed from the reclaimed waste rock outslope and placed on the North end of the existing subsoil stockpile.

*Deficiencies Details:*

The application does not meet the R645-301-121.100, current information requirements. The following deficiency must be addressed prior to final approval:

In accordance with R645-301-121.100, R645-231.400 and R 645-301-234, The Permittee must update the MRP to report the volume, storage location and protection of topsoil and subsoil removed from the contemporaneously reclaimed waste rock cells.

pburton

## Reclamation Plan

### Cessation of Operations

#### Analysis:

The Permittee is not in compliance with R645-301-515.320, notice of temporary cessation. The waste rock site was transferred to Fossil Rock permit in December 2015. The Fossil Rock waste rock site (previously known as the Trail Mountain Waste Rock site) was constructed in June 1990. Three lifts were constructed and their out slopes were contemporaneously reclaimed. Map 4-5 shows the site as built in 2013. The fourth quarter 2014 certified inspection report (Cottonwood Mine Incoming 1/20/2015) states that the total storage capacity of the waste rock site is 784,000 CY. The site was at 36% capacity (282,240 CY). The elevation of the waste was 6,803.31 ft. at the time of the transfer to Fossil Rock.

Re-mining of the waste was initiated in 2016. A certified waste rock inspection report dated 12/27/2017 states that 121,000 CY of waste has been removed from the pile. Division inspectors have reported the site has been idle for over one year. Currently there are graded piles of waste rock and soil on the surface of the waste rock site.

Interim reclamation of the existing topsoil stockpiles, pond embankments and road out slopes is described in Volume 4 Biology Section 341.200. Table 300-5 provides the interim seed mix of grasses, forbs and shrubs. Interim reclamation included seeding, raking seed, application of fertilizer and 2 T/ac mulch (Section 341.200, p. 11 & 12). These procedures should also be applied to the newly stockpiled soil and exposed waste rock slopes. Where possible, the surface of the pile should be leveled to reduce erosion.

#### Deficiencies Details:

The application does not meet the R645-301-121.100, current information requirements. The following deficiency must be addressed:

In accordance with R645-301-515.320 and R645-301-515.312 and R645-301-331, The Permittee must provide the Division with a notice of temporary cessation which describes methods used to level the graded waste stockpiles, and stabilize the exposed waste rock cell out slope and protect the soil stockpiles.

pburton

### Bonding and Insurance General

#### Analysis:

The application meets the State of Utah R645 requirements for General Bonding and Insurance.

A previous review of this midterm application found the posted reclamation bond to be inadequate. Various references within the narrative proposed a plan to sample the soils in addition to conditioning the soils with fertilizer, but these costs were not included in the bonding calculations.

The newly submitted bond was recalculated using the 2017 version of the R.S. Means Heavy Construction Cost Data, and separate line items for fertilizer, soil testing and a splash apron at the Cottonwood Mine outfall were included. The differences between the 2012 and 2017 R.S. Means Cost indexes together with the inclusion of additional costs have increased the total bond liability by \$14,000 dollars. The current posted bond amounts to \$1,154,000 dollars, while the total updated bond liability is \$1,168,000 dollars. Consequently, the the posted bond must be increased by \$14,000 dollars in order to remain current.

jeatchel