

KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

February 15-21, 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
ERT - Environmental Resources
Geographic Information & Engineering

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HIGHLIGHTS
<ul style="list-style-type: none">• Cumulatively, just over 2,656,000 cubic yards of ash have been removed from the river and east of Dike 2.• To date, 160 unit trains, with a total of approximately 1,477,760 tons, have been loaded and transported to Alabama.• The draft of the Sampling and Analysis Plan for the River system was sent to EPA/TDEC on Monday, February 15th.• TVA General Manager of the project reported on the progress of the ash recovery project at the end of one year to the Tennessee joint legislative committee.• TVA General Manager of the project presented EE/CA information to two Roane County Senior Citizen groups.• Attended and presented site updates to the Roane County Long Term Recovery Committee (LTRC).
SAFETY
<p><u>Program Summary</u></p> <ul style="list-style-type: none">• 41 site specific HSE orientations conducted for the week, 1,293 to date.• 3 Safety Observation Reports submitted for the week: 754 to date; 538 of which have been closed. <p><u>Recordable Incidents</u></p> <ul style="list-style-type: none">• February 18, 2010 – a Severson equipment operator was bending over in the cab of the excavator to pick up an eight ounce bottle of water he was going to use to wash off the cab window. As he reached for the bottle, the operator stated he “twisted” his back. <p><u>Non-Recordable Incidents</u></p> <ul style="list-style-type: none">• February 17, 2010 – Severson employee entered the water after the skiff he was towing sank.• February 19, 2010 – The axle on a MACTEC JLG (articulated man basket) broke resulting in no injuries.
INFRASTRUCTURE/ASH MANAGEMENT
<ul style="list-style-type: none">• Continued with dust suppression activities, road maintenance, and HAZWOPER controls.• Just under 5,600 cy of ash were moved east of Dike 2 to storage or the ballfield.• Confirmation sampling of the northern portion of the east embayment began this week. So far, there is no evidence of remaining ash. This effort should be completed next week.• Offsite utilities contractor continued installation of 10” waterline between I-40 and Swan Pond Road crossing – 1,100 feet of piping installed.
ASH DREDGING & PROCESSING
<ul style="list-style-type: none">• Approximately 34,392 cy of ash were removed from the river. Pipeline and booster pumps were installed for the fourth dredge.• Effluent from the ash pond dredges were sent to the lateral expansion area and the filter presses. The effluent from the lateral expansion area indicates that the flow is beginning to bypass settling. The hours the dredge is pumping to the area have been reduced.• Eleven filter presses were operational throughout the week. The cake consistency and cycle time were within committed levels and the presses are operating as designed.• Lime was brought on site and used to treat the sluice trench material and ash from the filter presses.• Roughly 46,000 cy of material were hauled off the ballfield or the sluice trench to storage on site. The extra push on offloading the ballfield has resulted in much improved conditions there.
ASH DISPOSITION
<ul style="list-style-type: none">• Loaded and transported 6 unit trains this week.• Have loaded and transported 160 unit trains for a total of approximately 1,477,760 tons.• Improved weather allowed for increased loading and unloading operations.

- 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.

CENOSPHERE RECOVERY

- Three boat crews worked in the Tennessee River resolving Outreach calls. One boat crew worked in the Emory and Clinch Rivers cleaning booms and checking on public areas
- Water levels appear to have stabilized at ~736.5' MSL and flows have returned to normal levels. The rivers visually appear to be in good shape with limited debris and cenospheres.
- Received an Outreach call from the Sportsman Cove area regarding impacts of the new river closed area and the initiation of dredging in that area. The community group is working the call.
- Crews continue to monitor the river for accumulations 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 610 feet of slope have been completed.
- Material quality remained within specifications.
- Civil Projects added a second crew to help boost production.
- Work conditions remain tight and Civil Projects is working on ways to better improve their ability to haul out ash while bringing in buttress material.
- Addendum 001 was issued to EPA to approve the change to the specifications for in-place material.
- Continued to monitor the dikes on a daily basis.

ROUTINE MONITORING

Surface Water Sampling

- On Monday February 15th, boat ramp conditions were too icy to safely launch the sampling boats. Alternatively, the automated sampler at ERM 0.5 was activated to collect a set of 4 samples over the 24-hour period ending on Tuesday, February 16th. These samples were split with the EPA contractor. Routine surface water monitoring at the ten fixed river locations occurred on Friday, February 19th, as scheduled.
- 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 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 15th 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. 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 completed by the vibracore crew from ERM 1.8 to the south to further characterize for legacy (not related to the ash spill) constituents. Over the past two weeks, a total of 31 cores were sampled for analysis to supplement the 24 cores that were sampled from ERM 0.0 to ERM 1.0 in December and January.

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. One hourly measurement of 26 micrograms was recorded on February 17th. This result appeared consistent with a visual observation of a steam plume resulting from lime application that may have mobilized some fine particulates. The application process was altered and subsequent hourly measurements dropped to around 10 micrograms per cubic meter. Overall, 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

- Sampling to verify that all ash has been removed from the north end of the East Embayment was initiated on Friday, February 19th. Samples are being collected and sent to a laboratory for microscopic evaluation for the presence of ash particles. Sampling is scheduled to be completed the week of February 22nd.
- The monthly TCLP, radiological, and paint filter samples were collected from railcars on February 18th.

FINAL REMEDIATION

- The draft of the Sampling and Analysis Plan for the River system was sent to EPA/TDEC on Monday, February 15th.

DREDGE CELL

- Roughly 3,000 cy of ash were placed in the test embankment this week. Wet conditions kept hauling from occurring most days.

COMMUNICATIONS

Communications

- Posted to website: Weekly Report, Public Meeting transcript and video, River Closure Extension information, and Weekly Area Resident Update information.
- Delivered Dredge Report to site and plant employees.
- Updated bulletin boards at boot-wash stations site-wide.
- Worked on final revision to the Community Involvement Plan (CIP) Responsiveness Summary; continued revising CIP as appropriate based on comments from the public.
- Continued to handle calls from the news media.

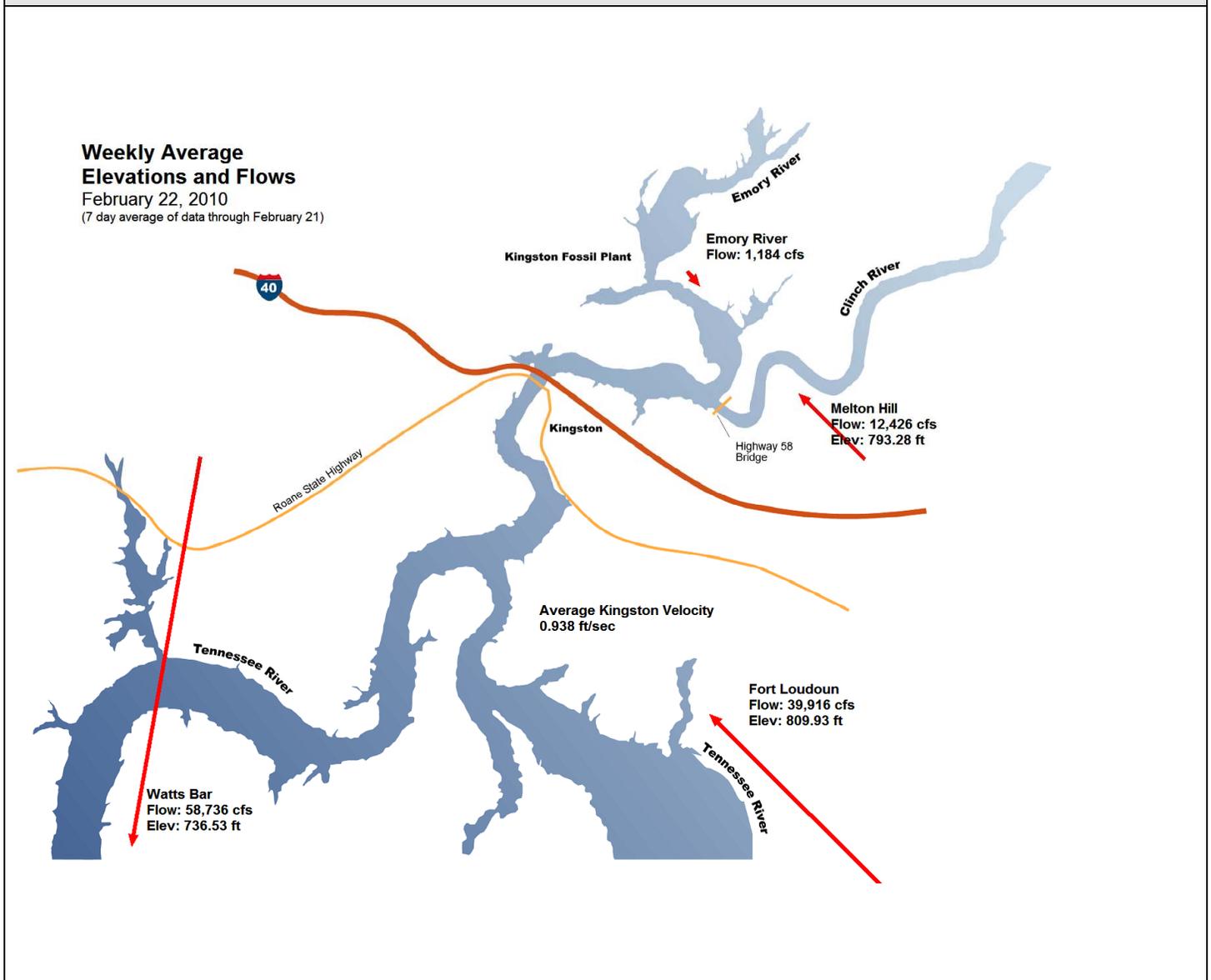
Outreach

- Amended EE/CA Fact Sheet for mailing to Roane County residents with information on how to comment on the different alternatives.
- Sent information on KIF and site Emergency Notification System test to all site and plant employees, members of the CAG, and to Swan Pond Road residents.
- Provided various updates on utility installation and site activities to the Community Advisory Group, local officials and Swan Pond road residents.
- Updated Administrative Record with work plans.
- Continued to handle calls and visits from residents.
- Continued to gather comments on various administrative record documents.

Government Relations

- Coordinated TVA's participation in presentation before a joint committee of the TN General Assembly.
- Attended meeting with recovery staff, Kingston Mayor Beets and Kingston City Manager Jim Pinkerton to discuss water line project.
- Gave project update to the Roane County Long Term Recovery Committee.

RIVER OPERATIONS



MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
02/22	0730	Environmental Meeting (ICP Conference Room)
02/22	0800	PMP Meeting (Old ICP Conference Room)
02/22	0830	Risk Assessment (Team Room)
02/22	0900	Dike C Buttress Intake Channel (ICP Conference Room)
02/22	0930	MACTEC Standby Meeting (Team Room)
02/22	1000	Risk Assessment (ICP Conference Room)
02/22	1000	Aquatic Resources Studies (Team Room)
02/22	1300	Risk Assessment (ICP Conference Room)
02/22	1300	Interactive Planning Meeting – Ash Loading Process (Team Room)
02/22	1400	Schedule Updates (ICP Conference Room)
02/23	0800	PMP Meeting (Old ICP Conference Room)
02/23	0800	Accident Investigation Team (Team Room)
02/23	0800	SPCC Training (ICP Conference Room)
02/23	0930	BCP Meeting (ICP Conference Room)
02/23	1000	TVA Weekly Communication Meeting (Team Room)
02/23	1000	River System Investigation (Old ICP Conference Room)
02/23	1030	Project Review Weekly Meeting (ICP Conference Room)
02/23	1300	Air Filter Lab Review (Team Room)
02/23	1330	Dredge Team Meeting (ICP Conference Room)
02/23	1430	Focus Review (ICP Conference Room)
02/23	1430	Project Governance (Team Room)
02/24	0800	Time Critical Weekly Meeting (ICP Conference Room)
02/24	0800	PMP Meeting (Old ICP Conference Room)
02/24	0900	Data Management Meeting (ICP Conference Room)
02/24	1100	MRC Environmental & Safety Meeting (ICP Conference Room)
02/24	1200	Stantec (Trailer #1 Meeting Room)
02/24	1300	Engineering Alignment Meeting (Old ICP Conference Room)
02/24	1330	Test America Weekly Call (Conference Call)
02/24	1430	FY10 TVA KIP Forecast (ICP Conference Room)
02/25	0730	Environmental Meeting (ICP Conference Room)
02/25	0800	PMP Meeting (Old ICP Conference Room)
02/25	0900	FLAC Analysis Status Meeting (ICP Conference Room)
02/25	0900	LTD Project Controls (Team Room)
02/25	1000	Skimmer Wall Debris Removal (Team Room)
02/25	1000	Pace Telecon (Conference Call)
02/25	1130	HSE Staff Meeting (Old ICP Conference Room)
02/25	1400	SOP Meeting (Old Team Room)
02/25	1700	SPCC Training (ICP Conference Room)
02/26	0800	PMP Meeting (Old ICP Conference Room)
02/26	0900	Jacobs Senior Managers Meeting (ICP Conference Room)
02/26	1000	SPCC Training (ICP Conference Room)
02/26	1200	Francis Quentin – Avakian Video (Team Room)
02/27	1100	Safety Orientation (Team Room)
Daily	0730	Site Safety Orientation (Old Team Room)
Daily	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

Kingston Recovery Project		Date: February 15-21, 2010	Field Report		
Safety*			Weekly Total	Cumulative Total	
Near Misses			1	38	
First Aid Incidents			1	29	
Recordable Incidents			0	8	
Lost Time Incidents			0	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)		1,391	94,540	
Total	Tons of Light Debris		0	959.57	
Cenosphere Slurry	Gallons		156,000	12,093,000	
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	171,645	
TVA	Air – Fixed	1,673	--	2,267	
TVA	Surface/Utility Water	3,125	26,303	129,710	
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	637	1,561	15,757	
*Week ending 02/19/10					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards thru February 21, 2010 (see Note)			34,392	2,072,521
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			5,600	583,629**
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			54,209	1,477,760

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 21st

