



# KINGSTON ASH RECOVERY PROJECT

## WEEKLY REPORT

September 7-12, 2010

### HIGHLIGHTS

- To date, 345 unit trains have been loaded and approximately 3,358,690 tons of ash has been transported to the landfill in Uniontown, Alabama.
- No incidents or injuries during the week.

### SAFETY

#### Program Summary

- Three (3) site specific HSE orientations were conducted for the week – 1,689 to date. One hundred ninety-six (196) HSE site orientation refresher courses have been conducted to date.
- Thirty-three (33) Safety Observation Reports were submitted for the week – 1,389 to date; 1,352 have been closed.
- Four (4) WBGT (Wet Bulb Globe Thermometer) weather alerts were issued last week. These are issued to alert supervisors of the current heat level so they can evaluate their crews for physical effort, PPE requirements and acclimation to determine appropriate maximum stay times and associated work/rest regimens.
- The last recordable injury, an insect bite, occurred on August 2, 2010.

#### Incident:

- September 8, 2010 – At approximately 14:00 hours, a hydraulic hose on water truck # R28420 burst releasing between 15-25 gallons of hydraulic fluid into the hall road runoff ditch. An earthen dam was constructed to contain the hydraulic fluid and prevent entry into the dirty water pond. River Operations and Civil Projects employees used absorbent pads to collect the fluid from the ditch. The contaminated material was collected and transported to an approved storage area to await transport to an offsite waste facility. This did not result in a Recordable Environmental Event (REE).

### INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Mayes Construction continued installation of the offsite utilities with 96% complete.
- Continued recovering cenospheres from the onsite ponds. Responded to outreach calls as received.

### ASH DREDGING & PROCESSING

- Decontamination Severson equipment and materials complete.
- Equipment and materials loaded onto trailers and staged at plant parking area, awaiting pickup.
- Repairs completed on rental barge at the intake channel.
- Asphalt pad at former filter press area decontaminated.

### ASH DISPOSITION

- Loaded and transported five (5) unit trains this week. One train was not shipped as the site was shut down for Labor Day and the second train was not shipped due to heavy rains at the site which impacted the loading and closing process.
- Continued monitoring the rail in the yard for alignment issues considering the high temperatures we are experiencing.
- Continued monitoring moisture content of the ash and determined that the moisture content is such that we are shipping trains without polymer.
- Continued to work with the plant to minimize the impact of the delivery of coal trains, limestone cars, ammonia cars, and the loaded and empty ash trains.

## SKIMMER WALL

- The Skimmer Wall reconstruction is scheduled to start on September 20, 2010.
- Aquarius Marine LLC, the Skimmer Wall construction contractor, received sheet piling and started assembling the caisson template this week. The current schedule for completion of the Skimmer Wall reconstruction is December 7, 2010.

## DIKE REINFORCEMENT

- Construction on Segment C is suspended until November 2010.
- Stantec continued to work on finalizing design efforts for the buttress.
- Jacobs continued to monitor the dikes at Kingston on a daily basis.

## ROUTINE MONITORING

### Surface Water Sampling

- The second of eight (8) rounds of surface water sampling for the river system engineering evaluation/cost analysis (EE/CA) surface water sampling task was completed on Wednesday, September 8, at 10 locations on the Emory, Clinch and Tennessee Rivers. This task is also incorporated into the approved Non Time Critical Removal Action (NTCRA) Surface Water Monitoring Plan that became effective with the completion of all ash removal activities on the Emory River.
- Automated samplers have been deployed and tested at two locations in the Clinch River, three locations in the Emory River, and in the Swan Pond Embayment Clean Water Ditch in accordance with the NTCRA Surface Water Monitoring Plan. The samplers on the Emory and Clinch Rivers will be activated whenever local rainfall exceeds 1.0" in a 24-hour period and/or flow on the Emory River at Oakdale exceeds 10,000 cubic feet per second (cfs). The automated sampler in Swan Pond Embayment is activated whenever local rainfall exceeds 0.5" in a 24-hour period.
- On Saturday September 11, local rainfall surpassed 1.0" and a sampling crew deployed to collect the Swan Pond Embayment samples. All five river automated samples were activated to collect 24-hour composite samples. Samples are being retrieved on Monday, September 13. EPA contractor, Tetra Tech, will collect split samples.
- Noteworthy results are reported below for Fixed River Location samples collected between 06/01/2010 and 07/26/2010. Comparisons to the F&AL are performed for dissolved concentrations only.
  - On the Tennessee River, arsenic was detected in 18 of 18 samples and selenium was detected in one sample. Arsenic and selenium concentrations were both well below the TDWS and F&AL criteria. Thallium was not detected in any Tennessee River sample.
  - On the Clinch River, arsenic was detected in 77 of 77 samples and selenium detected in 3 of 77 samples at concentrations well below the TDWS and F&AL. Total and dissolved thallium was detected in 4 of 77 samples. Thallium detections were near the limit of detection but exceeded the TWQC (0.00024 mg/L).
  - On the Emory River, arsenic was detected in 101 of 103 samples and selenium was detected in 40 of 103 samples. All detected arsenic and selenium concentrations were less than the TDWS and F&AL. Thallium was detected in 48 of 103 samples. Again, all thallium concentrations were near the limit of detection but exceeded the TWQC.
- Swan Pond Embayment surface water sampling continues routinely once per week at two locations along the Swan Pond Embayment drainage.

### Sediment Sampling

- None to report.

### Air Sampling

- Air monitoring results, including fixed-station and real-time monitoring results are below ambient air quality criteria.
- TVA currently operates six real-time PM2.5 instruments: a tapered element oscillating microbalance (TEOM) PM2.5 instrument at Lakeshore Drive (PS07); and PM2.5 Beta Attenuation Monitors (BAM) at the northern-most reach of work in the North Embayment (PS13); PS05; PS07; PS08 and PS09. With regulator approval of the revised Air Monitoring Plan, the TEOM is being converted to PM10 and relocated to PS09. PM2.5 average measurements at all stations for the past week were below the action level of 26 ug/m3 averaged over a 24-hour period.

### 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**

- Raccoon sampling continues in conjunction with the University of Tennessee.
- TVA sample management and quality assurance staff are working with the biota analytical lab to improve sample throughput and prioritize samples for analysis.

**Non-Routine Sampling**

- None to report.

**RIVER RESTORATION**

- Continued the well installation, including repair of wells damaged during installation.

**DREDGE CELL**

- Continued regrading within the Dredge Cell, including excavation from a section of the Middle Embayment.
- Stantec continued installation of geotechnical instrumentation in the Central Dredge Cell area.
- The Deep Soil Mixing (DSM) Pilot contractor (RECON) brought a new drilling subcontractor on site and started coring of the DSM Pilot columns on September 10.
- EPA and TDEC approved the Stantec Dredge Cell Interim Ash Stacking and Instrumentation Plan.

**PLANT ASH DISPOSITION**

- Civil Projects operated the rim ditch, sluice trench, and ash pond areas to remove plant-generated ash and process it for disposal.

**EMBAYMENT ASH PROCESS**

- Civil Projects continued the ash consolidation in the North Embayment. It is 87% complete.
- MidState Construction, the underpass bridge erection contractor, completed setting of pre-stressed beams and is preparing to start deck slab erection.

**COMMUNICATIONS****Communications**

- Posted to Website: Public Meeting Schedule, Weekly Report, and Weekly Area Resident Update.
- Sent weekly update to the CAG and members of the public who have signed up to receive the weekly emails.
- Prepared full-page photo ad highlighting site progress to run in Roane County News on September 17.
- Submitted ad to Roane County News and The Shopper advertising the time-critical work plans public comment period.

**Outreach**

- Provided updates to employees, customers, residents, and public officials of site activities.
- Worked on materials to be used for students at local high schools as part of the Educational Initiative project.
- Met with presenters and school administrators for the Educational Initiative.
- Updated Administrative Record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.

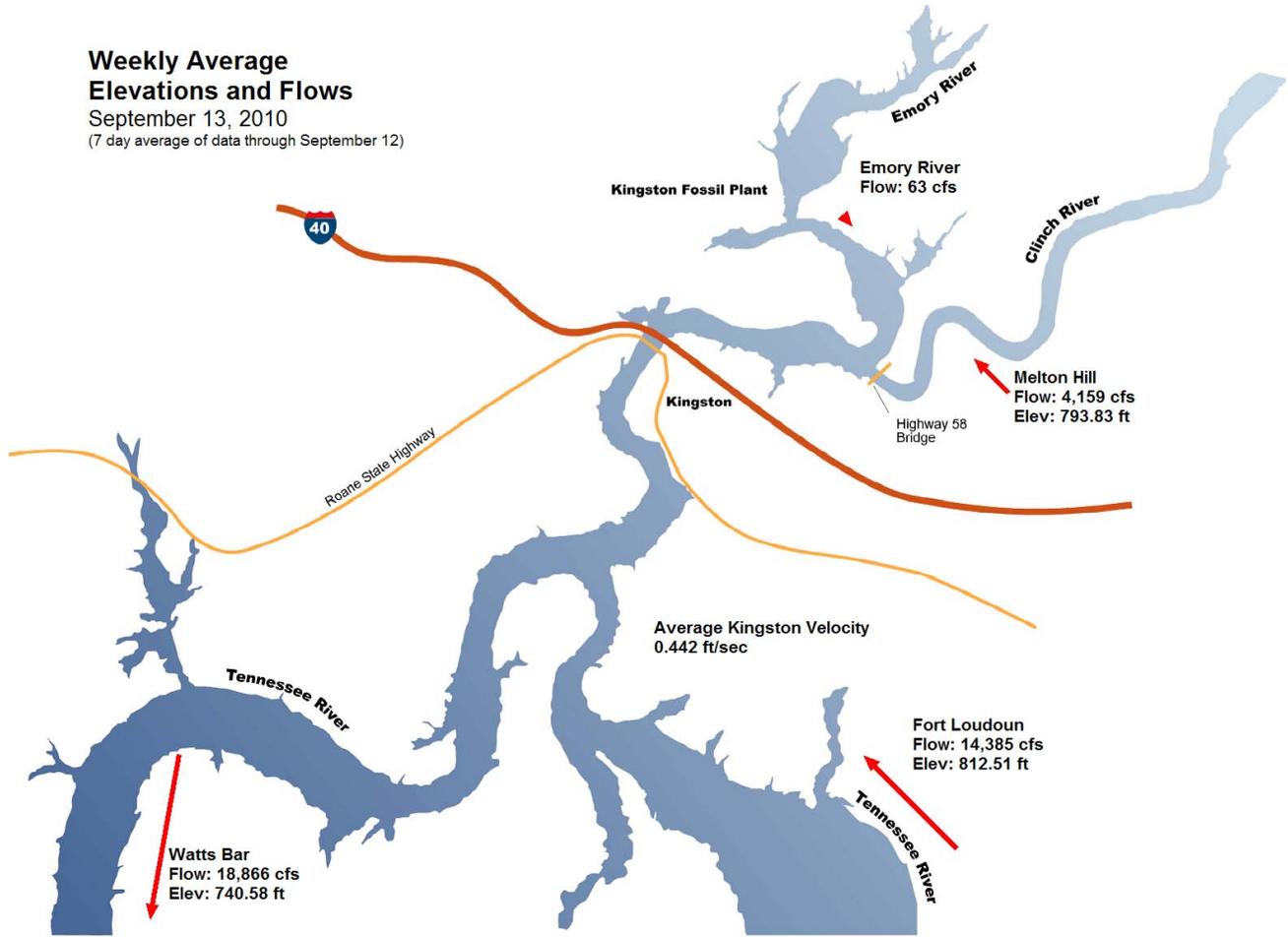
**Government Relations**

- Met with newly-elected Roane County Executive, Ron Woody (Week of Aug. 31)
- Met with Kingston Mayor, Troy Beets

# RIVER OPERATIONS

## Weekly Average Elevations and Flows

September 13, 2010  
(7 day average of data through September 12)



Kingston Recovery Project		Date: September 7-12, 2010	Field Report		
<b>Safety</b>			<b>Weekly Total</b>	<b>Cumulative Total</b>	
Near Misses			0	26	
First Aid Incidents			0	74	
Recordable Incidents			0	18	
Recordable Lost Time Incidents			0	12	
<b>Environmental</b>					
<b>Org</b>	<b>Matrix</b>	<b>Samples*</b>	<b>Analyses*</b>	<b>Results*</b>	
TVA	Air - Real-Time (final)	--	--	267,188	
TVA	Air - Fixed (final)	2,636	--	3,990	
TVA	Surface/Utility Water	4,397	38,738	187,573	
TVA	Ground Water (spring and well)	113	1,305	5,296	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	276	479	3,684	
TVA	Biota	1,488	3,321	39,019	
*Week ending September 9, 2010					
<b>Ash Dredging &amp; Excavation</b>				<b>Weekly Total</b>	<b>Cumulative Total</b>
River	Estimated Cubic Yards (including mechanical dredging)			0	2,762,105
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			0	758,849
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			49,022	3,358,690

