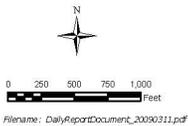


# KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT

August 17 - 23, 2009



Legend	
<span style="color: green;">—</span> Dike #2	<span style="color: brown;">—</span> Skimmer Wall
<span style="color: yellow;">—</span> Dike C	<span style="color: pink;">—</span> Weir # 1
<span style="color: red;">—</span> Dike D	<span style="border: 1px solid red; display: inline-block; width: 10px; height: 10px;"></span> Proposed Dredge Segment
	<span style="border: 2px solid orange; display: inline-block; width: 20px; height: 10px;"></span> Ash Processing Facility

Date of map imagery: Feb. 25, 2009

Tennessee Valley Authority  
OE&R - ER&S  
Geographic Information & Engineering

Prepared by:  
Mary McDermott

Issue (Date/Time)  
08/24/2009 1:14:19 PM

# KINGSTON ASH RECOVERY PROJECT

## WEEKLY REPORT

August 17 - 23, 2009

### HIGHLIGHTS

- Construction was completed on the clean water ditch system in Swan Pond Embayment west of Swan Pond Circle Road. Now all water either bypasses the ash or is treated in the settling basins.
- Moved approximately 24,200 cy of ash east of Dike 2 to storage areas west of Dike 2.
- Dredged over 28,000 cy for August 17-20 from the river.
- Loaded and transported over 53,000 tons of ash (6 trains) from the site.
- No safety incidents to report this week.

### SAFETY

#### Incidents

- No incidents to report.

#### Site Safety Activities

- 19 site specific HSE orientations conducted for the week; 703 to date.
- 23 Safety Observations Reports submitted for the week; 211 to date.

### INFRASTRUCTURE/ASH MANAGEMENT

- Moved approximately 24,200 in-place cubic yards from east of dike 2 to the ash storage area west of Dike 2 and to the dredge cell for the test.
- The state is reviewing drawings for the new utilities, prepared by CTI.
- Completed construction of the clean water ditches to allow upstream water to bypass the ash.
- Performed Storm Water Pollution Prevention Plan (SWPPP) inspections as required.
- 2 acres of Flexterra applied this week.
- Continued operating water trucks on roads and around ash piles as needed for dust control.
- Maintaining the site HAZWOPER requirements – including but not limited to personnel and equipment decontamination stations, fencing, and roads.

### ASH DREDGING & PROCESSING

- Dredging from the river was performed Monday through Saturday on a two 12-hour shift per day schedule with both the McKenzie 14" and the Little Rock 20". Hours operated were lower than target due to various mechanical and startup issues. All dredged material was discharged to the Rim Ditch for processing.
- McKenzie cutter head was replaced with a more aggressive design unit on 8/23.
- Dredging from the Ash Pond was performed for two days by TVA and discharged to the Rim Ditch.
- Rim Ditch operation was successfully tested at higher flows during the week with all three dredges operating.
- Rim Ditch operation was continuous throughout the week with settled fly ash dipping performed by one or two excavators on both shifts.
- Sluice Trench dipping was performed by TVA clamshell crane on Monday through Friday schedule.
- Daily NTU and TSS sampling was performed on the Sluice Trench discharge.
- Sluice Trench exit slopes were shaped and erosion armored to adjust for heavier flows.
- Rim Ditch and Sluice Trench material was processed to acceptable moisture content and hauled to the Ballfield area by Severson on both shifts.
- Daily bathymetric surveys of river dredged areas were completed. Completed calculations for volumes dredged from the river are:
  - Total through week ending 8/15/09 = 20,223 cubic yards.
  - Total for 8/17 through 8/20 = 28,266.
  - Surveys completed but data pending for 8/22.

- Severson is nearing completion of equipment assembly and hiring/ training of necessary personnel.
- Fly ash processed and delivered for disposition as estimated from load counts:
  - Sluice Trench = 28,815 cy for week ending 8/23 - 66,742 total.
  - Rim Ditch = 9,826 cy for week ending 8/23 - 17,561 total.
  - Total = 38,641 cy for week ending 8/23 - 84,303 total.

## ASH DISPOSITION

- Continuing to load rail cars and ship the ash to the landfill in Alabama.
- Loaded and moved 6 unit trains again this week – weather impact one day.
- Have loaded and transported 40 unit trains to date.
- Loaded and transported approximately 53,430 tons of ash this week, for a total of approximately 350,000 tons.

## CENOSPHERE RECOVERY

- Outreach calls from local residents are minimal. The focus remains on addressing EPA identified sites in non-residential areas.
- The TVA tug and barge mounted excavator assisting the barge crews pushed back upriver to be unloaded and refueled. The barge will be unloading most of next week.
- Completed installing “river closed” signs in the Emory River for the EPA.
- Continued collecting cenospheres on site around the ash and stilling ponds. Two vacuum trucks are being used in conjunction with CPG activities to assist with the cenosphere recovery.

## SKIMMER WALL

- Continued to work with Worley Parsons and TVA plant personnel on addressing navigation lighting on the new skimmer wall.
- There was a pre-bid meeting for skimmer wall debris and excavator removal on Thursday.

## DIKE REINFORCEMENT

- Continued with the design for the Dike C buttress. Design will focus on starting the northern section of Dike C first. The southern intake channel area will follow.
- Jacobs continued to monitor the dikes at Kingston on a daily basis. Monitoring includes the previously identified eleven seeps.
- Several erosion features along Dike D were repaired.
- Plant Facilities is assisting with the mowing of the Dikes.

## ROUTINE MONITORING

### Surface Water Sampling

- Routine surface water fixed station monitoring occurred on Monday, Wednesday, and Friday, August 17, 19 and 21. Samples for nutrient analyses continued with the weekly sampling event performed on Wednesday. Through August 3, there have been no ash-related constituents detected above any criteria (i.e., ambient water quality, domestic water supply) for the three constituents of primary interest (arsenic, selenium, mercury). Since the May 4, 2009 Emory River high flow event, the total suspended solids (TSS) concentrations have been consistently less than 20 mg/L.
- Swan Pond Embayment surface water sampling continues twice weekly at two locations along the Swan Pond Embayment drainage ditches. Since the tie-in off the Embayment settling basins, TSS results from samples collected at the settling basin effluent and from the clean water ditch have generally been 20 mg/L or less. The arsenic concentrations sporadically exceed the Tennessee Drinking Water Standard (TDWS), but are below the Aquatic Water Quality Standard (AWQS). Selenium concentrations are well below the TDWS, but continue to be, on average, above the AWQS.
- The revised draft Surface Water Sampling Plan for the Emory, Clinch, and Tennessee Rivers is under review by the TDEC.

### Sediment Sampling

- Equipment issues have delayed progress for gravity core sediment sampling. This included engine problems with a pontoon boat obtained from TVA-Norris for sediment sampling, as well as selection of equipment for sampling in deeper water. Both of these issues are being worked so that the sampling can resume.

- The sub-bottom profile crew continued a series of parallel profiles in the Emory, Clinch and Tennessee Rivers. Several preliminary maps have been generated to display the results of the survey. Additional visual confirmation will be performed as the gravity core sampling is re-instituted.
- Data reduction continues for the sub-bottom profiling that was completed along Dike C the week of August 10.

### **Air Sampling**

- All air monitoring results, including fixed-station and real-time monitoring results continue below ambient air quality criteria.
- The new air monitoring contractor, Shaw Environmental, has mobilized to the KIF and transition activities are ongoing.
- The real-time TEOM PM2.5 instrument is operating at the Lakeshore Drive (PS07) air monitoring location. Data for this instrument are available on the regulator-only website.

### **Data Management**

- Test transfers of data from Equis to the EPA SCRIBE database were initiated the week of August 17. Routine transfers are scheduled to begin on September 8.

## **FINAL REMEDIATION/DREDGE CELL**

- EPA and TDEC are reviewing the non-time critical work plan.
- An engineering coordination meeting was held on August 18<sup>th</sup> to develop the details of the alternatives.
- Work continues on the baseline human health risk assessment and the screening level ecological risk assessment.
- 10,450 cy of ash were moved into the test in the dredge cell. The base of Area A is complete and more trucks can be sent to the test. Results of the monitoring are being posted on a shared ftp site.

## **COMMUNICATIONS**

### **Communications**

- Posted to TVA's Kingston Webpage: Weekly Progress Report, Air Test Results Updated, Updated Fish Testing Results, and EPA Report on Selenium Released.
- Continued to handle daily calls from the news media.
- Advertisements re: Action Memorandum and Administrative Record appeared in Roane County News and Shopper.
- Presentation on site progress to TVA Board of Directors at August 20<sup>th</sup> Board Meeting
- Presentation on KIF Ash Recovery at CoalGen 2009 Conference..

### **Outreach**

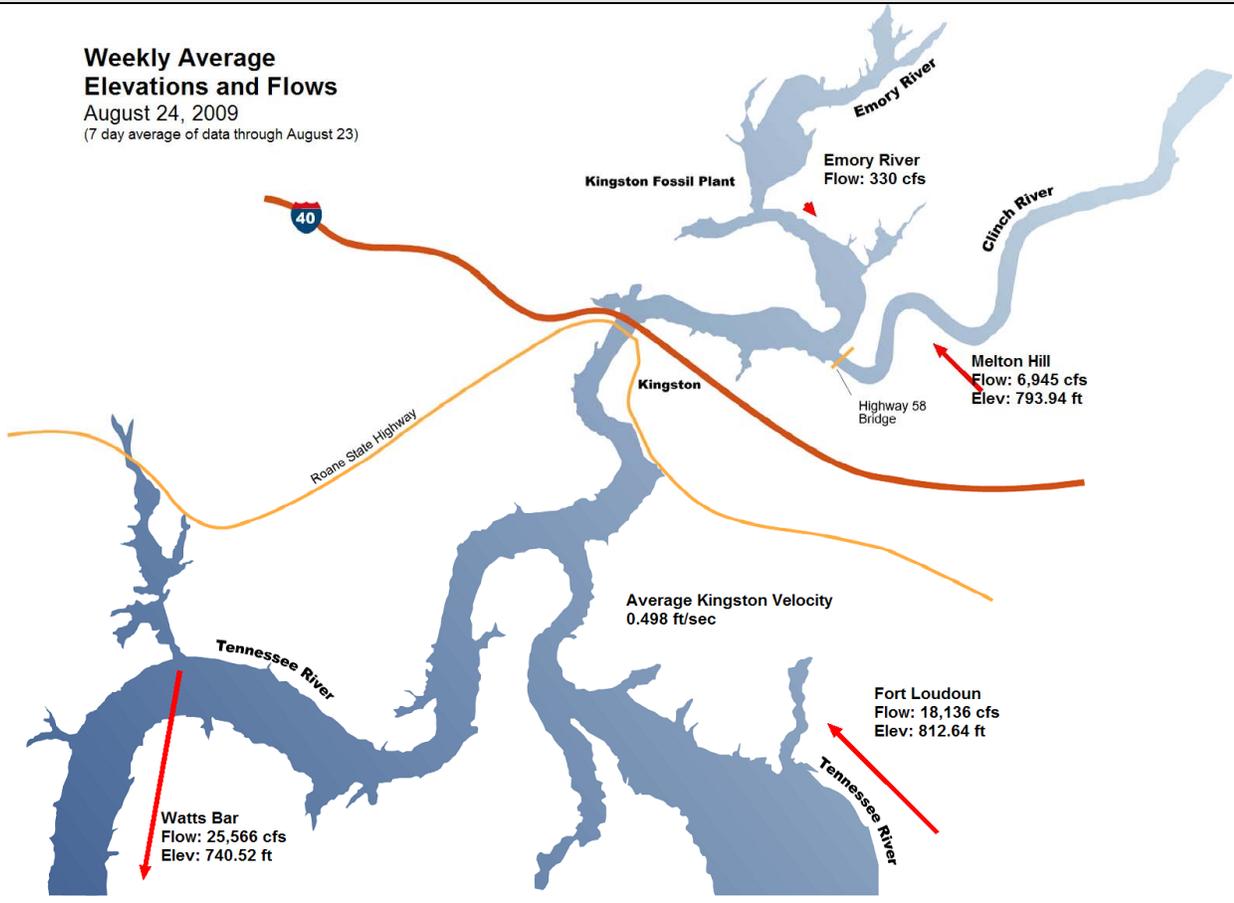
- "River closed" signs installed on Emory River.
- Met with individual residents about property and operations issues.
- Continued to handle calls and visits from residents.
- Responded to Congressional Inquiries and TVAINFO letters about residents.

### **Valley/Government Relations**

- Site tour and briefing for TVA Board member Howard Thrailkill.

# RIVER OPERATIONS

**Weekly Average  
Elevations and Flows**  
August 24, 2009  
(7 day average of data through August 23)



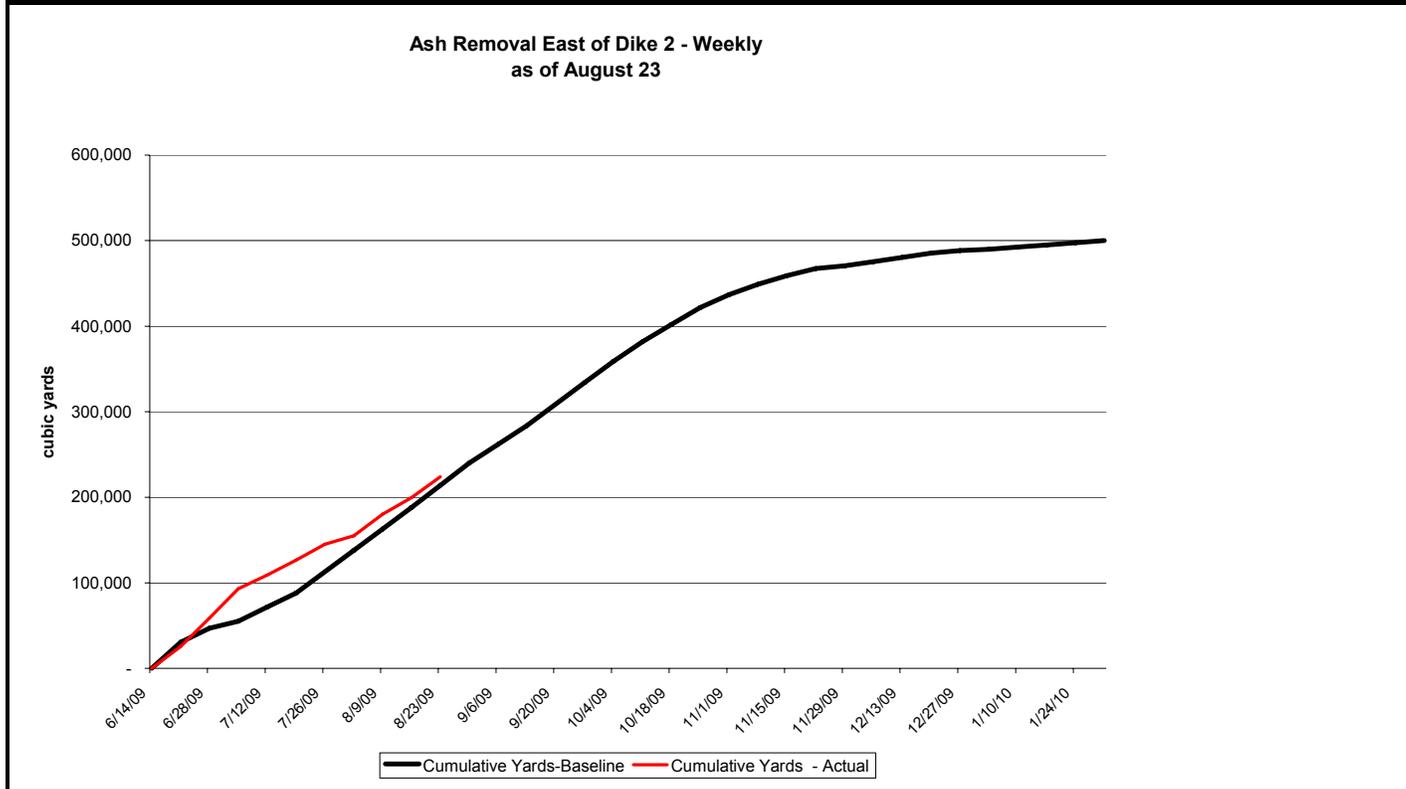
<b>MEETINGS/CONFERENCE CALLS</b>		
<b>Date</b>	<b>Time</b>	<b>Subject</b>
08/24	0730	Environmental Meeting (ICP Conference Room)
08/24	0800	Time Critical Meeting (ICP Conference Room)
08/24	1000	Aquatic Resources Study (Team Room)
08/24	1300	Dredge Team Meeting (Team Room)
08/24	1600	Teleconference on Research Paper Presentation (Team Room)
08/25	1000	Project Managers Meeting (ICP Conference Room)
08/25	1100	Jacobs Monthly Staff Meeting (ICP Conference Room)
08/25	1300	Briefing on Traffic Accident (Team Room)
08/25	1500	Environmental Assessment – General Alignment (ICP Conference Room)
08/25	1530	Environmental Meeting (ICP Conference Room)
08/26	0800	Data Management Meeting (ICP Conference Room)
08/26	0900	KIF Recovery Staff Meeting (ICP Conference Room)
08/26	1130	EPA/TDEC Order Deliverables (Team Room)
08/26	1300	Economic Development Contractor Local Office Initiatives (Team Room)
08/26	1330	Weekly Call With Test America (Conference Call)
08/27	0730	Environmental Meeting (Team Room)
08/27	0800	Time Critical Meeting (ICP Conference Room)
08/27	0900	KIF SOP Meeting (Team Room)
08/27	0900	Jacobs OPR Meeting (ICP Conference Room)
08/27	1030	Data Management Meeting (Team Room)
08/27	1130	HSE Staff Meeting (ICP Conference Room)
08/27	1300	Jacobs Senior Staff Meeting (Team Room)
08/27	1300	TVA Sampling Team Meeting (ICP Conference Room)
08/27	1400	SOPs (Team Room)
08/27	1800	CAG Meeting (ICP Conference Room)
08/28	0900	Project Progress Report (ICP Conference Room)
Daily	0730	Site Safety Orientation (Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)

<b>Kingston Recovery Project Field Report</b>	<b>Date: August 17-23, 2009</b>	<b>Field Report</b>
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<b>Safety</b>		<b>Weekly Total</b>	<b>Cumulative Total</b>
First Aid Incidents		0	17
Recordable Incidents		0	3
<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)	1,045	76,580
Total	Tons of Light Debris	0	959.57
Cenosphere Slurry (gallons)		102,000	6,892,500

<b>Environmental</b>					
Org	Matrix	Weekly Samples Collected	Total # of Samples Collected to date	Sample results	
				received	Verified
TVA	Air - Real-Time (8/14-20)	3,330	95,050	95,050	95,050
TVA	Air – Analytical (8/14-20)	12	1,535	1,447	1,039
TVA	Surface/Utility Water	76	2,435	2,312	198
TVA	Ground Water (spring and well)	0	26	29	2
TVA	Ash	0	314	323	50
TVA	Soil/Sediment	0	79	126	9

<b>Ash Dredging &amp; Excavation</b>				<b>Weekly Total</b>	<b>Cumulative Total</b>
River	Estimated Cubic Yards (8/17-21)			28,266	511,800
Ash Pond	Estimated Cubic Yards			4,915	61,400
Stilling Pond	Estimated Cubic Yards			0	24,350
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			24,200	223,900**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	0
Ash Disposal	Estimated Tons			53,430	350,000



River Dredging - Weekly  
as of Aug 20th

