

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Tuesday, January 13, 2009

From: Karen Buerki, OSC

Subject: #2

TVA Widows Creek Spill
Steam Plant Road, Stevenson, AL
Latitude: 34.8849190
Longitude: -85.7577210

POLREP No.:	2	Site #:	A4XR
Reporting Period:	1/11-12/2009	D.O. #:	
Start Date:	1/9/2009	Response Authority:	CERCLA
Mob Date:	1/9/2009	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

At approximately 0600 hrs on January 9, 2009, a release of spent Flue Gas Desulfurization (FGD) material (calcium sulfate, or "gypsum") was discovered by TVA contractor TransAsh. The material is produced when limestone slurry (calcium carbonate) is used to scrub sulfur dioxide (SO₂) emissions from flue gas. A small amount of fly ash is also sent to the FGD ponds because one of the boilers does not have an electrostatic precipitator, and so the SO₂ scrubber also serves to remove the fly ash. The release occurred through a 36" retired-in-place standpipe from FGD Pond #2B. The cap on the pipe dislodged, releasing liquid and solid contents from the bottom of FGD Pond #2B into the Stilling Pond located below it. The material overflowed the Stilling Pond and released into Widows Creek. Widows Creek feeds into the Tennessee River approximately 2 miles downstream from the release. Gypsum also overflowed the weir on the Stilling Pond and released through NPDES outfall number DSN008 to the Tennessee River.

Additional information may be found on the EPA Region 4 home page, the Alabama Department of Environmental Management (ADEM) home page, and the TVA home page: <http://www.epa.gov/Region4/stevenson/index.html>, <http://www.adem.state.al.us/>, <http://www.tva.gov/>.

Current Activities

O'Briens Response Management is assisting TVA with Unified Command. EPA, ADEM, and TVA are fully engaged. A Joint Information Center will not be established; however, Public Information Officers for EPA, ADEM, and TVA are coordinating to ensure timely, accurate, and consistent information is released to the public. EPA, ADEM, and TVA jointly developed a sampling plan for the response. The sampling plan is going through final review and approval. TVA has been collecting two rounds of samples daily and will be going to once daily sampling beginning January 14, 2009. EPA collected two sets of data co-located with the TVA samples for verification of results. TVA results are posted on their home page. EPA results from January 10, 2009, were made available on January 13, 2009. SESD is in the process of validating the data package for final EPA acceptance.

TVA continues to work to secure the retired-in-place standpipe and to fortify or re-buttress, as necessary, the dike walls that were impacted during the release. TVA's response contractor SWS has placed boom in Widows Creek and at the confluence of the Tennessee River to corral floating solids containing cenospheres. Flexi-barges have been brought to the site and will be put into service on January 14, 2009, to increase access to floating solids and aid in recovery of floating solids. Fourteen vacuum truck loads of solids have been removed from DSN008 channel to date and placed into the Ash Pond.

TVA continues to pump down the Stilling Pond to the Ash Pond to allow access to the retired-in-place standpipe and the standpipe to DSN008. The retired-in-place standpipe will be grouted closed after it has been cleared of solids and fully inspected. Grouting is expected to begin January 13, 2009. TVA has placed 200' of turbidity curtain at the release location on the Stilling Pond to prevent additional gypsum from releasing into Widows Creek. TVA continues to survey the release location to determine the volume

of material that was released to Widows Creek.

Planned Removal Actions

TVA will begin recovery of floating solids. TVA will continue fortification or rebuttressing the dikes and will permanently plug the retired-in-place standpipe in FGD Pond #2B. TVA will continue to remove solids from the DSN008 outfall channel. The DSN008 standpipe pipe will be temporarily plugged with an inflatable bladder so that the Stilling Pond water level can be brought back up to facilitate upcoming dredging operations.

Assessment of the extent of gypsum released into Widows Creek and the Tennessee River, and whether or not it should be removed, remains to be conducted. U.S. Fish and Wildlife Service will be contacted regarding the need for a National Resources Damage Assessment (NRDA).

Next Steps

Analytical results from TVA sampling on January 9, 2009, are available on the TVA home page. TVA will continue daily surface water sampling. EPA will transition oversight the ADEM as analytical results become available and can be verified and as the repairs are completed and plans are finalized for future recovery actions.

response.epa.gov/TVAWidowsCreekSpill