

## DECEMBER 2008

### MONDAY, DECEMBER 22

Spill occurs about 12:50 a.m. TVA, local, state, and federal agencies respond.



TVA begins relocation of and assistance to affected residents, water quality sampling, and inspection of impoundments at other TVA fossil facilities.

### WEEK OF DECEMBER 22

EPA begins water quality sampling. TVA releases water quality data and begins air quality monitoring.

TVA Outreach Team begins door-to-door visits in affected area.

TVA begins seeding ash acreage to keep ash from becoming airborne.



### WEEK OF DECEMBER 29

All utilities in affected area restored.

Roane County Long Term Recovery Committee established.

TVA begins homeowner and community/business leader meetings.

## JANUARY 2009

### WEEK OF JANUARY 5

TVA air and water sampling results posted.

Root analysis of spill begun by AECOM, a global provider of professional technical and management support services.

TVA Outreach Center building opens.



### WEEK OF JANUARY 12

Initial waste disposal plan signed by TVA, TDEC, and Roane County EMA. The plan says the ash will go to a temporary on-site storage area.

## FEBRUARY 2009

### WEEK OF FEBRUARY 9

TVA reports expenses for Kingston recovery, approximately \$525 million in calendar 2008.

TVA informs residents about new potential flood-damage zone due to contours of riverbeds.

### WEEK OF FEBRUARY 16

Alliance Hauling, a group of local trucking companies, is formed to transport ash and other debris at the site.



### WEEK OF FEBRUARY 23

TVA begins to purchase affected properties.

Ash pond inspection reports posted on [www.tva.com](http://www.tva.com).

## MARCH 2009

### WEEK OF MARCH 2

TVA issues drawings for Swan Pond Road and Swan Pond Restoration Project.

TVA sends Corrective Action Plan to TDEC for approval.

TDEC approves TVA's Phase 1 Dredge Plan and Ash Processing Area Plan. TDEC, EPA, USFWS, TWRA, and TVA coordinate water monitoring efforts in anticipation of Phase 1 dredging operations.

About 90 acres are covered with Flexterra® growth media to help keep ash from becoming airborne.



Over 20,000 real-time air particulate monitoring samples collected to date.

### WEEK OF MARCH 9

Recovery of road from dike to East Slough point is 70 percent complete.



### WEEK OF MARCH 16

Ash Recovery Project is ready to begin dredging, pending final regulatory approval.

TVA begins dredging operations on Emory River.



### WEEK OF MARCH 30

TVA completes Swan Pond Road engineering design.

9,600 cubic yards of ash removed from Emory River.

30,000 air samples collected to date.

## APRIL 2009

### WEEK OF APRIL 6

TVA purchases over 70 pieces of affected property to date.

About 17,600 cubic yards of ash removed from Emory River.

### WEEK OF APRIL 13

Swan Pond Road recovery is completed and turned over to Roane County.



### WEEK OF APRIL 20

Oak Ridge Associated Universities begins coordinating research on potential health effects of ash exposure.

## MAY 2009

### WEEK OF MAY 4

TVA begins tests of ash transportation by rail.



Extra equipment and staff support downstream river clean-up after "five-year flood"

### WEEK OF MAY 11

EPA and TVA sign Administrative Order and Agreement on Consent to divide work at Kingston into time-critical, non-time-critical, and remedial actions under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

### WEEK OF MAY 18

Two additional rail spurs built to facilitate moving ash off-site.



3,000 cubic yards of ash removed from ash stilling pond.



## JUNE 2009

### WEEK OF JUNE 1

Total of 200,000 cubic yards of ash removed to date from Emory River.

### WEEK OF JUNE 8

TVA begins moving ash to recovery area for off-site disposal.

### WEEK OF JUNE 22

In preparation for ash transport by rail, TVA cautions residents about increased rail traffic.

AECOM announces findings in Root Cause Analysis report.

### WEEK OF JUNE 29

TVA submits offsite disposal plan to EPA; EPA approves plan.

First trains leave site for Arrowhead Landfill in Perry County, Alabama.



Site begins operating as a HAZWOPER site (with Hazardous Waste Operations and Emergency Response Standard training).

### WEEK OF JULY 6

34,000 tons of ash shipped by rail to Arrowhead Landfill.

### WEEK OF JULY 20

TVA Board of Directors approves resolution on organizational effectiveness and directs staff to begin remediation plan for all ash pond storage.

### WEEK OF JULY 27

63,000 tons of ash loaded onto rail cars. 44,200 tons of ash unloaded at Arrowhead Landfill.



130 properties purchased in affected area.

## AUGUST 2009

### WEEK OF AUGUST 3

24-hour dredging operations begin.

Emory River to be closed from mile marker 1.5 to mile marker 3.

### WEEK OF AUGUST 17

TVA Board reviews remediation plan to convert all TVA impoundments to dry storage.

Construction completed on clean-water ditch system in Swan Pond Embayment; all water either bypasses the ash or is treated in settling basins.



### WEEK OF AUGUST 24

TVA seeks public comment on all TVA-EPA documents.

Total of 54 trains sent to Arrowhead Landfill to date.

Air samples taken to date exceed 100,000.

## SEPTEMBER 2009

### WEEK OF SEPTEMBER 14

TVA and Roane County elected officials establish Roane County Economic Development Foundation with \$43 million from TVA.

### WEEK OF SEPTEMBER 28

More than 1 million cubic yards of ash removed to date from Emory River and east of Dike 2.

## OCTOBER 2009

### WEEK OF OCTOBER 5

Closure of Emory River extended from mile marker 1.5 to mile marker 3 through February 15, 2010.

"Then and Now" recovery video produced by TVA available on YouTube.

### WEEK OF OCTOBER 12

More than 650,000 tons of ash shipped to Arrowhead Landfill to date.

### WEEK OF OCTOBER 19

TVA's "Engineering Evaluation/Cost Analysis Work Plan" and "Community Involvement Plan" available for public comment.

## NOVEMBER 2009

### WEEK OF NOVEMBER 2

More than 1,748,400 cubic yards of ash removed to date from river and east of Dike 2.

About 754,100 tons of ash disposed of off-site.

## DECEMBER 2009

More than 2,093,000 million cubic yards of ash, or two-thirds of all ash spilled there, removed from Emory River and east of Dike 2.

150 pieces of property have been purchased by TVA.

More than 142,000 air quality samples have been collected by TVA, EPA, and TDEC. All samples meet national particulate standards.

More than 20,000 water quality samples have been collected by TVA, EPA, and TDEC. All drinking-water samples meet drinking-water standards.

Repairs and improvements begin to Kingston and Harriman water, gas, and effluent lines.

110 unit trains have moved more than 1 million tons of ash for disposal off-site.

