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State of Utah

DEPARTMENT OF NATURAL RESOURCES

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May 27, 2020

Kirt Tatton, General Manager
Canyon Fuel Company, LLC
P.O. Box 1029
Wellington, Utah 84542

Subject: Phase II Contemporaneous Reclamation Soils, Canyon Fuel Company, LLC,
Dugout Canyon Mine, C/007/0039, Task #6140

Dear Mr. Tatton:

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. In an effort to ensure approval of the amendment during the next review iteration, the Division requests a meeting/conference-call to discuss the deficiencies prior to re-submitting the amendment.

The plans as submitted are denied. Please resubmit the entire application. If you have any questions, please call me at (385) 290-9937.

Sincerely,

Steve Christensen
Coal Program Manager

SKC/sqs

cc: Jay Marshall, CFC
Vicky Miller, CFC

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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070039
TaskID: 6140
Mine Name: DUGOUT CANYON MINE
Title: PHASE II CONTEMPORANEOUS RECLAMATION SOILS

Summary

To facilitate Phase II expansion of the waste rock site and contemporaneous reclamation, topsoil stockpile #2 and subsoil stockpile #2 were moved in January 2019 from the SW fence line, at the toe of the Dugout Waste Rock site, to the top of the waste rock pile. In accordance with R645-301-234.240, the Permittee notified the Division of this move on January 29, 2019 and agreed to follow up with a permit amendment (personal communication with Jay Marshall, 1/29/2020).

This amendment replaces Page 2-iv Table of Contents, page 2-11, pages 2-17 through 2-23, RA Table 2-2 In-place soil salvage volumes, RA Attachment 2-2, Soil Salvage and Distribution narrative, RA Attachment 2-2 Dwg. Refuse Pile Facility Relocated Soils, RA Plate 2-2 Soil Stockpiles As-Built, and RA Plate 5-1 Dugout Refuse Pile Design Operational Plan Phase II.

The plan states that the Permittee would seed the stockpiles (moved in January 2019) in the early spring 2020 when daytime temperatures reached above freezing, so that hydromulch could be put down. Despite the Division's deficiency in the last review requiring seeding to be completed by April 2nd, the stockpiles have not yet been seeded after 16 months. The stockpiles will be hand broadcast today, May 22, 2020 (personal communication with Vicky Miller 5/22/2020).

pburton

Operation Plan

Topsoil and Subsoil

Analysis:

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

Replaced page 2-11 is incorrectly numbered. It replaces narrative on MRP page 2-7

No redline/strikeout changes were apparent on replaced page 2-17. Replaced page 2-17 and 2-18 are incorrectly numbered as they replace the narrative found on MRP p. 2-12 and 2-13, respectively.

Replaced page 2-18 replaces the narrative on page 2-14.

Replaced page 2-20 deletes language found on page 2-15.

Dwg RA Attachment 2-2 mistakenly indicates that the stockpiles were placed on top of the refuse in December 2019.

These stockpiles were moved in January 2019 according to information provided to the Division (personal communication with Jay Marshall, January 29, 2019).

Topsoil and subsoil stockpile quantities are listed in Section 242.100.

RA Plate 2-2 shows the location of **long term topsoil #1 (5,612 CY) and subsoil #1 (9,211 Y) stockpiles** at the entrance to the site.

Former locations of stockpiles #2 are also shown on Plate 2-2. Section 234.300 states that between 2017 - 2019 stockpiled and salvaged soils were "redistributed" on the northeastern end of the refuse pile. This is misleading, since the contemporaneous reclamation was done in 2017 with seeding completed in late December, early January 2018. Topsoil was transferred to the refuse pile location, but was not redistributed over the refuse pile in 2019.

The transfer of stockpiles is re-iterated in Section 242.100.

The narrative in RA Attachment 2-2 describes operational protections of the topsoil/subsoil stockpiles.

The Reclamation Soils (Quantities Approximate) Table (Section 242.100) accounts for volumes of topsoil and subsoil stockpiled, live-hauled in 2017, and remaining in place. These volumes are taken from Aero-Graphics Inc. surveys in 2008, 2009 2015, 2017 and 2019.

The Reclamation 2-2 Soils (Quantities Approximate Table states that in total, **10,816 CY of topsoil** are stockpiled and **19,914 CY of subsoil** are stockpiled. The drawing in RA Attachment 2-2 shows the location of the temporary topsoil and subsoil stockpiles on top of the refuse pile. Revised pages 2-20 and 2-21 state that the **temporary piles hold 5,204 CY topsoil (which includes the 84.90 CY "flood" topsoil) and 10,703 CY subsoil (which includes the 2,102 CY of subsoil remaining after 2017 contemporaneous reclamation)**. These volumes are much larger than the September 2018 Aero-graphics survey volumes (personal communication with Jay Marshall, January 29 2019). This large discrepancy in volumes before and after transfer of the topsoil and subsoil is the reason that the Division requests dimensions and cross-sections of the stockpiles on top of the waste rock pile or the 2019 aerographic survey data.

Reclamation 2-2 Soils (Quantities Approximate) Table states that **1,180 CY of topsoil were live-hauled in contemporaneous reclamation of the waste rock site and estimates that 2,364 CY topsoil remain in place**. The table estimates **7,696 CY subsoil were live-hauled and 16,902 CY remain in place**. A notation to the table specifies map units J & H as the area to be salvaged salvage. However RA Attachment Table 2-2 does not anticipate any further salvage from these map units. Please refer to Table 3.41 in RA Attachment 2-1 Soil Survey to make the appropriate corrections to RA Attachment Table 2-2.

RA Attachment 2-2 shows the location of the remaining in-place soil to be recovered when the full extent of the refuse pile is constructed. The narrative in Section 242.100 estimates that between 6,219 and 11,599 CY of topsoil were available from the 3.23 acre expansion area. The narrative estimates between 13,484 and 24,100 CY of subsoil from the same area. Thus the volumes stated in Reclamation 2-2 Soils (Quantities Approximate) Table are low estimates for topsoil *in situ* and high estimates for subsoil *in situ*.

Deficiencies Details:

DEF

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

R645-301-121.200,

- (1) Replaced page 2-11 is incorrectly numbered. It replaces narrative on MRP page 2-7
- (2) No redline/strikeout changes were apparent on replaced page 2-17. Replaced page 2-17 and 2-18 are incorrectly numbered as they replace the narrative found on MRP p. 2-12 and 2-13, respectively.
- (3) Replaced page 2-18 replaces the narrative on page 2-14.
- (4) Replaced page 2-20 deletes language found on page 2-15.

(5) Dwg RA Attachment 2-2 mistakenly indicates that the stockpiles were placed on top of the refuse in December 2019. These stockpiles were moved in January 2019 according to information provided to the Division (personal communication with Jay Marshall, January 29, 2019).

(6) Section 234.300 states that between 2017 - 2019 stockpiled and salvaged soils were "redistributed" on the northeastern end of the refuse pile. This is misleading, since the contemporaneous reclamation was done in 2017 with seeding completed in late December, early January 2018. Topsoil was transferred to the refuse pile location, but was not redistributed over the refuse pile in 2019.

R645-301-234.230,

(1) If topsoil and subsoil stockpiles have not already been seeded, they must be seeded and hydromulched by May 29, 2020.

R645-301-231.400, Provide the Division with dimensions and cross-sections of the stockpiles on top of the waste rock pile or provide the results of the 2019 aerographics survey of the stockpiles on top of the refuse pile.

R645-301-232, RA Attachment Table 2-2 does not anticipate any further salvage from Map Units H & J, however these units are specified as the source of remaining in-situ soil on revised page 2-19. Please state the acreage remaining in map units J and H on RA Attachment Table 2-2.

pburton

Reclamation Plan

Topsoil and Subsoil

Analysis:

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

A summary of the difference in projections of total cover in stockpiles and in-situ between 2017 and 2020 follows:

2020: 13,180 CY topsoil and 36,816 CY subsoil (replaced p. 2-21) = 49,996 CY.

2017: 20,149 CY topsoil and 36,064 CY subsoil (approved MRP p. 2-15) = 56,213 CY.

The final extent of the refuse pile is shown on RA Plate 5-1 Dugout Refuse Pile Design Operational Plan Phase II. The 2017 reclamation area adjusted for slope was 792,473 sq ft or 18.19 acres in 2017 (RA Chap 2, revised pages numbered 2-18 and 19). The total soil volume available (storage and in situ) is 13,180 CY topsoil and 36,816 CY subsoil, which totals 49,996 CY. (The Reclamation Soils (Quantities Approximate) This volume will be used for the remaining 15.06 acres of the waste rock site remaining in 2020 (p. 2-22). Total soil volume required is based on 15.06 acres in 2020 (revised page 2-22). **(a)** Please make it clear whether the 15.06 acres have been adjusted for slope. **(b)** Please state the acreage of contemporaneous reclamation outlined on RA Plate 2-2.

Deficiencies Details:

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

R645-301-240, The total reclamation soil volume is based on 15.06 acres remaining in 2020 (revised page 2-22). **(a)** Please make it clear whether this area has been adjusted for slope. **(b)** Please state the acreage that was contemporaneously reclaimed and that is outlined on RA Plate 2-2.

pburton