



State of Utah

DEPARTMENT OF NATURAL RESOURCES

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Technical Analysis and Findings

Utah Coal Regulatory Program

August 23, 2017

PID: C0150018
TaskID: 5492
Mine Name: DEER CREEK MINE
Title: REMOVE CONTAINERIZED PLANTINGS

General Contents

Permit Application Format and Contents

Analysis:

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Reclamation Plan

General Requirements

Analysis:

The amendment changes the text of MRP Volume 2, Reclamation - Rilda Canyon Surface Facilities Appendices (electronic MRP pages 191-197). This change does not apply to the North Rilda Rilda Canyon Portal Facilities, MRP, Vol 11, Biology.

pburton

Topsoil and Subsoil

Analysis:

The application meets the requirements of Soil Reclamation. The application revises the woody plant density requirement for reclamation of the Left Fork Fan portal and substation (MRP Vol. 2, Appendices, Rilda Canyon Facilities pages 1-6, electronic pages 191-197).

Soil redistribution and reclamation practices for the Left Fork fan portals and substation are described on p. 2 of Vol 2 Appendix Reclamation- Rilda Canyon Surface Facilities. The Left Fork fan and substation pad will be graded, ripped if necessary, and covered with 12 inches of topsoil (Vol 2 Appendix Reclamation -Rilda Canyon Surface Facilities, p. 2). The access road will be seeded with the pinyon-juniper seed mix listed on MRP Biology section page 3-3, and the pad will be seeded with the mix described on page 2 of Vol 2 Appendix, as revised for Aspen/Fir/Dogwood and Spruce/Fir.

An excess 3,010 CY cut from the Left Fork will be placed as backfill to cover the discharge water pipeline in the vicinity of the Rilda 1st Left portal (personal communication with Dennis Oakley 7/17/2017 and Vol 2. Appendix Reclamation- Rilda Canyon Surface Facilities, p. 1). An excess of 2,137 CY at Rilda sediment pond will be graded to blend with the approximate original contour (Vol 11. p. 23). (This volume of excess is manageable, since if the total 5,147 CY were graded over the entire 7.3 ac North Rilda disturbed area, the entire area would be covered with an additional 0.45 feet.)

The application does not revise the reclamation requirements for the North Rilda Canyon facilities (Vol. 11, Biology reclamation plan). Three seed mixes are planned for North Rilda: Pinyon-Juniper/Mountain Brush (which was seeded on the topsoil stockpile, p. 22, Vol 11, Soils), Sagebrush/Grass, and the White Fir/Aspen. The North Rilda Table 300-10 seed mixture will be planted on the topsoil storage location and disturbances near the Rilda Canyon stream (p. 30, Vol 11, Biology). North Rilda Table 300-10 Seed mixture (White Fir/Aspen) requires 200 woody plants of three species be planted per acre. These woody species are White Fir, Quaking Aspen, and Blue Spruce.

Woody plants made up approximately 50% of the North Rilda proposed disturbed and reference areas (MRP, Vol 11A, Biology App. B).

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Revegetation General Requirements

Analysis:

The amendment meets the State of Utah R645 coal rules for Revegetation, General Requirements at R645-301-353-356.

On June 28, 2017 the Division received an amendment to remove containerized plants and bare root stock from the final seed mix for the Deer Creek mine. The removal was based on limited success from previous reclamation attempts and overall cost. A site visit and consultation (personal conversations with Makeda Hanson DWR & Jeff Jewkes USFS Manti La-Sal) were conducted on August 8th and 9th. Since the perimeter of the portal pad and access road are heavily vegetated with the majority of species listed in the containerized plant seed mix it is likely that these species will establish on their own or volunteer at the reclaimed site. Makeda and Jeff from DWR and FS concurred with the Division's findings. The amendment is recommended for approval.

jhelfric

Bonding Determination of Amount

Analysis:

The amendment meets the State of Utah R645 requirements for Determination of Bonding Amount.

The narrative in this amendment proposes to change the method of revegetation from containerized plantings to a native seed mix. Locally, it has been empirically proven that the hardiness and survivability of plants grown from seed surpass that of their containerized counterparts. For that reason, Permittee has determined that to proceed with containerized plantings would be a waste of time and money. Moreover, replacing containerized plantings with a native seed mix decreases the Permittee's required bond liability as well as enhancing the success standards for this particular reclamation project.

On page 6 of the submitted amendment the Permittee states that the labor rates and equipment costs were obtained from the 1993 Edition of the Means Heavy Construction Cost Data, and that the equipment specifications were obtained from the 1992 Edition of the Cat Performance Handbook. As part of the next Mid-term review, the Permittee should consider updating reclamation costs using a more recent edition of the Cat handbook.

jeatchel