



GARY R. HERBERT
Governor
GREG BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Technical Analysis and Findings Utah Coal Regulatory Program

April 28, 2017

PID: C0410002
TaskID: 5437
Mine Name: SUFCO MINE
Title: MITIGATION AND BOND FOR 2RWL SINKHOLE

Environmental Resource Information

Maps Affected Area Boundary Maps

Analysis:

The amendment meets the State of Utah R645-301-323 requirements for maps and aerial photographs.

Plate 5-6 has been updated to include the sinkhole as part of the permit area. The permittee also has another amendment under review by the Division to incorporate the Greens Hollow Lease into the Permit area. That amendment will update all the maps in the MRP to include both the sinkhole and the additional permit area associated with the Greens Hollow Lease. If the Greens Hollow Lease does not get incorporated into the MRP, the Permittee must update all MRP maps to show the correct permit area.

Plate 3-1 indicates the location of reference areas for measuring reclamation success.

Plates 4-1A and 4-1B show land use of the Quitchupah and SITLA Muddy Tracts.

Plate 3-2v6, Elk Range does not show the disturbed boundary and therefore does not require an update.

Plate 3-3 shows deer range and raptor nests and therefore does not require an update.

Reinhart

Reclamation Plan

Revegetation General Requirements

Analysis:

The amendment does not meet the State of Utah R645-301-356 requirements for revegetation standards for success.

On page 3-50 of the amendment, the permittee has proposed a 100' square reference area immediately adjacent to the reclaimed sink hole on the northern edge to be used as a reference site. In theory this location should meet the regulatory requirements of a reference site. However, the permittee has not provided adequate information to demonstrate the proposed reference site is representative of geology, soil, slope, and vegetation. Furthermore, Plate 3-1 is too large of a scale to adequately ascertain the precise location of the reference site for monitoring purposes.

Also, as stated in the previous deficiency and pursuant to R645-301-356.231 minimum stocking and planting arrangements must be coordinated with the Division and the land management agency. Since reclamation has already occurred, the Permittee must coordinate with the Division and Forest to determine appropriate minimum stocking and planting arrangements.

Deficiencies Details:

The amendment does not meet the State of Utah R645-301-356 requirements for revegetation standards for success. The following deficiency must be addressed prior to final approval:

R645-301-356: The Permittee must coordinate with the Division and Fishlake National Forest to determine shrub and stocking density standards for the reclaimed sinkhole. This information must be incorporated into the MRP.

The Permittee must demonstrate the proposed reference site represents the geology, soil, slope, and vegetation of the sinkhole. Plate 3-1 does not adequately show the precise location of the sinkhole due to the large scale. Again, the Division recommends a separate map clearly identifying all reference sites with associated vegetation communities).

lreinhart