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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

September 6, 2017

Garth Nielsen, General Manager
Savage Services Corporation
901 W. Legacy Center Way
Midvale, Utah 84047

Subject: Midterm Completion Response, Savage Services Corporation, Savage Coal Terminal, C/007/0022, Task #5500

Dear Mr. Nielsen:

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 October 6, 2017.

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

Sincerely,

A handwritten signature in blue ink that reads "Daron R. Haddock".

Daron R. Haddock
Coal Program Manager

DRH/sqs
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Technical Analysis and Findings

Utah Coal Regulatory Program

PID: C0070022
TaskID: 5500
Mine Name: SAVAGE COAL TERMINAL
Title: MIDTERM COMPLETION RESPONSE

Reclamation Plan

Revegetation Standards for Success

Analysis:

The response for the midterm review meets the State of Utah R645 requirements for reference areas at R645-301-356 and criteria noted in item H of the midterm review ;

The Savage Coal Terinal has 2 reference areas that were visited by DOGM biologist (Joe Helfrich) in December of 2016 and the NRCS Dean Stacey on July 12, 2017. The December visit verified the location of the reference areas on the map in the MRP and on the ground. The second visit by the NRCS indicated that;

The first site visited (4383355 N, 515467 E) was characterized as a Desert loamy clay (Shadscale) ecological site. Although the site seemed to be relatively stable in terms of soil/site stability and hydrologic function, the biologic integrity of the site has seemed to have declined over the years. From the report of the baseline inventory, the species diversity is much higher then, than now. Although the overall production of the site was good (approx. 475 lbs/acre), the species diversity was relatively low. Several different species on the site were recorded; however, it is dominated by winterfat, halogeton and cheatgrass.

The second reference area visited (4376173 N, 519668 E) had two different ecological sites in it. However, the majority of the site was characterized as Alkali flat (Black greasewood). Adjacent to it to the west was what would be considered to be a transition into a mat saltbrush ecological site. For the purposes of this evaluation, the focus was on the black greasewood site. The production on this site fit within the parameters of what would be expected for this site at 600 lbs/Ac. Like the first reference site however, species diversity was low for what should be expected for the site. Grass species were virtually non-existent, with the understory being dominated by Powell's saltweed, five-horn and halogeton. Black greasewood was the dominant shrub with a few scattered mat saltbrush plants. Approximately 70% of the annual production came from the forb component which was dominated by Powell's saltweed (approx.. 50%).

The permittee may want ot have the sites evaluated to determine if the diversity is adequate to represent the success standards for revegetation.

This portion of the midterm review is recommended for approval.

Deficiencies Details:

Bonding Determination of Amount

Analysis:

The midterm does not meet the State of Utah R645-301-830 requirements for Determination of Bond Amount.

R645-301-830, Tech 007 (effective July 17, 2017) requires all direct costs include overhead and profit. It is noted that the detailed cost in the bonding sheets do not include the overhead and profit. The Permittee must revise the bonding information to conform to the Tech Directive 007- Calculation Guidelines for Determining Coal Mining Reclamation Bond Amounts that was mailed out to all operators on July 17, 2017. The permittee will need to update all cost in the Demo details and Total detail cost sheets to the year, 2016 and use the RS Means O&P costs (instead of bare unit costs). Total the direct costs, the indirect costs, and apply the escalation factor for 5 years from 2016 to 2021 If 2017 cost are used then only apply the escalation for 4 years. The 2016 escalation factor was .007 or 0.7%. The escalated reclamation cost will then be rounded up to the nearest 1000 dollars.

Deficiencies Details:

The application does not meet the State of Utah R645-301-830 requirements for Determination of Bond Amount.

R645-301-830, Tech 007 (effective July 17, 2017) requires all direct cost include overhead and profit. The permittee will submit all bonding sheets with updated overhead and profit included in the bonding details. The midterm year was 2016 so cost should reflect that year and be escalated to 2021.