

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

JK

October 26, 2007

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor *page*

FROM: *SC* Steve Christensen, Environmental Scientist II

RE: Refuse Drainage to Pond 8, Consol Coal Company, Emery Deep, C/015/0015, Task ID #2852

SUMMARY:

The Division of Oil, Gas and Mining (the Division) issued Consol Coal Company (the Permittee) a violation relative to their temporary refuse pile. Division inspector Karl Houskeeper issued the violation (#10005) upon observing the limited capacity of the receiving drainage channels that accept storm runoff from the refuse pile.

This memo provides the hydrologic analysis for Violation #10005. Upon review of the submittal provided by the Permittee on September 10, 2007 to address the violation, there are outstanding deficiencies in connection with the operation and design of the refuse pile. The Permittee must address the following deficiencies prior to vacating the violation:

R645-301-746.212 requires that uncontrolled surface drainage may not be diverted over the outslope of the refuse pile. The Permittee must either provide the plans and designs for controlling the storm runoff generated from the top of the refuse pile or provide the Division with a demonstration that such runoff controls are unnecessary given the relative size of the refuse pile.

R645-301-746.212 also requires that runoff generated from areas above the refuse pile and runoff from the surface of the refuse pile will be diverted into stabilized diversion channels designed to meet the requirements of R645-301-742.300 to safely pass the runoff from a 100-year, 6-hour precipitation event. The figure submitted to the Division in response to the violation, *Pond No. 8 Plan View and Drainage Map*, depicts a proposed permanent development waste disposal site approximately 100 to 200 feet away. However, upon review of the approved MRP and additional submitted materials, hydrologic calculations for the

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permanent development waste site are not provided. The Permittee must provide the hydrologic calculations, designs and plans for the stabilized channels that will be utilized at the permanent waste disposal site.

TECHNICAL ANALYSIS:

OPERATION PLAN

SPOIL AND WASTE MATERIALS

Regulatory Reference: 30 CFR Sec. 701.5, 784.19, 784.25, 817.71, 817.72, 817.73, 817.74, 817.81, 817.83, 817.84, 817.87, 817.89; R645-100-200, -301-210, -301-211, -301-212, -301-412, -301-512, -301-513, -301-514, -301-521, -301-526, -301-528, -301-535, -301-536, -301-542, -301-553, -301-745, -301-746, -301-747.

Analysis:

Refuse Piles

The submittal does not meet the requirements for Refuse Piles as provided in R645-301-746.200. R645-301-746.212 requires that uncontrolled surface drainage may not be diverted over the outslope of the refuse pile. The Permittee must either provide the plans and designs for controlling the storm runoff generated from the top of the refuse pile or provide the Division with a demonstration that such runoff controls are unnecessary given the relative size of the refuse pile.

R645-301-746.212 also requires that runoff generated from areas above the refuse pile and runoff from the surface of the refuse pile will be diverted into stabilized diversion channels designed to meet the requirements of R645-301-742.300 to safely pass the runoff from a 100-year, 6-hour precipitation event. The figure submitted to the Division in response to the violation, *Pond No. 8 Plan View and Drainage Map*, depicts a proposed permanent development waste disposal site approximately 100 to 200 feet away. However, upon review of the approved MRP and additional submitted materials, hydrologic calculations for the permanent development waste site are not provided. The Permittee must provide the hydrologic calculations, designs and plans for the stabilized channels that will be utilized at the permanent waste disposal site.

The application contains the design data, maps and hydrologic model runs used to design the drainage system at the current refuse pile site. R645-301-746.212, as stated above, requires that runoff from a refuse pile must be diverted into stabilized diversion channels that are designed to safely pass the runoff from a 100-year, 6-hour event. Upon review of the submitted

model, as well as the surface drainage map, the drainage network at the current refuse pile location meets this requirement.

Findings:

The submittal does not meet the Refuse Pile requirements of R645-301-746.212. The following deficiencies should be addressed prior to vacancy of the violation:

R645-301-746.212- R645-301-746.212 requires that uncontrolled surface drainage may not be diverted over the outslope of the refuse pile. The Permittee must either provide the plans and designs for controlling the storm runoff generated from the top of the refuse pile or provide the Division with a demonstration that such runoff controls are unnecessary given the relative size of the refuse pile.

R645-301-746.212- R645-301-746.212 also requires that runoff generated from areas above the refuse pile and runoff from the surface of the refuse pile will be diverted into stabilized diversion channels designed to meet the requirements of R645-301-742.300 to safely pass the runoff from a 100-year, 6-hour precipitation event. The figure submitted to the Division in response to the violation, *Pond No. 8 Plan View and Drainage Map*, depicts a proposed permanent development waste disposal site approximately 100 to 200 feet away. However, upon review of the approved MRP and additional submitted materials, hydrologic calculations for the permanent development waste site are not provided. The Permittee must provide the hydrologic calculations, designs and plans for the stabilized channels that will be utilized at the permanent waste disposal site.

RECOMMENDATIONS:

Violation #10005 should not be vacated at this time. The Permittee should adequately address the identified deficiencies relative to drainage control/diversions associated with the refuse pile.