

# KINGSTON ASH RECOVERY PROJECT

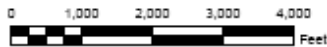
## WEEKLY REPORT

March 29 – April 4, 2010

Aerial Image of Kingston Ash Slide (01/11/2010)



#Name: Image\_011110\_011.gif



Date of map imagery: 01/11/2010

Tennessee Valley Authority  
E&T - Environmental Resources  
Geographic Information & Engineering

Prepared by:  
Mary McDermott

Issue (Date/Time)  
04/05/2010 4:43:24 PM

# KINGSTON ASH RECOVERY PROJECT

## WEEKLY REPORT

MARCH 29 – April 4, 2010

### HIGHLIGHTS

- Cumulatively, just over 2,989,800 cubic yards of ash have been removed from the river and east of Dike 2.
- To date, 193 unit trains, with a total of approximately 1,802,100 tons, have been loaded and transported to Alabama.
- Aquarius Marine LLC, the Skimmer Wall debris removal contractor, moved into position at the mouth of the Intake Channel and will start exploratory dredging next week.

### SAFETY

#### Program Summary

- 27 site specific HSE orientations were conducted for the week – 1,422 to date.
- 21 Safety Observation Reports submitted for the week: 794 to date; 669 have been closed.

#### Non Recordable Incidents

- March 29, 2010 – A Severson dump truck operator, in the process of being spotted by a flagger, struck the counterweight of an excavator, bending the tail gate. There were no injuries.

#### Recordable Incidents – None.

#### First Aid

- April 1, 2010 – A SWS employee and TVA employee reported a strong odor near the Plant intake. The employees were taken to the onsite medical station, checked out and released. Air monitors did not detect anything unusual.

### INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Lime treatment in the east embayment continued. Roughly 12,600 cy of ash were treated and moved from the area to storage.
- The berm that was used to protect Dike C buttress work is being removed and brought directly to the tracks.
- The offsite utilities contractor, Mayes Construction, continued construction of the 10" Kingston Utility board water line and Harriman Utility board 6" water and gas lines.

### ASH DREDGING & PROCESSING

- A total of 38,656 cy of ash were removed from the river this week using an assortment of 5 dredges. All dredges are operational. Work began on removing ash that has been cast back from the Dike C effort.
- The removal of Weir 1 restarted after barge repairs and a change out of equipment. The rock is being placed in the lateral expansion area.
- Work continued dipping from the rim ditch. Most of the sluice trench area was cleaned off and regraded to drain towards the trench.
- Amphibious trackhoes continued dipping from the ash pond onto the west bank. Ash accumulated on the platform of the lateral expansion area was moved to the valley storage area.
- Lime treatment of sluice trench material and the filter press material continued.

### ASH DISPOSITION

- Loaded and transported 6 unit trains this week. The site was shut down on Sunday, April 4.
- We have loaded and transported 193 unit trains containing a total of approximately 1,802,100 tons.
- Continued inspection, maintenance, and repair of the rail in the rail yard.
- Continued monitoring moisture content of the ash and placing polymer in rail cars prior to shipping to Alabama.

## CENOSPHERE RECOVERY

- Crews began work at the Sugar Tree Grove area along the Emory River. Work should be completed next week. In addition, crews worked under the I-40 Bridge.
- One boat crew manned the southern boom in the Emory River.
- The rivers appear to be in good shape with limited debris and cenospheres. It appears that more debris is coming down the Clinch River than in recent months. The warmer weather is leading to growth of natural brown algae. Also, pollen is beginning to collect on the water surface and this can be mistaken for cenospheres.
- 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. A long reach excavator was used to “dip” cenospheres from the Ash Pond.
- Assisted Severson with spud repairs to the barge working the weir removal.

## SKIMMER WALL

- Aquarius Marine LLC, the Skimmer Wall debris removal contractor, moved into position at the mouth of the Intake Channel and will start exploratory dredging next week.

## DIKE REINFORCEMENT

- Dike C Buttress work continued. Approximately 1,200 feet of buttress has been completed. Work has focused on construction of an access road along the bench and removal of the #57 stone from the original haul road built along the toe.
- CP continued using an amphibious excavator to relocate ash to an area where the dredges can more easily remove the material.
- Vibecore samples were collected along Dike C to determine the amount of ash present.
- 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, March 29<sup>th</sup>, and Friday, April 2<sup>nd</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.
- Dredging was discontinued on Thursday, March 25<sup>th</sup>, due to a Safety investigation. Daily monitoring of dredge plumes resumed on Tuesday, March 30<sup>th</sup>. 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. Sampling occurred on Tuesday March 30 and Thursday April 1.

### 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.
- 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**

- Amphibian sampling is underway and has been completed for 3 of 5 locations.

### **Non-Routine Sampling**

- None to report.

## **FINAL REMEDIATION**

- Continued developing responses to agency comments on the draft Sampling and Analysis Plan for the river system. Held a preliminary readiness review meeting with the sampling team for sampling of seasonally-exposed sediment and agreed to conduct a "surveillance" of the river system to identify depositional areas and establish locations for sampling so as to capture the narrow window before water levels in the reservoir rise to the summer pool. Subsequent sampling may be done by vibracore methods if the reservoir levels rise quickly. Obtained bids for installing monitoring wells and awarded the bid to MACTEC. Mobilization will begin the week of April 5<sup>th</sup> with a walkdown of drill site areas with MACTEC, the logging geologist, and TVA hydrogeologist.
- Working with Project Controls to develop an integrated schedule for Non-Time-Critical ash removal and ash stacking operations.

## **DREDGE CELL**

- Fill placement in the test cell was completed this week. On Saturday, the swales and final contouring work was conducted. This will be the last report on the test embankment construction activities.

## **COMMUNICATIONS**

### **Communications**

- Posted to Web site: Weekly Report, Weekly Area Resident Update information, and Availability Session Advertisement.
- Worked on Dredge Report for site and plant employees.
- Submitted ad publicizing Approved March Work Plans to Roane County News for publication.
- Submitted ad publicizing the April 13 Availability Session at the Kingston Outreach Center.
- Submitted site update column to Roane County News for publication.
- Worked on addendum to 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.

### **Outreach**

- Provided updates on site activities to the Community Advisory Group.
- Updated the Administrative Record with work plans.
- Continued to respond to calls and visits from residents.
- Continued to gather comments on various administrative record documents.

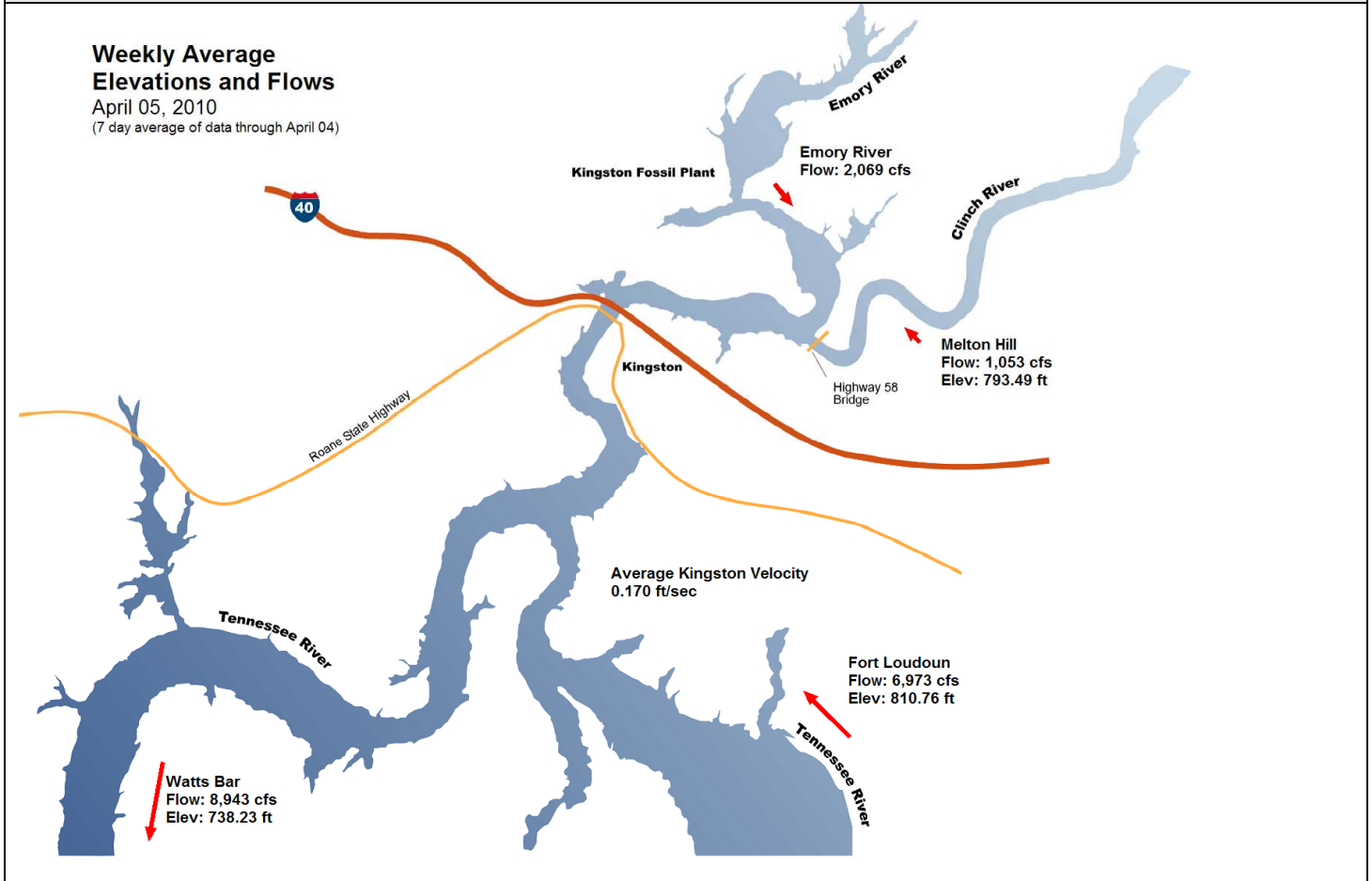
### **Government/Valley Relations**

- Sent site update to public officials.

**Other**

- Held a meeting of the Health and Safety Programs and Activities Team.

**RIVER OPERATIONS**



<b>MEETINGS/CONFERENCE CALLS</b>		
<b>Date</b>	<b>Time</b>	<b>Subject</b>
04/05	0730	Environmental Meeting (ICP Conference Room)
04/05	0900	Dike C Buttress Intake Channel (ICP Conference Room)
04/05	1000	Aquatic Resources Studies (Team Room)
04/05	1000	Programs and Activities (Trailer 1 Meeting Room)
04/05	1030	Duke University (ICP Conference Room)
04/05	1200	MACTEC Safety Meeting (Trailer 1 Meeting Room)
04/05	1300	Environmental Staff Meeting (ICP Conference Room)
04/05	1300	Work Package Jersey Barriers (Trailer 1 Meeting Room)
04/05	1400	Reports Meeting (Team Room)
04/05	1400	Schedule Updates (ICP Conference Room)
04/06	0930	BCP Meeting (ICP Conference Room)
04/06	0930	Communications (Team Room)
04/06	1000	TVA Communications (Team Room)
04/06	1000	JMJ Reorientation (Old ICP Conference Room)
04/06	1030	Project Review Meeting (ICP Conference Room)
04/06	1100	Jacobs All Hands Meeting (ICP conference Room)
04/06	1230	CCP Planning (ICP Conference Room)
04/06	1300	JMJ Reorientation (Old ICP Conference Room)
04/06	1330	Dredge Team Meeting (ICP Conference Room)
04/07	0800	JMJ Reorientation (Old ICP Conference Room)
04/07	0800	Non-Time-Critical Weekly Meeting (ICP Conference Room)
04/07	0900	Data Management Meeting (ICP Conference Room)
04/07	0900	Property Assessment Meeting (Team Room)
04/07	0930	JMJ Review of Findings (Old ICP Conference Room)
04/07	1030	TVA Monitoring Wells (ICP Conference Room)
04/07	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
04/07	1300	Project Status (ICP Conference Room)
04/07	1300	JMJ Reorientation (Old ICP Conference Room)
04/07	1330	Test America Weekly Call (Conference Call)
04/07	1430	Update Railroad Replacement (ICP Conference Room)
04/08	0730	Environmental Meeting (ICP Conference Room)
04/08	0800	JMJ Reorientation (ICP Conference Room)
04/08	0800	Kingston Update (Team Room)
04/08	0900	LTD Project Controls (Team Room)
04/08	0900	Communication Staff All Hands (ICP Conference Room)
04/08	1000	Utility Restoration Update (Team Room)
04/08	1000	Pace Telephone (Conference Call)
04/08	1130	HSE Staff Meeting (Old ICP Conference Room)
04/08	1300	Accident Investigations (Team Room)
04/08	1300	JMJ Reorientation (Old ICP Conference Room)
04/08	1400	SOP Meeting (Team Room)
04/08	1400	Upcoming Plant Startup (ICP Conference Room)
04/09	0800	JMJ Reorientation (ICP Conference Room)
04/09	0900	KIF Project Review (Upper Bluff Road)
04/09	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
04/09	1000	Ash Unloading (Trailer 1 Meeting Room)

<b>MEETINGS/CONFERENCE CALLS</b>		
04/09	1300	JMJ Reorientation (Old ICP Conference Room)
Daily	0730	Geo Exploratory Meeting (Trailer 1 Meeting Room)
Daily	0730	Site Safety Orientation (Old ICP Conference Room)
Daily	1100	MACTEC Daily Reconciliation (Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

Kingston Recovery Project		Date: March 29 – April 4, 2010		Field Report	
<b>Safety</b>			<b>Weekly Total</b>	<b>Cumulative Total</b>	
Near Misses			0	41	
First Aid Incidents			0	31	
Recordable Incidents			0	9	
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)	782	100,467	
Total		Tons of Light Debris	0	959.57	
Cenosphere Slurry		Gallons	84,000	12,972,000	
<b>Environmental</b>					
<b>Org</b>	<b>Matrix</b>	<b>Samples*</b>	<b>Analyses*</b>	<b>Results*</b>	
TVA	Air - Real-Time	--	--	193,343	
TVA	Air – Fixed	1,911	--	2,655	
TVA	Surface/Utility Water	3,453	29,735	144,554	
TVA	Ground Water (spring and well)	85	969	3,799	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	164	328	2,930	
TVA	Biota	819	1,844	20,592	
*Week ending 04/02/2010					
<b>Ash Dredging &amp; Excavation</b>				<b>Weekly Total</b>	<b>Cumulative Total</b>
River	Estimated Cubic Yards (see Note)			38,656	2,286,327
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			18,860	703,489
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			52,550	1,802,100

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 5th

