

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

January 11-17, 2010

Aerial Image of Emory River Area - 12/01/2009



Date of Photography
12/01/2009
Water Surface Elevation
735.86
Water Surface Elevation is the
Watts Bar Headwater Elevation
Tennessee Valley Authority
E3T - Environmental Resources
Geographic Information & Engineering

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HIGHLIGHTS

- Cumulatively, just over 2,392,300 cubic yards of ash have been removed from the river and east of Dike 2.
- To date, 139 unit trains have been loaded and transported for a total of approximately 1,285,600 tons.
- An EPA Region 4 audit of TVA field sampling activities was conducted
- Embayment/Dredge Cell EE/CA was delivered to TVA, EPA and TDEC on Friday, January 15th, and put out for public review.
- Notified CAG and public officials of January 26, 2010 public meeting and the release of the EE/CA and placed ads in the Roane County News & Shopper for both.

SAFETY

Program Summary

- 43 site specific HSE orientations conducted for the week, 1,211 to date.
- 7 Safety Observation Reports submitted for the week: 572 to date; 464 of which have been closed.

Incidents

- Recordable Incidents: None
- Non-Recordable Incidents: None

INFRASTRUCTURE/ASH MANAGEMENT

- Continued with dust suppression activities, road maintenance, and HAZWOPER controls.
- Ash was moved from the west storage area to the ballfield to support improvements in drainage.
- Approximately 1,000 cy of ash was moved from east of Dike 2 to west of Dike 2 to dry storage.
- The area outside the interim berm in the east embayment was completed. All ash has been placed inside the berm.
- Offsite utilities contractor, Mayse Construction, started delivery of equipment and materials to project.

ASH DREDGING & PROCESSING

- All three dredges were operational this week. A total of 78,271 cy of ash was removed from the river.
- The dewatering system was maintained. Both the Severson and CP cranes were operational.
- The ash pond free water volume has stabilized. One CP dredge operated discharging ash dredged from the ash pond to the lateral expansion area. Engineering agreement was reached from Stantec to raise the height of ash in the lateral expansion area to elevation 763.
- A new 12-inch dredge was placed in the ash pond. It will serve as the backup to the 14-inch dredge going to the filter presses. Both dredges experienced mechanical difficulties late in the week.
- An incident with one of the filter presses resulted in four being tagged out. The remaining eight operated this week during a startup period. Filter cake of acceptable consistency is being made. Evaluations are underway to see if eight presses will be sufficient.
- A new pipe was installed at the entry to the ballfield. Improvements on the ballfield interior roads continue. A work plan to increase the height of storage to 30 feet was submitted to EPA and comments received.

ASH DISPOSITION

- Loaded and transported 5 unit trains this week.
- Loaded and transported 139 unit trains for a total of approximately 1,285,600 tons.
- Continued inspection and maintenance of the rail in the rail yard.
- Continued putting polymers in rail cars prior to shipping to Alabama.
- The cold weather that was impacting the operations at the landfill in Alabama has subsided. The unloading and disposal operations have returned to normal.
- Rail yard modifications construction by Queen City and Civil Projects continues.

CENOSPHERE RECOVERY

- Cenospheres and debris levels were light in the rivers. The majority of the concentration was trapped in the booms along the Emory River.
- Ice buildups in the Emory have slowed the collection process and limited access to some areas. It is anticipated that the ice will clear out by next week.
- Crews continue to monitor the river for accumulations of ash, debris and cenospheres.
- The Dike 2 Sediment Ponds remain frozen.
- 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

- Work on the skimmer wall has been suspended until early next year.

DIKE REINFORCEMENT

- Dike C buttress work continued. Approximately 760 feet of haul road and 120 feet of slope have been completed.
- Sand and stone materials which were out of specification have been retested and approved for use by the engineer of record. Production along the slope of Dike C was halted until the problems with the materials were resolved. The material that was out of specification was removed from the stockpile area and used on other projects not requiring the specification. Monitoring of the material will continue at an increased frequency.
- Continued to monitor the dikes on a daily basis.

ROUTINE MONITORING

Surface Water Sampling

- Routine surface water fixed station monitoring occurred on Tuesday, January 12th and Friday, January 15th. The shift to Tuesday accommodated the schedule for an EPA Region 4 audit of TVA field sampling activities. On both dates, ERM 12.2 and ERM 4.0 were not sampled due to icing in of the river.
- Surface water analytical results are compared to the Tennessee Drinking Water Standard (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 11/02/09 and 12/10/2009. 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, all detected concentrations of arsenic and selenium were less than the TDWS and F&AL.
 - On the Emory River, all arsenic and selenium detects in surface water samples were less than the TDWS and F&AL.
- 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.

Sediment Sampling

- A TVA environmental vibecore sampling crew has joined the dredging project crew to expedite characterization of remaining ash in the river to optimize dredging.

Air Sampling

- The majority of air monitoring results, including fixed-station and real-time monitoring results continue below ambient air quality criteria. Several real-time readings were above the 150 ug/m³ PM10 level, but all were associated with local active fires and smoke.

- TVA's real-time tapered element oscillating microbalance (TEOM) PM2.5 instrument is operating at the Lakeshore Drive (PS07) air monitoring location. Data for this instrument are available on the regulator website. Daily results for 12/3-12/31 were well below the action limit of 26 ug/m³.
- Cold and dry weather over the past week has resulted in PM2.5 TEOM measurements to approach the 26 ug/m³ action limit; but these measurements are comparable to regional TEOM measurements at off-site locations.

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.
- EPA Region 4 completed a field and data audit at the KIF site the week of January 11. An audit report will be issued in several weeks.

Biota Sampling

- Nothing to report this period.

Non-Routine Sampling

- Nothing to report this period.

FINAL REMEDIATION

- Embayment/Dredge Cell EE/CA was delivered to TVA, EPA and TDEC on Friday, January 15th, and put out for public review.

DREDGE CELL

- Over 40,000 cy of ash from the ballfield and from the relic area were sent to the test embankment. Drilling for instrumentation upgrades occurred this week.

COMMUNICATIONS

Communications

- Posted updated sampling info on website.
- Printed Dredge Report for distribution.
- Coordinated positioning bulletin boards for safety and site information at exclusion zone access points.
- Continued preparation of Responsiveness Summary for EE/CA Work Plan and Community Involvement Plan.
- Notified CAG of January 26, 2010, public meeting and the release of the EE/CA, and placed ads in Roane Co. News & Shopper for both.
- Handled daily calls from the news media.

Outreach

- Continued scheduling speakers for local civic groups on January EE/CA and general Site information.
- Maintained Administrative Record.
- Continued to handle calls and visits from residents

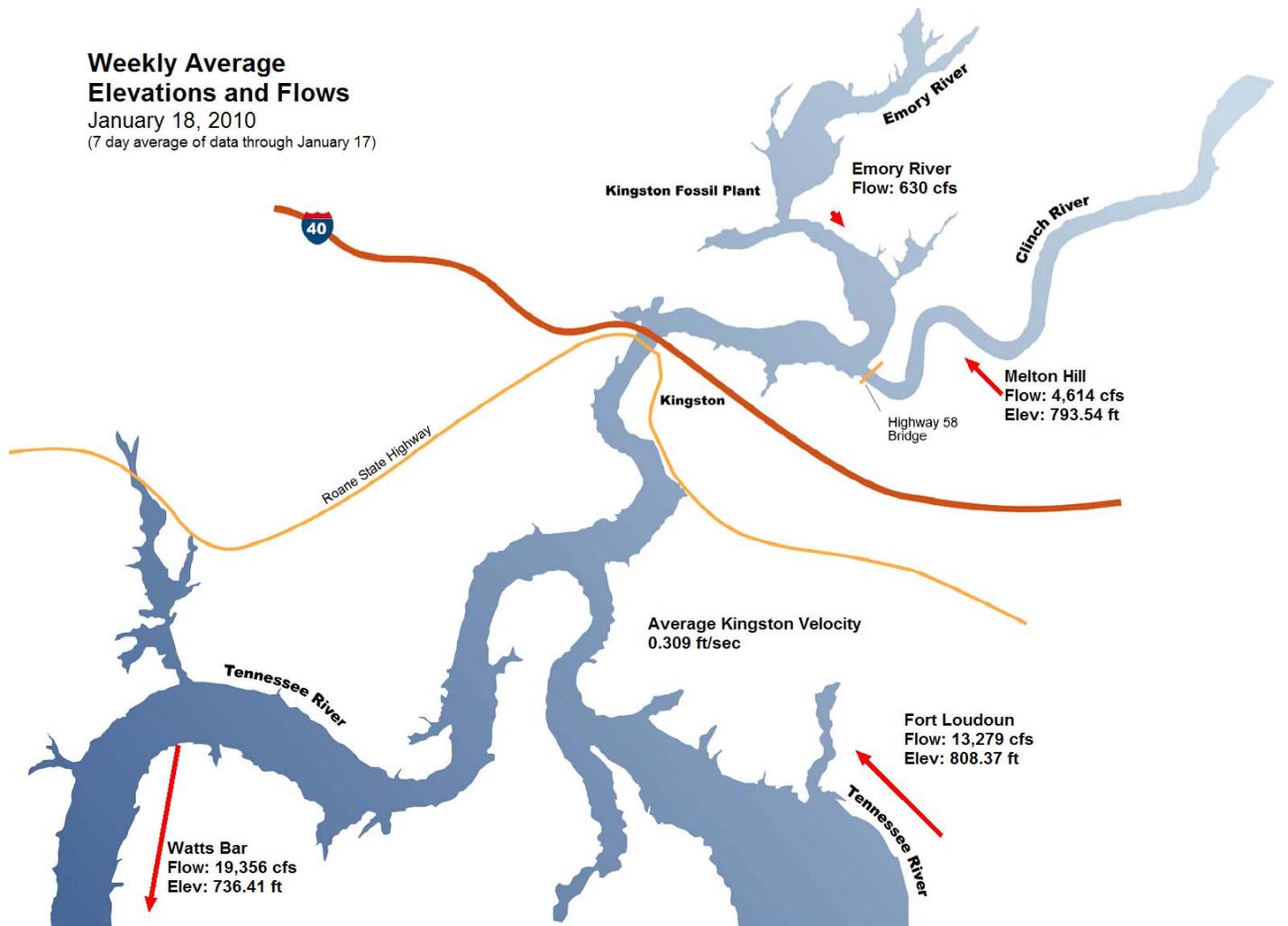
Government/Valley Relations

- Notified public officials of January 26, 2010, public meeting and the release of the EE/CA.

RIVER OPERATIONS

Weekly Average Elevations and Flows

January 18, 2010
(7 day average of data through January 17)

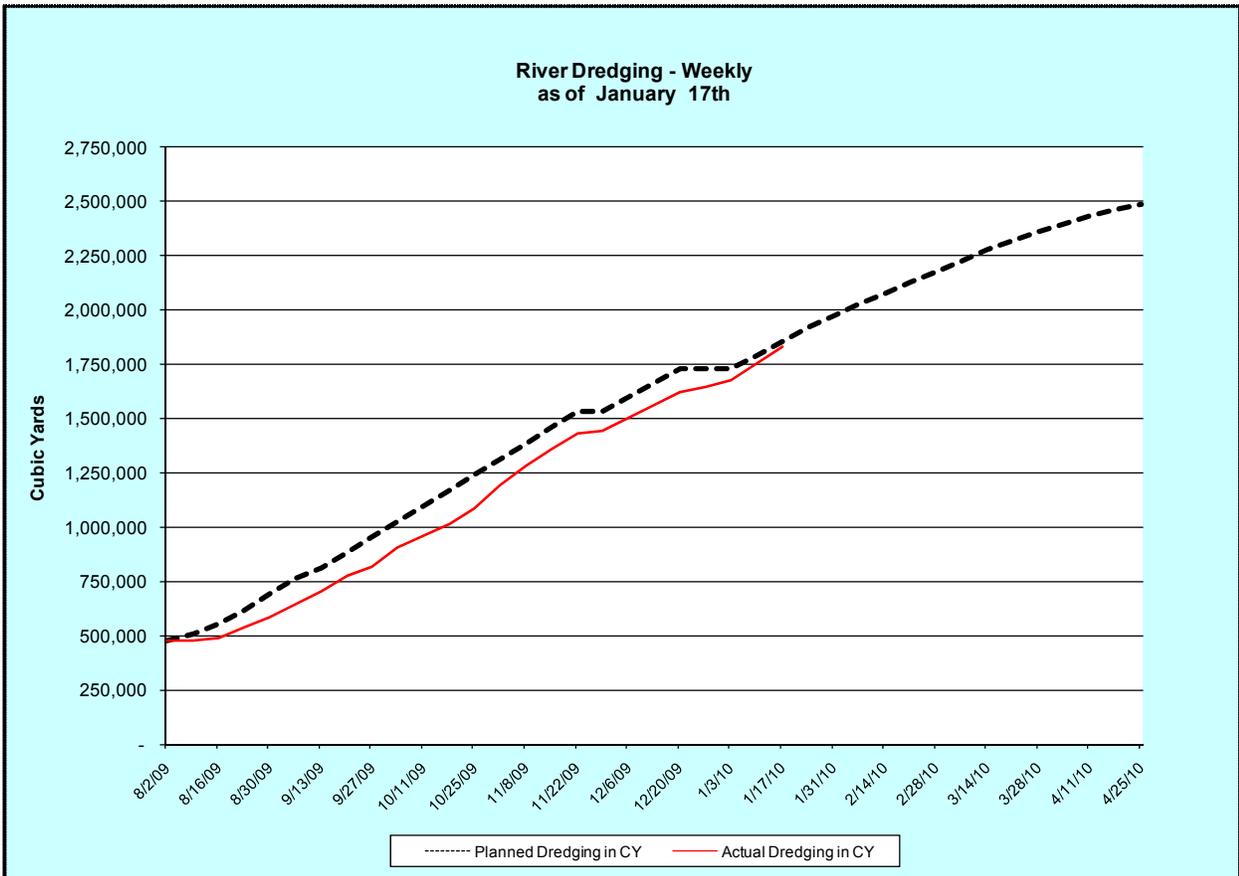
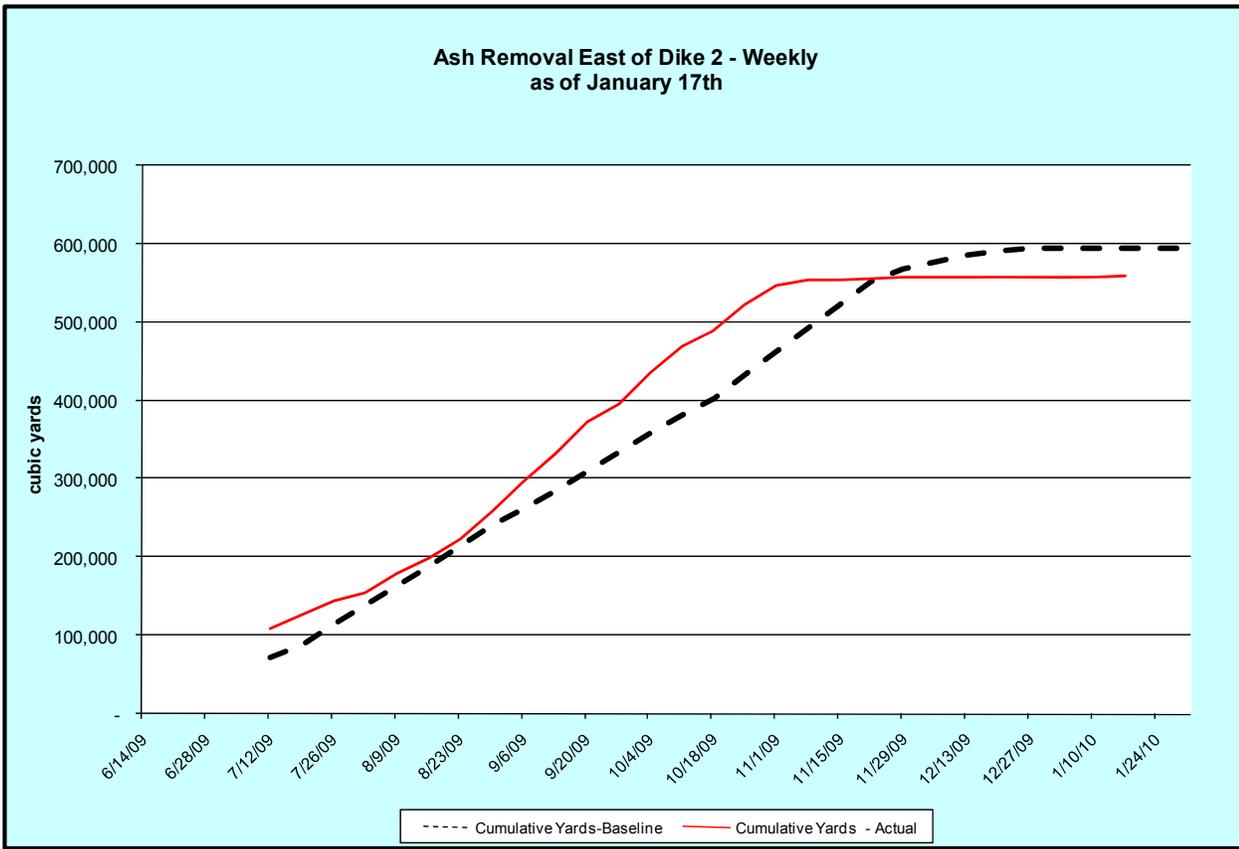


MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
01/18	0730	Environmental Meeting (ICP Conference Room)
01/18	0900	Dike C Buttress Intake Channel (ICP Conference Room)
01/18	1000	Aquatic Resources Studies (Team Room)
01/19	0915	BCP Meeting (ICP Conference Room)
01/19	1000	Project Review Weekly Meeting (ICP Conference Room)
01/19	1330	Dredge Team Meeting (ICP Conference Room)
01/20	0800	Time Critical Weekly Meeting (ICP Conference Room)
01/20	0930	Data Management Meeting (ICP Conference Room)
01/20	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
01/20	1330	Test America Weekly Call (Conference Call)
01/21	0730	Environmental Meeting (ICP Conference Room)
01/21	0900	Dredge Cell Design Meeting (ICP Conference Room)
01/21	1000	Weekly Communication Meeting (Team Room)
01/21	1000	Pace Telecon (Conference Call)
01/21	1130	HSE Staff Meeting (Old ICP Conference Room)
01/21	1300	HUB Wastewater Treatment Plant (Team Room)
01/21	0200	SOP Meeting (Old Team Room)
01/22	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
01/22	1000	ERP Update (ICP Conference Room)
Daily	0730	Site Safety Orientation (Old ICP Conference Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

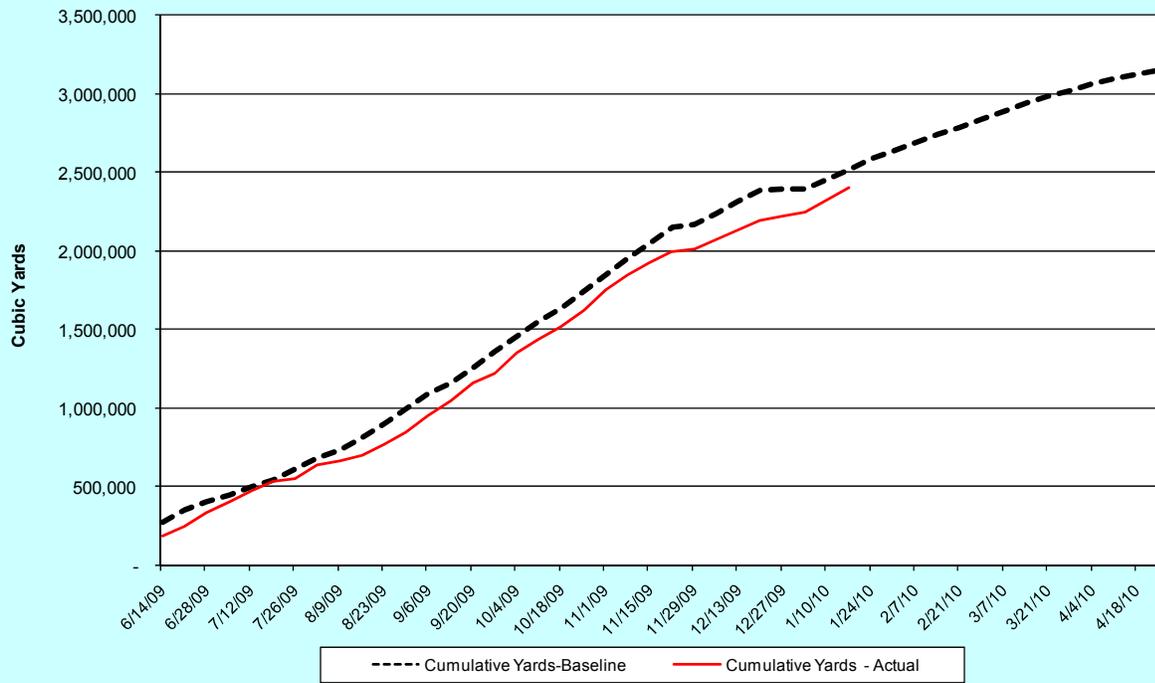
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Kingston Recovery Project		Date: January 11-17, 2010		Field Report	
Safety			Weekly Total	Cumulative Total	
First Aid Incidents			1	28	
Recordable Incidents			1	11	
Lost Time Incidents			0	3	
Cenosphere/Debris Removal			Weekly Total	Cumulative Total	
Outreach		Light Debris Removal – Land (bags)	0	18,867	
Divisions A, B,C,D Cleanup		Division Shoreline Cleanup (bags)	395	90,121	
Total		Tons of Light Debris	0	959.57	
Cenosphere Slurry		Gallons	186,000	11,097,000	
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	160,512	
TVA	Air – Fixed	1,434	--	1,434	
TVA	Surface/Utility Water	2,595	22,805	114,590	
TVA	Ground Water (spring and well)	58	691	2,559	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	62	129	1,009	
TVA	Biota	598	1,508	14,731	
*Week ending 01/15/2010					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru January 17, 2010 (see Note)			78,271	1,832,904
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			1,000	559,429**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			45,100	1,285,600

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.



**Time Critical Ash Removal - Weekly
as of January 17th**



**Ash Loading to Trains - Weekly
as of January 17th**

