

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

February 8-14, 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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Issue (Date/Time)
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HIGHLIGHTS

- Cumulatively, just over 2,616,150 cubic yards of ash have been removed from the river and east of Dike 2.
- To date, 154 trains have been loaded and transported approximately 1,423,550 tons of ash.
- The northern river closed signs and booms were moved north of Emory River Mile Marker 4.5 in anticipation of dredging in this section of the river.
- Prepared and mailed letter to residents living on Emory River to publicize the extension of the Emory River closure until May 15th.
- Prepared EE/CA Fact Sheet for mailing to Roane County residents with information on how to comment on the different alternatives.
- Guest speaker presented EE/CA information to two Roane State Community College classes, Kingston Optimist Club, and the Roane Alliance Joint Industrial Economic and community Development Board.
- Met with Rockwood Mayor about approved Foundation funds for Rockwood.

SAFETY

Program Summary

- 27 site specific HSE orientations conducted for the week, 1293 to date.
- 6 Safety Observation Reports submitted for the week: 754 to date; 524 of which have been closed.

Recordable Incidents

- February 14, 2010 – Civil Projects staff aug laborer fell off of ladder to water truck, taken to hospital for observation. Released same day with medication. OSHA recordable.
- February 14, 2010 – Severson Tug Captain slipped and fell on ladder way to engine room. Fractured right forearm. Casted, medicated and released. OSHA recordable.

Non-Recordable Incidents

- February 14, 2010 – Civil Projects laborers drove fence posts through 2 inch gas line on Lakeshore Drive. Repaired by HUB, no heavy equipment required.

INFRASTRUCTURE/ASH MANAGEMENT

- Continued with dust suppression activities, road maintenance, and HAZWOPER controls.
- Just under 12,000 cy of ash were moved east of Dike 2 to storage or the ballfield.
- Night shift support to allow Severson to haul to storage was provided by Civil Projects starting Thursday night.
- Mayse Construction continued pipe installation along Swan Pond Road and setting up for boring under I-40 for utility restoration.
- Civil Projects is rebuilding the plant access road that was removed for rail modifications.

ASH DREDGING & PROCESSING

- Approximately 33,690 cy of ash were removed from the river. Dredging was paused to allow the ballfield to be offloaded. A dredge was brought on line on Monday, another on Friday, and the remaining one on Saturday. Two of the dredges ran through Sunday. Pipeline for the fourth dredge is being laid and when the pipeline and booster pumps are operational, the fourth dredge will be brought on line (expected February 18th).
- Effluent from the ash pond dredges were sent to the lateral expansion area and the filter presses. There have been several mechanical issues with the TVA dredges that have reduced production.
- 11 filter presses were operational throughout the week when the TVA dredge was operational. Lime was brought on site (15 loads) and used to treat the entrance to the ballfield, some of the roads, and a portion of the sluice trench material.
- Over 16,000 cy of material were hauled off the ballfield or the sluice trench to storage on site.

ASH DISPOSITION

- Loaded and transported 5 unit trains this week.
- Have loaded and transported 154 unit trains for a total of approximately 1,423,551 tons.
- In general, inclement weather (rain, snow and ice) continues to affect loading operations at Kingston. Heavy rains at the landfill in Alabama continue to create wet conditions that impact the unloading and landfilling operation.
- Continued inspection and maintenance of the rail in the rail yard.
- Continued monitoring moisture content of the ash and putting polymer in rail cars prior to shipping to Alabama.
- Completed installation of rail modification Track #1 tie to yard tracks.

CENOSPHERE RECOVERY

- The barge mounted excavator and three boat crews worked in the Tennessee River addressing Outreach calls. A four-boat crew worked in the Emory River cleaning cenospheres and debris from booms.
- The northern river closed signs and booms were moved north of Emory River Mile Marker 4.5 in anticipation of dredging in this section of the river.
- Crews continue to monitor the river for accumulations of ash, debris and 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.

SKIMMER WALL

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

DIKE REINFORCEMENT

- Dike C buttress work continued. Approximately 760 feet of haul road and 530 feet of slope have been completed.
- Material quality remained within specifications.
- Civil Projects added a second crew to help increase production.
- Stantec responded to a request from Civil Projects to pre-remove ash. Stantec has determined that the Factor of Safety will not be significantly impacted if material is removed to elevation 740' msl. The ability to pre-remove ash should help maintain productive in areas where thicker than planned ash has been encountered.
- 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, February 8th, and Friday, February 12th.
- 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 12/04/09 and 01/15/2010. 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, all detected concentrations of arsenic and selenium were less than the TDWS and F&AL.
 - On the Emory River, one arsenic detect from a sample collected on January 15 was approximately equal to the TDWS and selenium detects in surface water samples were less than the TDWS and F&AL.
- Daily monitoring of dredge plumes continued. Weekend dredging operations continued through both Saturday, February 13th, and Sunday, February 14th, so plume monitoring was performed on both days. 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

- This past week additional sediment sampling was performed by two vibracore crews from ERM 1.8 toward the south to further characterize for legacy (not related to the ash spill) constituents. A total of 13 cores and 23 samples were collected.

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. With extended periods of precipitation, PM2.5 measurements for the past week were well below the action level of 26 micrograms per cubic meter.

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

- No activity to report.

Non-Routine Sampling

- No activity to report.

FINAL REMEDIATION

- Prepared responses to TVA review comments on the SAP; planned to send revised document to EPA/TDEC on Monday, February 15, 2010 (complete).
- Prepared list of work packages for transition from Time Critical to Non-Time-Critical for submittal to EPA/TDEC.

DREDGE CELL

- Roughly 6000 cy ash were placed in the test embankment this week.

COMMUNICATIONS

Communications

- Posted to website: Weekly Report added and Weekly Area Resident Update information added.
- Finalized Dredge Report for site and plant employees.
- Worked on final revisions to Community Involvement Plan (CIP) Responsiveness Summary; continued revising CIP based on comments.
- Continued to handle daily calls from the news media.
- Prepared Kingston update information for the TVA Board meeting.
- Prepared presentation for Tennessee legislative committee appearance next week.

Outreach

- Prepared and mailed letter to residents living on Emory River to publicize the extension of the Emory River closure until May 15th.
- Prepared EE/CA Fact Sheet for mailing to Roane County residents with information on how to comment on the different alternatives.
- Guest speaker presented EE/CA information to two Roane State Community College classes, Kingston Optimist Club, and the Roane Alliance Joint Industrial Economic and community Development Board.
- Maintained Administrative Record.
- Continued to handle calls and visits from residents.
- Continued to gather comments on various administrative records.

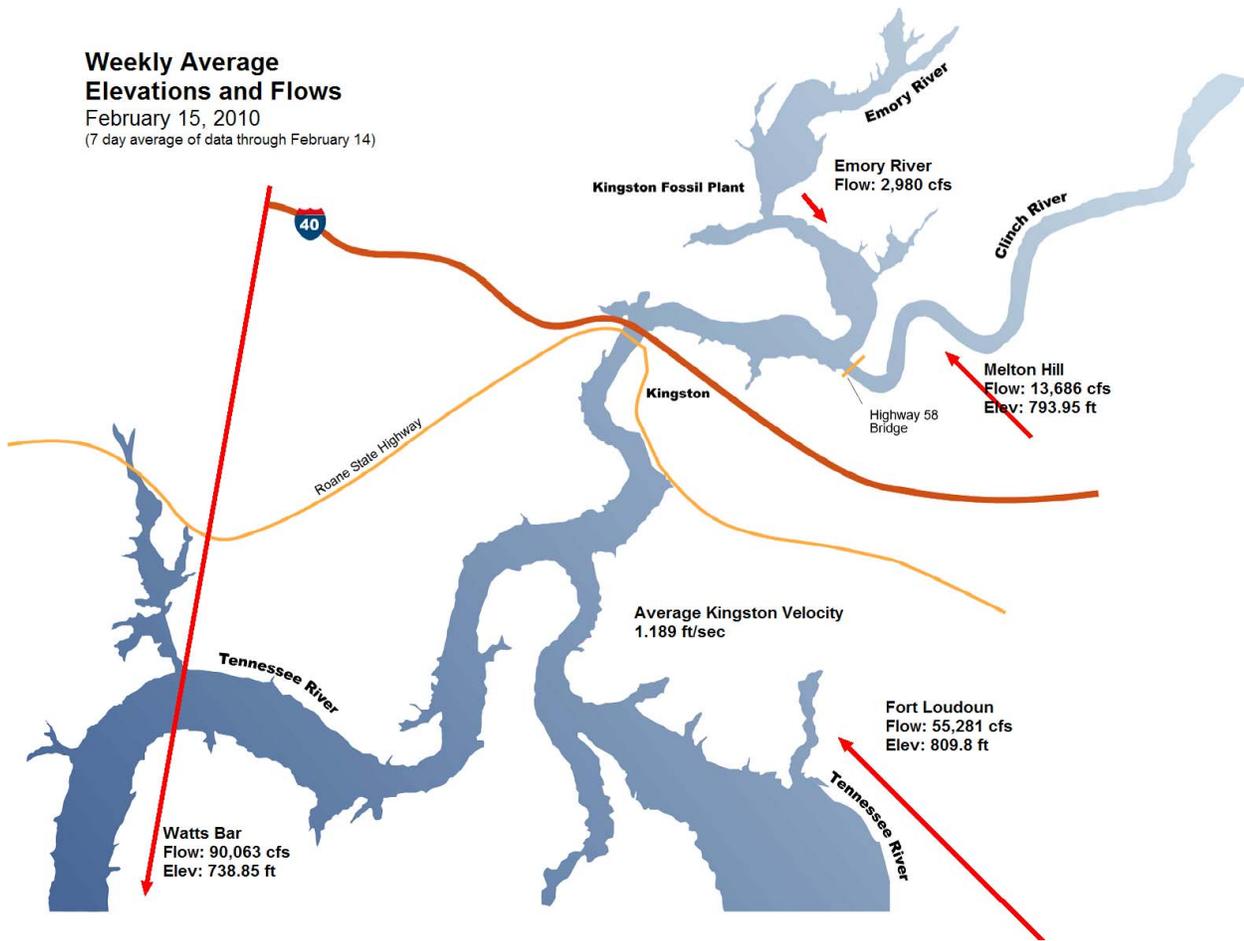
Government/Valley Relations

- Met with Rockwood Mayor about approved Foundation funds for Rockwood.

RIVER OPERATIONS

Weekly Average Elevations and Flows

February 15, 2010
(7 day average of data through February 14)



MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
02/15	0730	Environmental Meeting (ICP Conference Room)
02/15	0830	Risk Assessment (Team Room)
02/15	0900	Dike C Buttress Intake Channel (ICP Conference Room)
02/15	0900	Project Controls – Dike (Trailer #1 Meeting Room)
02/15	1000	Risk Assessment (ICP Conference Room)
02/15	1000	Aquatic Resources Studies (Team Room)
02/15	1130	Risk Assessment (Team Room)
02/15	1200	MACTEC Safety Meeting (Trailer #1 Meeting Room)
02/15	1400	Schedule Updates (ICP Conference Room)
02/15	1400	Risk Assessment (Team Room)
02/15	1400	Blue Flag Procedure (Trailer #1 Meeting Room)
02/15	1500	Dredge Plan Quantities (ICP Conference Room)
02/16	0930	BCP Meeting (ICP Conference Room)
02/16	0930	Project Review Weekly Meeting (ICP Conference Room)
02/16	1000	TVA Weekly Communication Meeting (Old Team Room)
02/16	1300	Risk Assessment (Team Room)
02/16	1330	Dredge Team Meeting (ICP Conference Room)
02/16	1430	SPCC Training (ICP Conference Room)
02/17	0800	Time Critical Weekly Meeting (ICP Conference Room)
02/17	0900	Data Management Meeting (ICP Conference Room)
02/17	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
02/17	1300	Stantec Scope, Estimate, Invoice Review (Old ICP Conference Room)
02/17	1330	Risk Assessment (Team Room)
02/17	1330	Test America Weekly Call (Conference Call)
02/17	1430	QAPP Training (ICP Conference Room)
02/17	1500	TA Selection for CAG (Team Room)
02/18	0730	Environmental Meeting (ICP Conference Room)
02/18	0800	SPCC Training (ICP Conference Room)
02/18	0900	LTD Project Controls (Team Room)
02/18	0930	Nuvison Eng. Tegratuff Fly Ash Solution (ICP Conference Room)
02/18	1000	Progress Meeting (Team Room)
02/18	1000	Pace Telecon (Conference Call)
02/18	1130	HSE Staff Meeting (ICP Conference Room)
02/18	1300	Jacobs OPR (ICP Conference Room)
02/18	1400	SOP Meeting (Old Team Room)
02/19	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
02/19	1300	SPCC Training (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)

Kingston Recovery Project		Date: February 8-14, 2010		Field Report	
Safety*				Weekly Total	Cumulative Total
Near Misses				1	36
First Aid Incidents				0	29
Recordable Incidents				1	8
Lost Time Incidents				1	7
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)		1,195	93,149
Total		Tons of Light Debris		0	959.57
Cenosphere Slurry		Gallons		177,000	11,937,000
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	171,645	
TVA	Air – Fixed	1,643	--	2,237	
TVA	Surface/Utility Water	3,049	25,583	126,292	
TVA	Ground Water (spring and well)	71	794	2,945	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	154	316	2,922	
TVA	Biota	632	1,545	15,615	
*Week ending 2/12/10					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru February 14, 2010 (see Note)			33,692	2,038,129
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			12,000	578,029**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			68,311	1,423,551

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 February 14th

