

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

September 7, 2011

TO: Internal File

THRU: Steve Christensen, Lead *ell*

FROM: Joe Helfrich, Biology *JH*

RE: Emery Reclamation Commitments, Consolidation Coal Company, Emery Deep Mine, C/015/0015, Task ID #3889

SUMMARY:

The Division's review of Consolidation Coal Company's 2010 annual report indicated that the commitments noted in Chapter III, page 4a and Appendix III-1 needed to be reviewed. This memo will include a review of that information.

SUMMARY OF DEFICIENCIES

R645-301-340: Commitments 2, 3 and 4 noted in the scope of the investigation will need to include timelines for implementation. Additional recommendations for commitment #2 include:

A site visit with the permittee to visit the 22 study areas and discuss the results of the vegetation and soils investigations prepared by Mt. Nebo Scientific.

The addition of salt tolerant legumes and other salt tolerant plant species to the final reclamation seed mix based on the site visit and survey discussion.

A timeline for the submittal of plans should be established during the on site meeting.

The requirement in commitment #4 to submit the reclamation plan 12 months prior to final reclamation should be deleted. (JH)

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TECHNICAL ANALYSIS:

RECLAMATION PLAN

GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

Analysis:

The permittee had committed to “*develop an investigative study into past reclamation practices conducted at the Emery and Hidden Valley mines*”. Chapter III, page 4a of the MRP outlines the scope of the investigation which includes:

1. A vegetation and soils study, (Appendix III-1), was completed in 2003. At first glance the study does not appear to include study sites at the Hidden Valley mine.
2. Based on findings from the study, plans shall be developed to enhance vegetation of each site. The plan is to be reviewed with DOGM prior to implementation. Enhancement methods should be implemented during warm season planting. Recommendations include:

A site visit with the permittee to visit the 22 study areas and discuss the results of the vegetation and soils investigations prepared by Mt. Nebo Scientific.

The addition of salt tolerant legumes and other salt tolerant plant species is based on the site visit and survey discussion.

A timeline for the submittal of plans should be established during the on site meeting.

3. The qualitative part of the study will be performed annually and the quantitative aspects be performed between the 4th and 6th year following initial implementation of enhancement methods. The present reclamation methods shall be correlated with the historical weather information obtained from an on-site weather station. This commitment needs a timeline for implementation based on the completion of commitment # 2.

4. Based on the follow-up study, a total reclamation plan shall be developed for the Emery mine site. The plan is to incorporate and utilize the best reclamation practices found through the results of the studies. The plan will be developed with DOGM and submitted 12 months prior to final reclamation. This commitment needs a time line for implementation based on the completion of commitment #3.

Findings:

Commitments 2, 3 and 4 noted in the scope of the investigation have not been adequately addressed by the permittee to meet the requirements of this section of the regulations. Prior to approval the following must be provided in accordance with; **R645-301-340**. Commitments 2, 3, and 4 noted in the scope of the investigation will need to include timelines for implementation. Additional recommendations for commitment #2 include:

A site visit with the permittee to visit the 22 study areas and discuss the results of the vegetation and soils investigations prepared by Mt. Nebo Scientific.

The addition of salt tolerant legumes and other salt tolerant plant species to the final reclamation seed mix based on the site visit and survey discussion.

A timeline for the submittal of plans should be established during the on site meeting.

The requirement in commitment # 3 to submit the reclamation plan 12 months prior to final reclamation should be deleted.

RECOMMENDATIONS:

Recommendations for commitments 2, 3, and 4 noted in chapter III, page 4a of the MRP are included in the previous findings section of this document.