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TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

December 13, 2010

TO: Internal File

THRU: Jim Smith, Permit Supervisor/Team Lead *DS 14 Dec 2010*

FROM: April A. Abate, Environmental Scientist II *AAA 12-14-2010*

RE: Change to Sediment Control Measures, NEICO, Wellington Prep Plant, C007/0012 and Task # 3670

SUMMARY:

On November 8, 2010, Mt. Nebo Scientific, on behalf of Nevada Electric Investment Company (NEICO), submitted an amendment to perform sediment control measures to an area adjacent to Siaperas Ditch within the Wellington Preparation Plant permit boundary. Currently, sediment control in the area is being treated with silt fence located at the boundary of the disturbed area and Siaperas Ditch, which routes undisturbed drainage from upstream agricultural activities. The area is labeled on Figure F9-177 in the Mining and Reclamation Plan (MRP) as Alternative Sediment Control Area (ASCA) #7 and covers approximately 2.52 acres.

The Permittee is proposing to replace the silt fence with gouging on approximately 50% of the surface within the ASCA #7 area in order to control runoff from the permit area and prevent it from migrating to Siaperas Ditch and the road.

The amendment meets the R645 Utah Coal Rules and is recommended for conditional approval pending the receipt of the required amount of copies.

TECHNICAL MEMO

TECHNICAL ANALYSIS:

GENERAL CONTENTS

RELOCATION OR USE OF PUBLIC ROADS

Regulatory Reference: R645-103-234

Analysis:

The application indicates that the proposed activity will take place within 100 feet of a public road. A road operated by Carbon County is located adjacent and west of ASCA Area #7. No alteration or relocations to the existing road are proposed.

Findings:

The applicant is planning to conduct erosion control methods within the previously-approved permit area boundary. The earthwork proposed to control erosion will include a gouging the existing soil in the permit area and the placement of hay bales at the boundaries of the permit area and the road. None of these activities are considered obstructive to normal daily operations that could affect the road, and therefore no approvals from Carbon County appear to be necessary for this project.

HYDROLOGIC INFORMATION

Regulatory Reference: R645-301-742, -301-743, -301-750, -301-761

Analysis:

Sediment Control Measures

The applicant is currently performing erosion control between the boundary of Siaperas Ditch and the permit boundary by using silt fence. The silt fence requires continuous maintenance which is why the Permittee is seeking an alternate erosion control method in order to control and divert runoff in this area.

Siltation Structures: General

The gouges will create "pocks" of small microbasins within the land surface and are designed to catch runoff from migrating to Siaperas Ditch. The gouges will be designed in accordance with the criteria set forth in the UDOGM publication "The Practical Guide to Reclamation, State of Utah". The depth of the gouges will range between 18 to 24 inches with at least half of the surface area within ASCA area #7 consisting of these gouges.

The Permittee will keep the hay bales located at the boundary of the Carbon County road and the permit area boundary. These bales will serve as an additional siltation structure between the road and the gouged area.

Based on a 10-year 24-hour precipitation event consisting of a total of 1.8 inches, the estimated amount of water the gouges would hold equals approximately 3.6 inches assuming that only 50% of the area is pocked. Under the most conservative scenario, under 100-year, 24-hour precipitation event conditions and only a 30% land surface pocked, then precipitation collected in the pocks would only average 7.8 inches.

Findings:

Based on these calculations for the amount of precipitation that will collect in the gouges, the 18-24 inch design will be more than adequate to handle the amount of runoff anticipated for this area.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Monitoring and Sampling Location Maps

The Permittee submitted a revised Hydrologic Evaluation Map -Drawing F9-177, 2 of 2 depicting ASCA area #7 shading in the area where the gouging and hay bales will be placed.

Certification Requirements

Drawing F9-177, 2 of 2 was stamped by Licensed Professional Geologist, Erik Petersen on November 2, 2010.

Findings:

The drawing submitted meets the R645 Utah Coal Rules.

RECOMMENDATIONS:

The amendment meets the R645 Utah Coal Rules and is recommended for conditional approval pending the receipt of the required amount of copies.