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State of Utah

DEPARTMENT OF NATURAL RESOURCES

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August 13, 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 Mine, C/007/0039, Task #6178

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.

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 September 14, 2020.

If you have any questions, please call me at (385) 290-9937.

Sincerely,

Steve Christensen
Coal Program Manager

SKC/sqs
cc: Jay Marshall
Vicky Miller
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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070039
TaskID: 6178
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). The amendment was first submitted in February of 2020 as Task 6069.

pburton

Operation Plan

Topsoil and Subsoil

Analysis:

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

The Permittee must state January 2019 as the date of soil stockpile transfer on Section 234.300, page 2-14.

The Permittee should state that the aerial survey proposed in Section 232.100 and Section 343.500 (p. 2-8), will document the volumes remaining in stockpiles and the acres contemporaneously reclaimed to date to update the Reclamation Soil (Quantities Approximate) table on p. 2-20.

Analysis:

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. Topsoil #2 (2,937 CY) and subsoil #2 (2,753 CY) stockpiles are shown on RA Plate 2-2 along the SW fence line.

In January 2019, the Division was notified that Topsoil #2 and subsoil #2 stockpiles were transferred to the top of the refuse pile. RA Attachment 2-2, Refuse Pile Facility Relocated Soils Figure shows the new stockpile location. The new location is noted in Sections 234.300, p. 2-14 and Section 234.200, p. 2-17. However, page 2-14 incorrectly states the date of transfer as January 2020. e-p 21 and 24 and 38 The Permittee must correct the date to January 2019, since the Division was notified that the piles had already been transferred in January of 2019. The relocated stockpiles were placed adjacent to 2,100 CY of subsoil that remained after the contemporaneous reclamation work in 2017/2018 (RA Attachment 2-2). The transferred stockpiles were bermed, but were not seeded until May 2020 (personal communication with Vicky Miller 5/22/2020), a delay of 16 months. The three stockpiles shown on RA Attachment 2-2 will be used in contemporaneous reclamation in 2020/2021.

In June 2020, additional soil was salvaged from 2.52 acres from the Phase II expansion area, which is outlined on RA Attachment 2-2. There was a potential for salvage of 4.065 CY topsoil and 16,261 CY subsoil from Phase II (Section 242.100, p. 2-16). (p. 2-19). e-p 23 and 26 The recently salvaged soils are temporarily stockpiled at the toe of the refuse pile for use in contemporaneous reclamation in 2020. (See photographs in Insp. Rpt. 6700). The actual salvaged soil volumes have not been determined.

The Reclamation Soil (Quantities Approximate) table on p. 2-20 (e-p 26) state that there is 144,881 CY of topsoil and 36,175 CY of subsoil in stockpiles at the site. These volumes will be will be reduced by contemporaneous reclamation. What remains after the 4.5 acre contemporaneous reclamation must be verified by a survey.

Section 234.100, p 2-12, (e-p. 19) through Section 234.200 p 2-13 and the narrative in RA Attachment 2-2 describe the operational protections of the topsoil/subsoil stockpiles. Since the contemporaneous reclamation is expected to take place over the course of two years (2020 – 2021), the Permittee must ensure that stockpiles are protected as described in the plan despite their occasional use for contemporaneous reclamation. This is a Performance Standard (R645-301-251 and R645-301-252).

Section 232.100, p. 2-8, and Section 343.500, p. 2-8, both state that an aerial survey in 2020 will be used to revise RA Plate 2-2 to show the current location of stockpiles. e-p 15 The stockpile location is outlined on RA Attachment 2-2. The aerial survey should document the volumes remaining in stockpiles and the acres contemporaneously reclaimed to date.

Deficiencies Details:

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, The Permittee must state January 2019 as the date of soil stockpile transfer on Section 234.300, page 2-14. Please do not include the Division citation.

R645-301-231.400, The Permittee must state that the aerial survey proposed in Section 232.100 and Section 343.500 (p. 2-8), will document the volumes remaining in stockpiles and the acres contemporaneously reclaimed to date to update the Reclamation Soil (Quantities Approximate) table on p. 2-20

pburton

Reclamation Plan

Topsoil and Subsoil

Analysis:

RECLAMATION PLAN

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

The Permittee must state that the 2017 test plots were installed under the direction of Bill King, Dugout Engineer, not a Division staff member (Section 241.200, p. 2-20).

The Permittee has incorrectly stated that 4.51 acres were contemporaneously reclaimed in 2017/2018 (p.2-17) and since cover calculations are revised on this basis, the Reclamation Soils Quantity table (p. 2-19) may need to be revised.

The Permittee must show calculations to for the new 15.06 acre footprint, since this acreage is not a straight forward subtraction of the the contemporaneously reclaimed acreage from the initial footprint.

The Permittee must keep the volume tabulations on RA Plate 5-1 and RA Plate 2-2 as is, until a new survey provides a basis for a change in waste rock footprint, capacity or cover requirement detailed on these PE certified maps.

Analysis:

RA Plates 2-2 and 5-1 establish the footprint for the refuse pile at the completion of Phase II to be 792,473 sq ft or 18.19 acres (adjusted for slope) (Section 242.100, p. 2-15). Cover requirements have not changed with this amendment (p.

2-14). The volume of cover soil required for the 18.19 is calculated to be 117,403 CY acres (existing RA Attachment 2-2). These calculations are removed from this amendment.

When the 4.5 acres of contemporaneous reclamation shown on RA Plate 2-2 is completed, there will be 13.69 acres remaining to be reclaimed. (18.19 initial footprint – 4.5 acres contemp. reclaimed = 13.69 acres remaining). In Section 241.100, the Permittee has calculated a 15.06 acre footprint remaining after contemporaneous reclamation of the 4.5 acres. The calculation of this remaining acreage is not clearly not simply subtraction, but some fraction of the acreage was likely adjusted for slope. The Permittee must provide calculations to show how the new acreage was derived.

There has been no change to the four foot cover depth. The cover volumes calculated in RA Attachment 2-2 remain accurate for the 18.19 acre final footprint. The Permittee revised the cover soil accounting based on 15.06 acres. The Permittee also increased the estimated salvage volumes of topsoil and subsoil, which has reduced the volume of borrow soil needed from 46,515 CY down to 29,183 CY.

Section 241.100 states the total cover required for 15.06 acres is 91,702 CY and the total cover available at the site is 51,056 CY. The total volume to be imported from the borrow area is 29,183 CY. (p. 2-18). As stated on p. 2-18, required volumes may change pending the outcome of the test plot and the chemistry of the waste rock surface. e-p 25

The Permittee must state the size (in acres or sq ft) of the test plot created in 2017/2018 and the number of acres contemporaneously reclaimed in 2017/2018.

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:

R645-301-121.200,

(1) The Permittee must state that the 2017 test plots were installed under the direction of Bill King, Dugout Engineer, not a Division staff member (Section 241.200, p. 2-20).

(2) The Permittee has incorrectly stated that 4.51 acres were contemporaneously reclaimed in 2017/2018 (p.2-17). Only a portion of the 4.51 acres was contemporaneously reclaimed in 2017/2018.

R645-301-240,

(1) The Permittee must state the size (in acres or sq ft) of the test plot created in 2017/2018 and the number of acres contemporaneously reclaimed in 2017/2018.

(2) The Permittee must show calculations to for the new 15.06 acre footprint, since this acreage is not a straight forward subtraction of the the contemporaneously reclaimed acreage from the initial footprint.

(3) The Permittee must keep the volume tabulations on RA Plate 5-1 and RA Plate 2-2 as is, until a new survey provides a basis for a change in waste rock footprint, capacity or cover requirement detailed on these PE certified maps.