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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 2, 2017

John Byars, General Manager
Canyon Fuel Company, LLC
597 South SR24
Salina, Utah 84654

Subject: Waste Rock As-Built Soils, Canyon Fuel Company, LLC, Sufco Mine,
C/041/002, Task ID #5341

Dear Mr. Byars:

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.

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

Sincerely,

Daron R. Haddock
Coal Program Manager

DRH/sqs

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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0410002
TaskID: 5341
Mine Name: SUFCO MINE
Title: WASTE ROCK AS-BUILT SOILS

Operation Plan

Topsoil and Subsoil

Analysis:

Analysis:

The as-builts provided do not meet the requirements for R645-301-231.100, because Operational Maps 4-A and 4-B (referenced on Map 2-G) do not portray the configuration of the topsoil and subsoil stockpiles and because the cross sections shown on Operational Maps 3-A and 3-B series do not portray the existing contours of the topsoil and subsoil piles as shown on Operational Map 2-B and because Map 2-B does not indicate station locations for the cross-sections.

The as-builts provided do not meet the requirements for R645-301-223, because the pre-disturbance soil survey information did not include analysis of N:P:K. Therefore section 222.200 states that a composite sample of topsoil will be taken at each phase and analyzed for a list of parameters, including available nitrate nitrogen, available phosphorus and extractable potassium. This information is overdue.

The as-builts do not meet the requirement of R645-301-121.200, because the first notation on Map 2-G refers to Figure 5, but there are only Figures 1-3 in the soil survey. In addition, the Quantities Table (p. 2-27) should reference Table on p. 2-3 as the source of the previously stored topsoil volume figure and for comparison with the subsoil as built volume (which is slightly more than that stated in Table 2-3). Also Figure 3 should be referenced for the map unit designation (soil type) used in the Quantities Table. And finally, the Quantities Table column heading Estimated should be replaced with the word Surveyed, since the quantities reported for Phase 1 and 2 are known. Estimated quantities are appropriate for Phases 3 - 6.

Maps 2A-F series do show protection of the topsoil with fencing. Map 2-G and the Quantities Table on page 2-27 do illustrate the salvaged quantity of topsoil and subsoil, the quantity replaced on reclamation of Lift 5, and the quantity currently stockpiled. The volume of topsoil in storage is 36,356 CY which is 8,456 less than anticipated. The volume of subsoil stockpiled is 29,730 CY which is 3,880 CY short of that anticipated by the soil survey, App. V (A).

Deficiencies Details:

The as-builts provided do not meet the requirements for Soil Survey Characterization. The following deficiency must be addressed prior to final approval.

R645-301-223, Please provide the results of soil sampling and analysis conducted during soil salvage, as described in MRP Section 222.200 which states that a composite sample of topsoil will be taken at each phase and analyzed for a list of parameters, including available nitrate nitrogen, available phosphorus and extractable potassium.

The as-builts provided do not meet the requirements for Soil Handling/Operation Plan. The following deficiencies must be addressed prior to final approval.

R645-301-231.100. Please update Operational Maps 4-A and 4-B (referenced on revised Operational Map 2-G) to portray the surveyed volumes and configuration of the topsoil and subsoil stockpiles. Please update Operational Map 2B to show the cross-section station locations and update Operational Maps 3-A and 3-B to show the current contours of the topsoil and subsoil piles.

The as-builts do not meet the requirement of Clear and Concise. The following deficiencies must be addressed prior to final approval.

R645-301-121.200. Please correct the reference to Figure 5 in the first notation of Map 2-G to a reference to Figure 3 App. V(A). In the Quantities Table (p. 2-27), please reference the Table on p. 2-3 as the source of the previously stored topsoil and subsoil volumes. Please reference Figure 3 App. V(A) as the source of the map unit designation (soil type) used in the first column of the Quantities Table. And finally, replace the word Estimated to Surveyed in the fifth and eighth column headings for Phase 1 and 2 as-built volumes in the Quantities Table.

pburton

Spoil Waste Refuse Piles

Analysis:

The amendment does not meet the State of Utah R645 requirements for Refuse Piles.

The amendment does not meet the standards of R645-301-528.322 as the amendment includes conflicting information between Maps 2B and 3A. The cross section stations shown on Maps 3A through 3C are missing station markers on Maps 2A through 2F for the Division to be able to quickly and easily identify locations between plan and profiles views.

The amendment included as built volumes presented in the narrative and drawings within the Waste Rock section of the MRP. Narrative within Volume 3 Chapter 2 was updated to reflect the updated information as of the 2016 as built. Additionally a salvaged soil table was added to Chapter 2 of Volume 3 detailing the actual topsoil/subsoil quantities placed on Lift 5, within the storage piles, and the estimated quantities to be salvaged in future phases. The information presented on the table is also found on Map 2G of the amendment. A total of 7,705 LCY of topsoil and 9,417 LCY of subsoil were placed on Lift 5 of June of 2016. The original amendment had the representative tables on each corresponding figure and the new amendment combined all the tables on to Map 2G.

These volumes are supposedly represented in Map 2G added within this amendment, but there is conflicting information between the plan view and profile views. Maps 2A-2F are missing station tick marks for the Division to efficiently identify locations between plan and profile drawings. The stations are labeled in Maps 3A-3C but without the tick markers also on Map 2A-2F there is room for misinterpretation on locations. On Map 2B the plan view for cross sections C-C' and D-D' show that there are two distinct soil mounds but Map 3A cross sections only show one. The Permittee shall include the tick markers on the plan views to help the Division associate locations with stations shown on cross sections. The Permittee will verify that the asbuilt topography for Phase 1 and 2 is represented on all Maps 2A-2G, 3A-3C, and 4A through 4F.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements for Refuse Piles. The following deficiency must be addressed prior to final approval.

R645-301-121.200, R645-301-521.120 through-521.125, and R645-301-528.322: Permittee shall include the tick markers on the plan view maps (e.g. Maps 2A-2F) to help the Division associate locations with stations shown on cross sections (e.g. Maps 3A-3C). The Permittee shall include the tick markers on the plan views to help the Division associate locations with stations shown on cross sections. The Permittee will verify that the asbuilt topography for Phase 1 and 2 is represented on all Maps 2A-2G, 3A-3C, and 4A through 4F.

cparker

Maps Facilities

Analysis:

The amendment does not meet the State of Utah R645 requirements Mining Facilities Maps.

The amendment does not meet the requirements of R645-301-521.120 through-521.125 which require maps to clearly show the mining facilities as the amendment includes conflicting information between Maps 2B and 3A. The cross section stations shown on Maps 3A through 3C are missing station markers on Maps 2A through 2F for the Division to be able to quickly and easily identify locations between plan and profiles views.

The amendment includes updates to Maps 2-A through 2-F which depict the operational phases of the Sufco Waste Rock site. Map 2-G was added to show the various as built volumes for topsoil/subsoil for each phase of operation and reclamation of the waste rock site. The amendment includes updates to the operational cross sections of the Sufco Waste Rock site drawings Maps 3-A through 3-C.

Deficiencies Details:

The amendment does not meet the State of Utah R645 requirements Mining Facilities Maps. The following deficiencies must be addressed prior to final approval.

R645-301-121.200, R645-301-521.120 through-521.125, and R645-301-528.322: Permittee shall include the tick markers on the plan view maps (e.g. Maps 2A-2F) to help the Division associate locations with stations shown on cross sections (e.g. Maps 3A-3C). The Permittee shall include the tick markers on the plan views to help the Division associate locations with stations shown on cross sections. The Permittee will verify that the asbuilt topography for Phase 1 and 2 is represented on all Maps 2A-2G, 3A-3C, and 4A through 4F.

cparker

Reclamation Plan

General Requirements

Analysis:

The amendment meets the State of Utah R645 requirements for Reclamation Activities.

The requirements of R645-301-540 are met within the amendment as there is no change to the existing MRP reclamation details.

cparker

Contemporaneous Reclamation General

Analysis:

The amendment meets the State of Utah R645 requirements for Contemporaneous Reclamation.

The requirements of R645-301-553 of backfill and grading are met within the amendment the amendment did not contemplate any change to the various six phases of operation and reclamation of the Sufco Waste Rock Site. The Permittee is currently bonded for Phase 1 through 3 of the new waste rock site.

cparker

Maps Reclamation Final Surface Configuration

Analysis:

The amendment meets the State of Utah R645 requirements for Final Surface Configuration Maps.

The requirements of R645-301-542 are met within the amendment as there is no change to the existing MRP plan of the estimated final surface configuration back to AOC.

cparker

Bonding Determination of Amount

Analysis:

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

The amendment does not meet the requirements of R645-301-830.140 as the Permittee failed to update the reclamation earthwork volumes for the Waste Rock site on the Earthwork bond sheets. The current bond sheets show a bond of \$234,477 to move approximately 58,600 CY of topsoil/subsoil. The updated salvage volumes shown on Map 2G shows for Phases 1 through 3 a total of 97,000 CY of topsoil/subsoil will be salvaged and need reclamation grading. The bonding amount required to regrade approximately \$592,865. The Permittee must increase the posted bond approximately \$234,000.

Deficiencies Details:

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

R645-301-830.140: The Permittee shall update the required volumes of salvaged soil for Phase 1 through 3 on the Earthwork bond sheet to match the projected salvaged soils on Map 2G.

cparker