

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Tuesday, January 6, 2009

From: Leslie Sims

Subject: Continuation of ER

TVA Kingston Flyash Release

714 Swan Pond Road, Harriman, TN

Latitude: 35.8949290

Longitude: -84.5347440

POLREP No.:	5	Site #:	A4XP
Reporting Period:	01/04/09 - 01/05/09	D.O. #:	
Start Date:	12/22/2008	Response Authority:	CERCLA
Mob Date:	12/22/2008	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

On Monday 12/22/2008, in response to NRC report #893129, and at the request of Roane County EMA and Tennessee EMA, OSC Sims and START responded to a catastrophic dike failure at the Tennessee Valley Authority Kingston Fossil Plant, Harriman, Roane County, TN. A breached settling pond retaining wall caused the release of an estimated 5.4 million cubic yards (approximately 300 acres outside the ash storage areas) of fly ash to the Emory and Clinch Rivers. The incident occurred around 0100 hrs. The cell was one of three at the facility used for dewatering fly ash. The release caused a massive slide that disrupted power, ruptured a major gas line, and destroyed several homes. As a result of the incident, residents in a nearby neighborhood were evacuated and relocated to temporary shelters.

Current Activities

01/04/09

OSC Sims replaced by OSC Spurlin as part of unified command.

EPA continued to monitor particulate concentrations in the work zone and surrounding areas. Rain and humidity caused monitoring to cease mid afternoon. The on-site fixed PM-10 station was run for 3 hours. The average reading was 22.3 ug/m3. Six on-site PM-10 readings were collected, values ranged from 38.2 to 47.4 ug/m3. Three off-site PM-10 locations were monitored. Readings range from 15.2 to 20.9 ug/m3. All values attained to date met NAAQS.

Technical Services personnel Tim Frederick mobilized to the Site in order to provide technical expertise regarding all sampling results. He will serve as EPA toxicologist/risk assessor for this incident.

All EPA sampling data was compiled and media-specific reports were generated for surface water, potable water, soils and ash, and air monitoring, for a total of four summary reports. These reports are available in the documents section.

TVA Activities

TVA continued seeding the ash spill area in order to control dust and erosion. A total of 47 tons of seed was deposited during this reporting period. A liquid stabilizing agent is also being used for erosion control in the vicinity of the ash cell.

All rails and ties have been removed. TVA is now beginning the process of rebuilding the railroad base and setting the tracks.

Material continues to be removed from Swan Pond Road. Public access past the plant and Swan Pond Circle Road remains restricted. TVA continues to remove debris from private properties. These activities are coordinated through TVA Community Outreach group.

TVA continued real-time monitoring on 01/04/2009 and air particulates continue to be less than the

NAAQS. Analytical results for 12/31/2008 for four samplers located on-site and for 01/01/2009 for five samplers located in residential areas immediately adjacent to the plant were received. All of the samples indicate that concentrations of all metals analyzed are below detection limits.

TVA met with TDEC Air Pollution Control staff to discuss TVA's air sampling plan and fugitive dust control plan. EPA provided air data updates to TDEC Division of Air Pollution Control.

01/05/09

Air monitoring continued in the work zone and surrounding residential areas. Twelve on-site PM-10 readings were attained from established locations. Readings ranged from 6.2 to 16.2 ug/m3. Four off-site PM-10 readings were collected and values ranged from 12.3 to 16.9 ug/m3. All values were below NAAQS.

A joint news conference was held with EPA, TVA, TDEC, and Roane County EMA. EPA External Affairs Dawn Harris-Young transitioned with Laura Niles as Public Information Officer. She will address media inquiries from the JIC.

A conference call was held with TVA and EPA GIS personnel concerning TVA's implementation of location data collection during sampling. EPA will offer technical assistance to TVA to begin implementation of location data collection. EPA ERT John Gilbert mobilized to the Site to transition with OSC Randy Nattis for the lead regarding database management coordination activities.

TDEC continues with private well monitoring. A total of 48 property owners have placed requests for well sampling. To date, 22 wells have been sampled and results have been received. No exceedances of MCLs have been detected to date. TDEC expects to sample 20 wells a day until all requests have been met. This sampling program is extended to residents within a 4-mile radius of the release.

TVA Activities

Response and removal activities continued.

TVA collected 11 total surface water samples from ten discrete locations: four from the Emory River, four from the Clinch River, one from the Tennessee River and two from Watts Bar Nuclear Plant.

EPA continues to encourage TVA to put all data into a comprehensive SCRIBE database. EPA is offering technical assistance with the migration. A date has yet to be established for SCRIBE implementation.

Planned Removal Actions

EPA will continue to offer assistance as requested by TVA.

Key Issues

SCRIBE database needs to be implemented. Personnel are working to ensure that this transition takes place as soon as possible.

In order to determine the need for EPA presence throughout the clean-up, a Residential Sampling and Remediation Plan must be developed by TVA. Once this plan is created, EPA and TDEC will review and approve the plan.

response.epa.gov/TVAKingstonFlyAshRelease