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TO: Internal File

FROM: Gregg A. Galecki, Reclamation Hydrologist/Team Lead *GA*

RE: Amendment to Water Monitoring Plan, Savage Industries, Inc., Savage Coal Terminal, C/007/022-AM01F

**SUMMARY:**

On November 13, 2001, the Division received a proposed amendment to the Savage Coal Terminal Water Monitoring Program. The proposal is to eliminate Station CV-16-W, located along the west property boundary, from the Water Monitoring Program. The following technical review evaluates the proposed amendment from a hydrologic prospective only. The amendment meets the minimum requirements of the State regulation.

**TECHNICAL ANALYSIS:**

**OPERATION PLAN**

**MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

**Analysis:**

**Monitoring Sampling Location Maps**

The elimination of Water Monitoring site CV-16-W requires a modification to the Water Monitoring Location Map. A revised map, Plate 7-1, was submitted with the proposed amendment.

TECHNICAL MEMO

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**Findings:**

Information in the application is adequate to meet the requirements of the Maps, Plans, and Cross Sections of Resource Information section of the regulations.

**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, 301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

**Analysis:**

**Groundwater monitoring**

Station CV-16-W was initiated in 1989 when a wetland/seep area located upslope of the property was diverted into the property by an adjacent landowner. Subsequently the adjacent landowner constructed facilities on the upslope property and diverted the flow to the northwest of the Savage Industries, Inc. property. The intention of the monitoring site was to monitor any possible overflow or contamination caused by the adjacent landowners' sediment pond. Additional changes affecting flow to Station CV-16-W include construction of an elevated roadway with associated ditches, and the adjacent landowner altering their sediment pond outlet to direct flow to the North. The drainage for the original site has been significantly altered.

From June 1989 through June 2001, CV-16-W has been monitored/visited a total of 78 times. Flow has been recorded a total of three times; June 1989, May 1990, and February 1997, respectively. The remaining site-visits were documented as No Flows. Laboratory analysis was conducted for the 1989 and 1990 samples only. The limited water quality data indicates the water is of poor quality with Specific Conductivity values of 3000 and 4690 umohms, Sulfate values of 2006 and 3152 mg/l, and Total Dissolved Solids values of 3102 and 4876 mg/l, respectively. Flows from 1989 through 1997 were 4.2 gpm, 1.7 gpm, and 0.2 gpm respectively. Due to the combination of minimal water quality/quantity data available, and the alteration of the drainage reporting to the site, elimination of the sample site location is reasonable.

**Surface-water monitoring**

A modification of the Surface-water monitoring is not necessary.

**Findings:**

Information in the application adequately addresses the requirements of the Hydrologic Information section of the Regulations.

**RECOMMENDATION:**

The amendment can be accepted in its present form.