



**State of Utah**  
 DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL, GAS AND MINING

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June 1, 1993

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Ken Wyatt, Senior Reclamation Hydrologist *KW*

RE: Bulk Rock Dust BTCA Area Amendment Review, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007, Folder #2, Carbon County, Utah

SYNOPSIS

On May 26, 1993, Sunnyside Coal Company (SCC) submitted a revision for the BTCA area associated with the bulk rock dust tank. This submittal was a fax and included Table III-50 and Drawing A4-0264 showing the area involved. This memo will review this submittal.

ANALYSIS

The damage from the storms that impacted the Sunnyside area last summer removed the existing vegetative filter in this BTCA area. According to Henry Sauer, inspector for the Sunnyside Mine, the operator was informed that he should provide additional sediment control in this area since the previous vegetative filter was damaged. Nothing was done so NOV 93-32-3-8 was issued on this area. SCC submitted this change as abatement for this NOV on May 26, 1993.

The area in question encompasses .06 acres. It is an area about 100 by 26 feet along the county road where the rock dust bulk tank is located. Original runoff calculations for the area show about .0124 acre feet of runoff from a 10 year 24 hour event. This was based on a vegetative filter in place. Based on the lose of the vegetative filter and the lower infiltration rate of the soils, I used a curve number of 88.

Using the Division's PEAK and STORM programs for runoff, I calculated the peak flow and runoff volumes from the following inputs:

Area: 0.06 acres  
 Slope: 5%



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Curve number: 88  
Channel length 100 feet  
Time of Conc.: .0285  
Precipitation: 10 year 24 hour @ 1.84 inches  
Storm type: SCS type 2

**RESULTS**

Peak Flow: .07 CFS  
Runoff volume: .01 acre feet

Using the results from these calculations, the runoff volume and the peak flow are within the guidelines set for BTCA areas. The original plan with the vegetative filter showed volumes very similar to those calculated here.

**RECOMMENDATION**

I recommend that the revision be approved as described and the information incorporated into the Sunnyside Coal Company permit.