

# KINGSTON ASH RECOVERY PROJECT

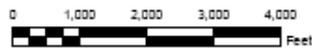
## WEEKLY REPORT

March April 12 - 18, 2010

Aerial Image of Kingston Ash Slide (02/27/2010)



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Date of map imagery: 02/27/2010

Tennessee Valley Authority  
Geographic Information & Engineering

Prepared by:  
Mary McDermott

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# KINGSTON ASH RECOVERY PROJECT

## WEEKLY REPORT

April 12 - 18, 2010

### HIGHLIGHTS

- Cumulatively, just over 3,101,290 cubic yards of ash have been removed from the river and east of Dike 2.
- To date, 206 unit trains, with a total of approximately 1,931,900 tons, have been loaded and transported to Alabama.
- The Availability Session was held April 13<sup>th</sup> at the Kingston Outreach Center.

### SAFETY

#### Program Summary

- 27 site specific HSE orientations were conducted for the week – 1,477 to date.
- 50 Safety Observation Reports submitted for the week: 1,020 to date; 951 have been closed.

#### Recordable Incident

- April 15, 2010 - Severson laborer felt a sharp pain in his lower back while pulling press plates at the Process Pad. After being evaluated by the on-site medical professional, it was determined that further medical attention was needed. Later that day, the employee was seen by a physician, who administered two shots to address his back pain. Therefore, the injury was categorized as OSHA recordable.

### INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Lime treatment and ash removal in the east embayment was completed. A preliminary walkdown with EPA was done. Roughly 11,020 cy of ash were treated and moved from the area to storage.
- The above water portion of the ash berm remaining in the river has been removed and brought directly to the tracks.
- The offsite utilities contractor, Mayse Construction, continued excavation, borings, and installation of the 10" Kingston Utility Board water line, Harriman Utility Board water and gas lines; and AT&T conduit along Swan Pond Road, Swan Pond Circle, Hassler Mill Road, and Highway 70. Utilities restoration is 50% complete; enhancements are 40% complete; and the project is 53% complete.

### ASH DREDGING & PROCESSING

- A total of 46,031 cy of ash were removed from the river this week.
- The removal of Weir 1 was completed. The equipment was mobilized to the northern portion of the river to use in mechanical dredging.
- Work continued dipping from the rim ditch and sluice trench.
- A decision was made to stop operation of the filter presses. Their tanks and pipes were flushed on April 15<sup>th</sup> and 16<sup>th</sup> and they were put in stand down mode until demobilization occurs.
- A decision was made to stop lime treatment for a while considering the good weather. Ash from the sluice trench is drying sufficiently to allow hauling.
- Support was provided to Aquarius to offload their barges from the skimmer wall removal project.

### ASH DISPOSITION

- Loaded and transported 7 unit trains this week.
- Have loaded and transported 206 unit trains for a total of approximately 1,931,930 tons.
- Continued inspection, maintenance, and repair of the rail in the rail yard. The repair work includes replacing rail and ties, installing rail anchors, checking and re-gauging rail, and identifying additional ties for replacement. Also replaced a frog in the south end of the yard.
- Continued monitoring moisture content of the ash and placing polymer in rail cars prior to shipping to Alabama.

## CENOSPHERE RECOVERY

- Boat crews continued working the Sugar Tree Cove area off of the Emory River. The work is approximately 95% complete. The remaining portion will be finished when the water rises.
- One boat crew manned the southern boom in the Emory River.
- The osprey egg collection event was completed successfully.
- There is a high level of pollen on the rivers.
- Large amounts of cenospheres continued to collect in the Ash Pond as a result of dredging activities. Crews worked to keep the weir areas clean.

## SKIMMER WALL

- Aquarius Marine LLC, Skimmer Wall debris removal contractor, continued exploratory dredging along the Skimmer Wall area. Aquarius has identified locations of two of three caissons with verification of divers. Aquarius brought into location the A-frame barge that will be used to lift components from the river.
- The Skimmer Wall pre-bid meeting was held at the site on April 15, 2010. Seven contractors participated in the meeting.

## DIKE REINFORCEMENT

- Dike C Buttress work continued. The focus for the week was removal of ash from south of the Rookery. Ash remains about 95% complete. Waiting on the dredge to return and clean a small area.
- Buttress construction is about 21% complete. Full scale construction of the buttress resumed Friday.
- Continued to monitor the dikes at Kingston on a daily basis.

## ROUTINE MONITORING

### Surface Water Sampling

- Routine surface water monitoring at the ten fixed river locations occurred on Monday, April 12<sup>th</sup>, and Friday, April 16<sup>th</sup>.
- Surface water analytical results are compared to the Tennessee Drinking Water Standards (TDWS) and the Ambient Water Quality Criteria for Fish and Aquatic Life (F&AL) to establish a reference point for evaluating the potential significance of the data. Although the most impacted section of the Emory River has been closed to public use, the Emory, Clinch, and Tennessee Rivers are classified for use for Recreation and as a source for Domestic Water Supplies. However, closure of the most impacted reach of the Emory River during the ash recovery operation must be considered in these comparisons.
- Noteworthy results are reported below for Fixed River Location samples collected between 02/01/2010 and 03/12/2010. Comparisons to the F&AL are performed for dissolved concentrations only.
  - On the Tennessee River, the detectable arsenic concentrations were well below the TDWS. Selenium was not detected in any samples.
  - On the Clinch River, arsenic was detected in all samples at concentrations well below the TDWS and F&AL. Selenium was not detected in any samples.
  - On the Emory River, all detected concentration of arsenic was less than the TDWS and the F&AL. Selenium was not detected in any sample.
- Daily monitoring of dredge plumes continued. TVA and EPA continued the compilation of turbidity measurement data from the mouth of the Emory River to ERM 4.0. The data are being compiled and plotted on Mondays and Wednesdays to determine that turbidity curtain placement is effective to prevent any adverse trends as the dredging operation continues.
- Plumes in the vicinity of dredging operations contain large amounts of suspended ash that settle out quickly and are not representative of overall water quality in the Emory River. Comparing Plume results to those from Fixed Station Locations provides an indication of the effectiveness of silt curtains and other Best Management Practices (BMPs) employed by the project
- Swan Pond Embayment surface water sampling continues routinely twice per week at two locations along the Swan Pond Embayment drainage ditches.
- A new background Hydrolab unit was installed at ERM 6.0.

### Sediment Sampling

- Vibecore sampling continues in support of dredging operations and Dike C reinforcement.

### **Air Sampling**

- The majority of air monitoring results, including fixed-station and real-time monitoring results continue below ambient air quality criteria.
- TVA's real-time tapered element oscillating microbalance (TEOM) PM2.5 instrument is operating at the Lakeshore Drive (PS07) air monitoring location. Overall, PM2.5 measurements for the past week were well below the action level of 26 micrograms per cubic meter.
- Additional real-time instruments have been ordered. The real-time instrument in the vicinity of the North Embayment was installed and reporting draft data as of Friday, April 16<sup>th</sup>.
- EPA is planning to collect co-located samples at two of the TVA air monitoring stations. Logistics are under review by site EPA staff.

### **Data Management**

- Electronic data deliverables are flowing into the Equis database.
- Data validation continues for electronic data packages received from the laboratories.
- Migration of data from the TVA Equis to the EPA SCRIBE database is ongoing.

### **Biota Sampling**

- Spring amphibian sampling has been completed.
- Osprey, heron, and Canada goose egg collection continues.
- Bird box deployment continues.

### **Non-Routine Sampling**

- Monthly rail car sampling for waste acceptance was completed.

## **FINAL REMEDIATION**

- Submitted draft responses to EPA/TDEC comments on the river system Sampling and Analysis Plan on Thursday April 15<sup>th</sup> for EPA and TDEC concurrence.
- Marked up the Sampling and Analysis Plan in accordance with those comment responses; changes are currently being processed.

## **DREDGE CELL**

- TVA Supply Chain received three bids on the Deep Soil Mixing Pilot Project to conduct testing of dikes and techniques to build a containment wall around the Dredge Cell.
- The Work Plan for Re-Contouring Subgrade of Dredge Cell Central Area was approved and construction work planned to begin next week.

## **COMMUNICATIONS**

### **Communications**

- Posted to Web site: Weekly Report and Weekly Area Resident Update information.
- Continued to work on updates for the Community Involvement Plan with information about the Engineering Evaluation/Cost Analysis.
- Sent weekly update to members of the public who have signed up to receive it.
- Continued to handle calls from the news media.
- Coordinated tour and Interview for Site GM, EPA OSC, and EPA PM with WATE.
- Mailed dredging letter to residents between Emory River Mile 5 & 6.
- Submitted Press Release "River Closure Reminder" release.
- Prepared articles for upcoming Dredge Report.
- Finalized and submitted quarterly report for TVA Board.

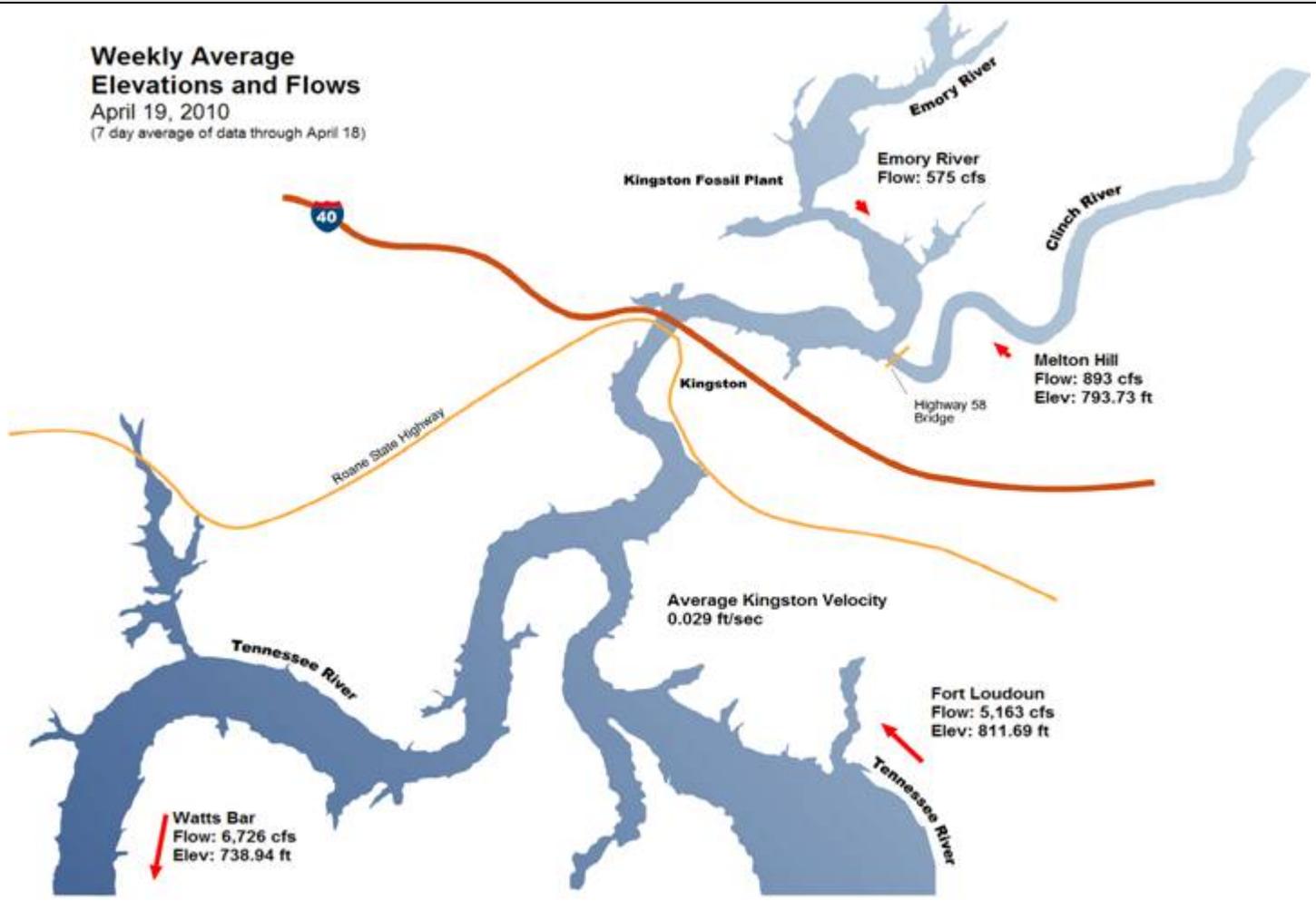
### **Outreach**

- Provided two updates on site activities to the Community Advisory Group.
- Updated Administrative Record with work plans.
- Continued to respond to calls and visits from residents.
- Updated message boards along Swan Pond Rd. as appropriate.
- Prepared and submitted column with site update to RC News.
- Coordinated and attended monthly Availability Session on April 13.

# RIVER OPERATIONS

## Weekly Average Elevations and Flows

April 19, 2010  
(7 day average of data through April 18)



<b>MEETINGS/CONFERENCE CALLS</b>		
<b>Date</b>	<b>Time</b>	<b>Subject</b>
04/19	0800	Environmental Group Meeting (ICP Conference Room)
04/19	0900	Dike C Buttress Intake Channel (ICP Conference Room)
04/19	1000	Aquatic Resources Studies (Team Room)
04/19	1000	Records Management (ICP Conference Room)
04/19	1100	TVA Monitoring Well (Team Room)
04/19	1200	MACTEC Safety Meeting (Trailer 1 Meeting Room)
04/19	1300	Environmental Staff Meeting (ICP Conference Room)
04/19	1300	Pre-Stressed Box Beam Meeting (Team Room)
04/19	1330	Time Critical CMs (Team Room)
04/19	1400	Schedule Updates (ICP Conference Room)
04/20	0800	JMJ Associates (Trailer #1 Meeting Room)
04/20	0930	BCP Meeting (ICP Conference Room)
04/20	0930	Communications (Team Room)
04/20	1000	TVA Communications (Team Room)
04/20	1130	EE/CA Alternative Meeting for TDEC/TVA (ICP Conference Room)
04/20	1330	Dredge Team Meeting (ICP Conference Room)
04/21	0800	JMJ Associates (Trailer 1 Meeting Room)
04/21	0900	Non-Time-Critical Weekly Meeting (ICP Conference Room)
04/21	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
04/21	1300	CSMRT (ICP Conference Room)
04/21	1330	Test America Weekly Call (Conference Call)
04/21	1430	Data Management Meeting (ICP Conference Room)
04/22	0800	JMJ Associates (Trailer #1 Meeting Room)
04/22	0900	Stantec Re-Baseline Estimates (ICP Conference Room)
04/22	1000	Pace Telephone (Conference Call)
04/22	1130	HSE Staff Meeting (Old ICP Conference Room)
04/22	1400	SOP Meeting (Team Room)
Daily	0730	Geo Exploratory Meeting (Trailer 1 Meeting Room)
Daily	0730	Site Safety Orientation (Old ICP Conference Room)
Mon-Thur	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

Kingston Recovery Project		Date:	April 12-18, 2010		Field Report
<b>Safety</b>			<b>Weekly Total</b>	<b>Cumulative Total</b>	
Near Misses			0	42	
First Aid Incidents			1	32	
Recordable Incidents			1	10	
Recordable Lost Time Incidents			0	12	
<b>Cenosphere/Debris Removal</b>			<b>Weekly Total</b>	<b>Cumulative Total</b>	
Outreach		Light Debris Removal – Land (bags)	0	18,867	
Divisions A, B,C,D Cleanup		Division Shoreline Cleanup (bags)	530	101,560	
Total		Tons of Light Debris	0	959.57	
Cenosphere Slurry		Gallons	150,000	13,314,000	
<b>Environmental</b>					
<b>Org</b>	<b>Matrix</b>	<b>Samples*</b>	<b>Analyses*</b>	<b>Results*</b>	
TVA	Air - Real-Time	--	--	202,784	
TVA	Air – Fixed	2,023	--	2,819	
TVA	Surface/Utility Water	3,575	31,003	150,326	
TVA	Ground Water (spring and well)	85	969	3,799	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	183	347	2,949	
TVA	Biota	948	2,135	23,987	
*Week ending 04/16/2010					
<b>Ash Dredging &amp; Excavation</b>				<b>Weekly Total</b>	<b>Cumulative Total</b>
River	Estimated Cubic Yards (see Note)			46,031	2,350,643
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			23,240	750,649
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			70,830	1,931,930

NOTE: Total dredged from the river has been adjusted to include ongoing survey adjustments and all of TransAsh and TVA reported hydraulic and mechanical dredging to date.

### Ash Loading to Trains - Weekly as of April 12th

