

# KINGSTON ASH RECOVERY PROJECT

## MONTHLY REPORT

June 2011



Prepared by:  
Mary McDermott

Issue (Date/Time)  
07/07/2011 3:41:53 PM

# KINGSTON ASH RECOVERY PROJECT

## MONTHLY REPORT

June 2011

### SAFETY

- Twenty-six (26) site specific HSE orientations were conducted during June – 1,930 to date. Seventy-one (71) site specific refresher courses were conducted during the month of June - 270 to date.
- One hundred twenty (120) Safety Observation Reports were submitted during May – 2,155 to date; 2,148 are closed.
- The last recordable incident occurred on December 22, 2010.
- June 24, 2011 - a dozer located on the lower bench of the Dike C buttress along the Emory River experienced diesel venting out of the fuel cap. Crews mobilized with absorbent pads to wipe down the equipment and absorb fuel that spilled to the ground. A fuel truck removed several gallons of fuel from the equipment. Affected rock was removed and processed. No petroleum products reached the water.

### INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.
- Completed construction of East/West Haul Road relocation.

### ASH SLURRY & POND TSS CONTROL

- TSS sampling was performed throughout the ash slurry system. The total suspended solids (TSS) of the Sluice Trench discharge averaged 1,166 mg/L. Main Ash Pond discharge averaged 58.4 mg/L. Stilling Pond TSS averaged 11.6 mg/L.
- The Plant effluent, Sluice Trench effluent and Ash Pond effluent polymer addition rates were adjusted as necessary. There were no pH control actions required with the Main Ash Pond pH tracking close to 7.6 and the Stilling Pond averaging close to 8.1.

### ASH PROCESSING / BALLFIELD PREPARATION

- LiDAR data of Phase 1 area was reviewed prior to ash placement.
- Contractor completed four holes to provide subsurface geotechnical information in the Rim Ditch area.
- Moisture reduction processing of the ash removed from the Sluice Trench was performed to ready ash for placement in the Interim Ash storage area when Test Cell calculations and instrumentation repairs are completed by the contractor.
- Contractor performed sampling on the Test Cell material and is processing samples to determine compaction and optimum moisture content requirements for ash placement.
- The 60% design package for the planned replacement Main Ash Pond outfall structure was completed and received on July 1, 2011.

### DIKE REINFORCEMENT

- EPA approved the response to their request for additional buttress along the Skimmer Wall.
- Bridge removal was completed and the subcontractor has demobilized.
- EPA approved the Work Plan for Segment B Part 2.
- The existing diffuser pipes were removed and are currently being staged on the peninsula side of the Intake Channel.
- The Plant took five (5) units offline on June 23, 2011. Monitoring of the siphon was adjusted to respond to changes in pond water level.
- The crews will resume construction of the buttress in the Intake Channel once work in the Skimmer Wall Peninsula area is completed.
- The temporary siphons are working well.

- Civil Projects (CP) continued removing the causeway using a crane and clamshell bucket.
- Buttress construction remains approximately 93% complete. Crews are finishing up the Skimmer Wall area and moving to the Intake Channel area.

## **ROUTINE MONITORING**

### **Surface Water Sampling**

- There were two rainfall events that triggered storm flow sampling in Swan Pond Embayment and the Emory and Clinch Rivers on June 15, 2011 and on June 22, 2011.
- Continued routine surface water sampling at the Stilling Pond and Swan Pond Embayment.
- Continued daily pH monitoring in the Dirty Water Ditch and the Settling Basin. The readings are collected twice a day and include run off ditches that empty into the Dirty Water Ditch. Additionally, sample points were added in Berkshire and Church Sloughs, and dissolved oxygen was added to the monitoring.

### **Air Sampling**

- One or more TVA air samplers exceeded the PM2.5 Ambient Air Monitoring Plan (AAMP) action levels on June 1-2, 2011 and June 7-11, 2011. The exceedances were investigated and not deemed to be related to site activities, as regional PM2.5 levels were elevated.
- No findings were identified during the semi-annual EPA air audit conducted on June 14-15, 2011. Overall auditors were complimentary of the air monitoring program.

### **Data Management**

- The NTCRA EECA technical memorandums for reptiles and tree swallows were submitted to EPA and TDEC on June 1, 2011.
- The fish technical memorandum is currently undergoing internal review.

### **Biota Sampling**

- Completed bioassay pore water sample collection from the Emory River locations.
- Completed spring benthic invertebrate sampling.
- Completed aquatic vegetation sampling for all but three planned locations where the sampling equipment was moved or disturbed likely by recreational boaters.
- Preparing to set periphytometers after the holiday weekend at the three locations that were disturbed during the initial round of sampling for aquatic vegetation.

### **River System EE/CA Sampling and Analysis**

- Continued weekly bulk replenishment water sampling in support of the bioassay testing for the Emory River.

### **Non-Routine Sampling**

- Sampled drums containing booms and pads for waste characterization.
- Supported TVA samplers with quarterly groundwater sampling at the Gypsum Pond.
- Supported TVA samplers with quarterly groundwater sampling at the ball field and ash pond wells.
- Assisted Duke University with their research and development sampling and collected split samples of the Duke samples.
- Collected concurrence samples in the Gupton Slough area of the North Embayment for PLM analysis.

## **DREDGE CELL**

- Lime treatment has been discontinued during the hot, dry summer months. The wettest ash was hauled to four separate test plots in the West Storage area for use as a sun-drying pad in lieu of lime treatment.
- Finalized a plan for management of spoils from the perimeter wall stabilization construction.
- Contractors met to work out details of constructability and quality control for the perimeter wall stabilization production phase.
- Continued ash stacking in the Central Dredge Cell.
- The 60% design package for the Dredge Cell closure was submitted to TVA for review.
- Results of the Perimeter Wall Stabilization Demonstration Test were presented to EPA and peer reviewers.

## **LATERAL EXPANSION**

- Prepared responses to TDEC comments on the 90% ash stacking design for the Lateral Expansion.
- Continued placing ash as part of subgrade preparation.

- The 60% design package for the Ash Pond outlet structure was submitted to TVA for review.

## NORTH EMBAYMENT

- Continued excavation of ash.
- Continued installation of clay berm for water diversion.
- Performed confirmation sampling and reporting process for verifying areas are clean of ash deposits.

## COMMUNICATIONS

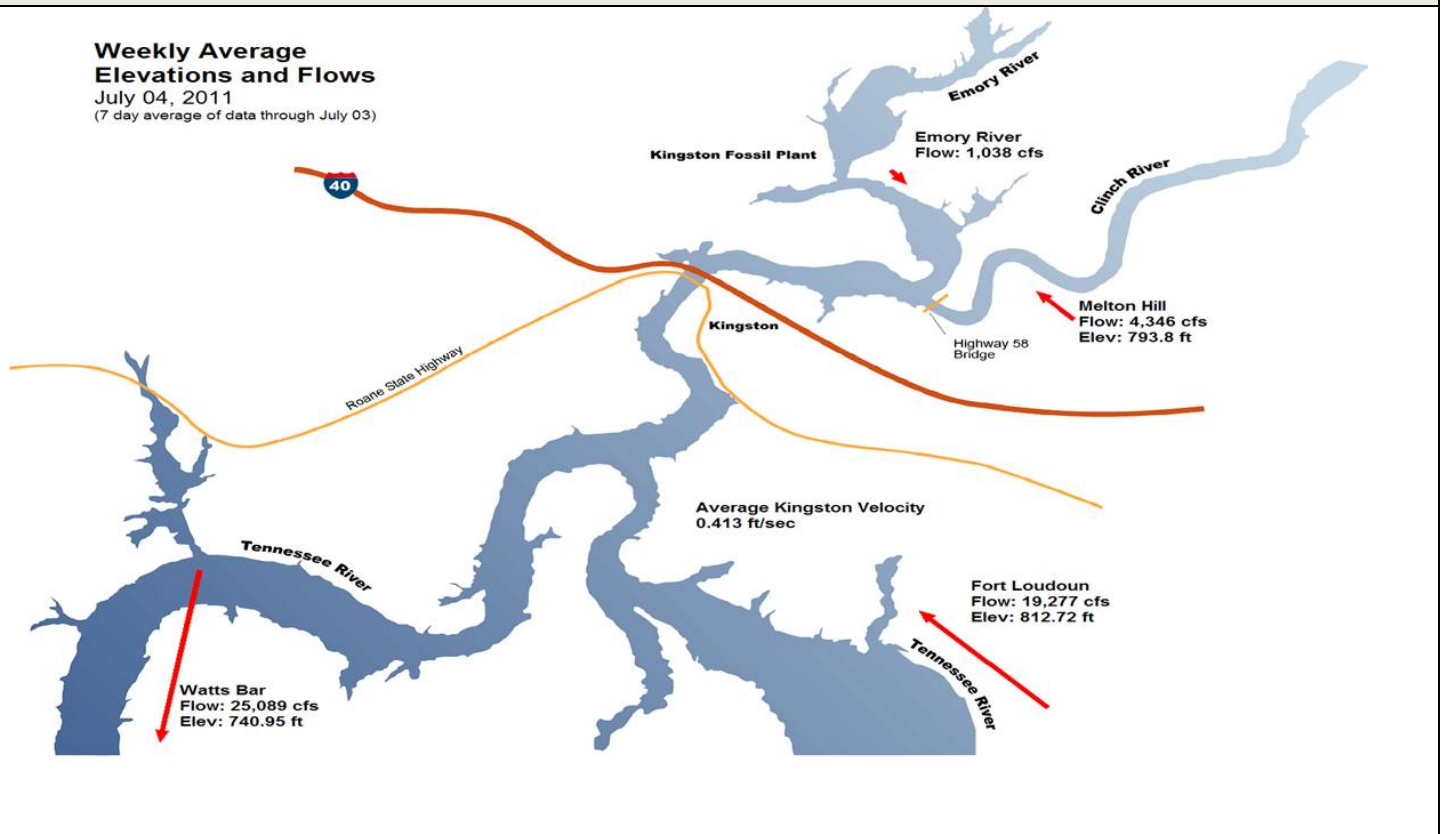
### Communications:

- Added Weekly Dike C Reports and Weekly Area Resident Updates to Kingston Ash Recovery website.
- Sent weekly updates to the CAG, public officials and members of the public who have signed up to receive weekly emails.
- Updated Administrative Record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.
- Distributed *Inside the Cell* newsletter to site and plant employees.
- Updated site bulletin boards.

### Community Relations:

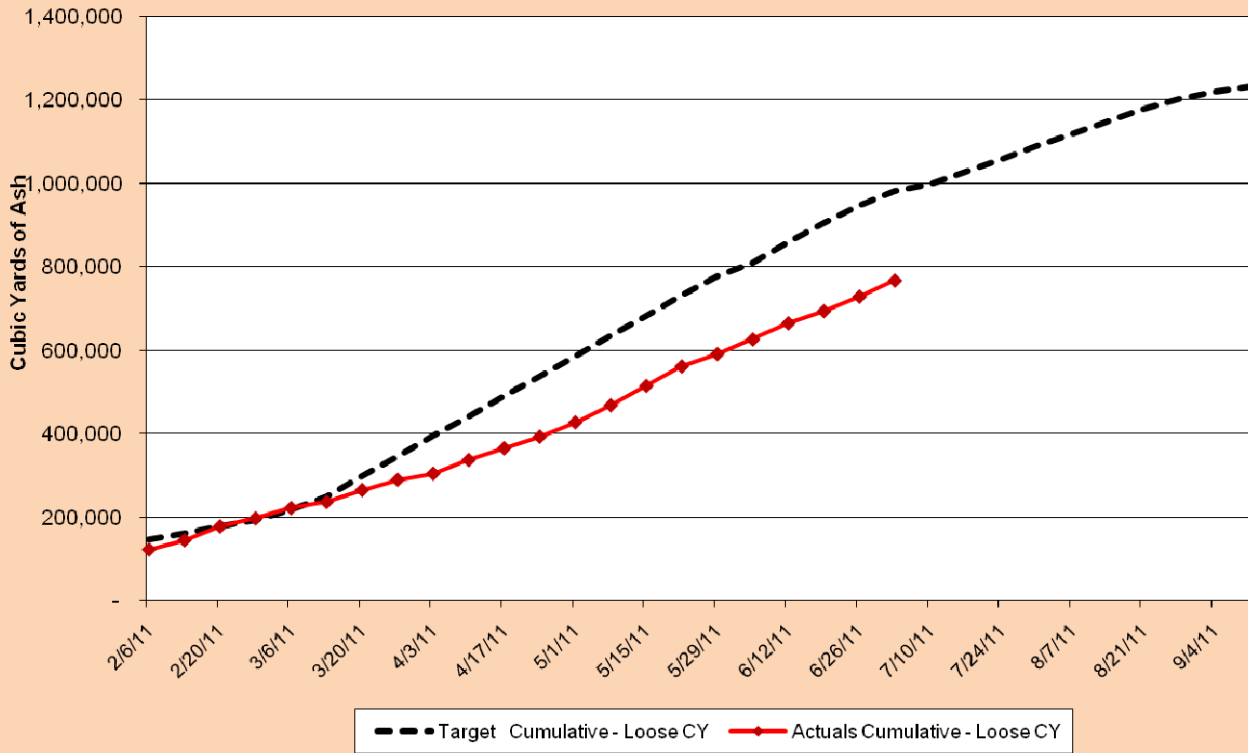
- Continued the "Breakfast with the Project Management" meetings with site employees.
- Issued RFP for Asbestos abatement and structure removal on TVA purchased properties; conducted pre-bid meeting and site tours for interested bidders.
- Hosted tour for Emory River Watershed Association.
- Attended Roane County Schools' groundbreaking ceremony at Oliver Springs Elementary School.
- Coordinated site's participation in Operation Stand down by collecting work boots and shoes.

## RIVER OPERATIONS



KINGSTON ASH RECOVERY PROJECT			JUNE 2011		FIELD REPORT	
<b>Safety</b>			<b>Monthly Total</b>	<b>FY - Cumulative Total</b>		
Near Misses			0	0		
First Aid Incidents			0	9		
Recordable Incidents			0	2		
Recordable Lost Time Incidents			0	0		
<b>Environmental</b>	<b>Matrix</b>	<b>Samples</b>	<b>Analyses</b>	<b>Results</b>		
Organization - TVA	Air - Real Time (Final)	--	--	267,188		
Organization - TVA	Air - Fixed	5,143	--	7,520		
Organization - TVA	Surface/Utility Water	5,379	46,310	227,690		
Organization - TVA	Ground Water (spring & well)	199	1,986	9,986		
Organization - TVA	Ash	78	104	1,690		
Organization - TVA	Soil/Sediment	829	1,618	10,928		
Organization - TVA	Biota	3,355	7,374	90,473		
<b>Ash Removal/Excavation</b>	<b>Non-Time-Critical</b>			<b>Cumulative Total</b>		
From West Storage TC to Dredge Cell	Estimated CY (modified to an in-place volume) Time Critical			17,834		
Mid Embayment to Dredge Cell	Estimated CY (modified to an in-place volume)			195,361		
From Mid Embayment to Dredge Cell 1 - Relic	Estimated CY (modified to an in-place volume)			1,529		
North Embayment to Dredge Cell	Estimated CY (modified to an in-place volume)			354,686		
From Dredge Cell	Estimated CY (modified to an in-place volume)			5,336		
From Mid Embayment to Ballfield	Estimated CY (modified to an in-place volume)			49,062		
From North Embayment to Ballfield	Estimated CY (modified to an in-place volume)			130,072		
From Mid Embayment to Lateral Expansion	Estimated CY (modified to an in-place volume)			39,588		
From Settling Basin to Lateral Expansion	Estimated CY (modified to an in-place volume)			5,025		
From North Embayment to Lateral Expansion	Estimated CY (modified to an in-place volume)			51,644		
From North Embayment to Mid Embayment	Estimated CY (modified to an in-place volume)			8,670		
<b>Ash Stacking</b>	<b>Non-Time-Critical</b>			<b>Cumulative Total</b>		
Subgrade Recontouring Central Dredge Cell (Cell 3)	Estimated CY (modified to an in-place compacted volume)			30,930		
Subgrade Recontouring Lateral Expansion (Cell 2)	Estimated CY (modified to an in-place compacted volume)			98,268		
Ash Stacking Central/North Dredge Cell (Cells 2 & 3)	Estimated CY (modified to an in-place compacted volume)			693,153		
Ash Stacking South Dredge Cell (Cell 1)	Estimated CY (modified to an in-place compacted volume)			4,930		
Ash Stacking Lateral Expansion (Cell 4)	Estimated CY (modified to an in-place compacted volume)			0		
Ash Stacking Ash Pond	Estimated CY (modified to an in-place compacted volume)			0		
Ash in Temporary Storage	Estimated CY (modified to an in-place compacted volume)			94,846		

Ash Excavation from North Embayment - Weekly  
as of July 3rd



Ash Stacking in Dredge Cell - Weekly  
as of July 3rd

