

KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT

July 19-25, 2010

Aerial Image of Kingston Ash Slide (05/19/2010)



Date of map imagery: 05/19/2010

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KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

July 19-25, 2010

HIGHLIGHTS

- To date, 298 unit trains have been loaded and approximately 2,876,600 tons of ash has been transported to Uniontown, Alabama.
- Mayse Construction completed most of the utility work on Swan Pond Road and the road was reopened to public traffic on July 23, 2010.

SAFETY

Program Summary

- Twelve (12) site specific HSE orientations were conducted for the week – 1,642 to date. One hundred twenty (120) HSE Site Orientation refresher courses have been conducted to date.
- Fifteen (15) Safety Observation Reports were submitted for the week – 1,192 to date; 1,138 have been closed.
- Seventeen (17) WBGT (Wet Bulb Globe Thermometer) weather alerts were issued last week. These are issued to alert supervisors of the current heat level so they can evaluate their crews for physical effort, PPE requirements and acclimation to determine appropriate maximum stay times and associated work/rest regimens.
- The last recordable injury, a bee sting, occurred on July 9, 2010.

First Aid Incident:

- July 19, 2010 – A TVA employee was stung by a bee. The bite was treated topically at First Aid and the employee returned to work.

INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Mayes Construction continued installation of the offsite utilities with 90% complete.
- Continued to dry ash in the ballfield.
- Moved ash from the west storage, relic area and test pad areas to the trains.
- Continued using the clamshell and dragline to remove and stack material from the Sluice Trench.
- Continued recovering cenospheres from the onsite ponds. Responded to outreach calls as received.

ASH DREDGING & PROCESSING

- Continued preparation of the draft On-Scene Coordinator (OSC) Report in concert with EPA.
- Submitted demobilization work plans for Severson support facilities, Bob Summers Road dredging, and sheet pile removal from the Rim Ditch.
- All dredges have been dismantled. One dredge remains to be loaded on trucks for removal from site.
- Continued decontamination and demobilization activities on the filter presses and on heavy equipment.
- Confined space entry crews continued cleaning ash from the interior of TVA material barges.

ASH DISPOSITION

- Loaded and transported seven (7) unit trains this week.
- Have loaded and transported 298 unit trains for a total of approximately 2,876,600 tons.
- Two short trains (84 cars each) were shipped this week to allow the Uniontown operation to eliminate bunching at the landfill.
- The rail in the yard is being monitored continuously for alignment issues due to the high temperatures and multiple trains moving.
- Continued monitoring moisture content of the ash and placing polymer in rail cars prior to shipping to Alabama. The moisture content is such that some cuts of cars are being shipped without polymer.
- Continuing to work with the Plant to minimize the impact of the delivery of coal trains, limestone cars, ammonia cars, and the loaded and empty ash trains.

SKIMMER WALL

- Aquarius Marine LLC, the Skimmer Wall Removal contractor, is mechanically dredging the Intake Channel skimmer area for ash and debris. The debris removal work is 70% complete.

DIKE REINFORCEMENT

- Construction on Segment C is suspended until November 2010.
- Stantec continued to work on finalizing design effort for the buttress.
- Jacobs continued to monitor the dikes at Kingston on a daily basis.

ROUTINE MONITORING

Surface Water Sampling

- Routine surface water samples were collected at 10 fixed locations on the Emory, Clinch, and Tennessee Rivers on Monday, July 19th. Triggered by local rainfall >1.0", all 10 river locations were also sampled on Tuesday, July 20th. The automated sampler at ERM 0.5 was also activated to collect samples. Local rainfall again exceeded 1.0" on Thursday, July 22nd, and the automated sampler at ERM 0.5 was activated, with all 10 fixed locations sampled on Friday, July 23rd.
- 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.
- Noteworthy results are reported below for Fixed River Location samples collected between 05/04/2010 and 06/04/2010. Comparisons to the F&AL are performed for dissolved concentrations only.
 - On the Tennessee River, arsenic was detected in 12 of 13 samples and selenium (dissolved) was detected in one sample. Arsenic and selenium concentrations were both well below the TDWS and F&AL criteria. Thallium was not detected in any Tennessee River sample. Dissolved copper previously reported as detected in one sample exceeding the F&AL was determined to be a non-detect during data validation.
 - On the Clinch River, arsenic was detected in 40 of 40 samples and selenium detected in 3 of 40 samples at concentrations well below the TDWS and F&AL. Total and dissolved thallium was detected in 1 of 40 samples and exceeded the TWQC (0.00024 mg/L).
 - On the Emory River, arsenic was detected in 43 of 49 samples and selenium was detected in 10 of 49 samples. Two detected arsenic concentrations exceeded the TDWS. All detected selenium concentrations were less than the TDWS and F&AL. Thallium was detected in 4 of 49 samples and all detected concentrations exceeded the TWQC. Dissolved copper was detected in 28 of 49 samples with one concentration collected at ERM 12.2 reported as exceeding the F&AL rejected during validation. Lead was detected in 32 of 49 samples, with one sample from ERM 2.1 exceeding the TDWS.
- Swan Pond Embayment surface water sampling continued routinely twice per week at two locations along the Swan Pond Embayment drainage. Additional embayment sampling occurred on July 19th, triggered by local rainfall exceeding 0.5". On July 22nd, routine embayment samples were collected in the morning and an additional round of samples collected in the afternoon following a local rainfall exceeding 0.5". The automated sampler in the embayment was also activated as a preliminary run for transition to the revised surface water monitoring plan implementation by mid-August.
- Automated samplers are being located in the Emory and Clinch Rivers; and in the Swan Pond Embayment in preparation for implementation of the Non-Time Critical Surface Water Monitoring Plan. Approval of that plan by EPA and TDEC is pending.

Sediment Sampling

- None to report.

Air Sampling

- Air monitoring results, including fixed-station and real-time monitoring results are below ambient air quality criteria.
- TVA currently operates six real-time PM2.5 instruments: a tapered element oscillating microbalance (TEOM) PM2.5 instrument at Lakeshore Drive (PS07); and PM2.5 Beta Attenuation Monitors (BAM) at the northern-most reach of work in the North Embayment (PS13); PS05; PS07; PS08 and PS09. When the revised Air Monitoring Plan is approved, the TEOM will be converted to PM10 and relocated to PS09. PM2.5 average measurements at all stations for the past week were below the action level of 26 ug/m3 averaged over a 24-hour period.
- EPA Region 4 approval of the revised Air Monitoring Plan was received on Friday, July 23rd.

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

- Turtle trapping and sampling will be continuing over the next several weeks.
- A meeting was held on July 22, 2010 to update the status of all ongoing biota sampling and analysis. The objectives included identification of inter-linkages and assimilation of results that can be used to meet over-arching data needs.

Non-Routine Sampling

- None to report.

RIVER RESTORATION

- Began roto-sonic drilling and bedrock well installation in the Dredge Cell/Ash Pond.
- Began laboratory testing of ash and lime-ash mixtures (both permeability and leaching tests).
- Began cursory 3-D MODFLOW groundwater analysis (long-term steady-state) to support Stantec design of the Dredge Cell closure, including perimeter wall and capping.

DREDGE CELL

- Continued discussions with Stantec as the Engineer-of-Record for the Dredge Cell regarding the design basis for the working platform and ash stacking. Received a draft white paper describing a new configuration of the dredge cell subgrade and construction specifications for ash placed below a gravel "capillary break".
- Began installation of soil-cement columns as part of the Deep Soil Mixing pilot test. Encountered difficulties during a safety shutdown due to lightning in that the cement hardened around the shaft of the auger and in the grout tubes, which damaged the equipment and compromised the first test column. Successfully installed a total of one additional column. Held discussions with Stantec and Recon regarding requirements for advancing the pilot test working platform for the 2nd row of soil-cement columns. Received draft recommendations for additional sampling (daily unconfined compressive strength tests for 14 days) to support rig foundation bearing capacity analysis.

PLANT ASH DISPOSITION

- Civil Projects operated the rim ditch, sluice trench, and ash pond areas to remove plant-generated ash and process it for disposal.

EMBAYMENT ASH PROCESS

- Civil Projects continued the ash consolidation in the north embayment. It is just over 72% complete.
- Continued excavation of Swan Pond Circle Road underpass. Civil Projects along with EarthTec began installation of the panels.
- The underpass design/fabrication/construction is 40% complete.

COMMUNICATIONS

Communications

- Posted to Website: Weekly Report and Weekly Area Resident Update.
- Sent weekly update to the CAG and one to members of the public who have signed up to receive it.
- Continued to handle calls from the news media.
- Worked on new Dredge Report for site and plant employees.
- Submitted bi-weekly column to Roane County News.
- Worked with representatives from communications, environmental and creative services on web site redesign and accessibility.
- Prepared newspaper ad for Roane County News and The Shopper for the next upcoming public meeting.
- Submitted revised Community Involvement Plan with information about the Engineering Evaluation/Cost Analysis and Action Memorandum to EPA.

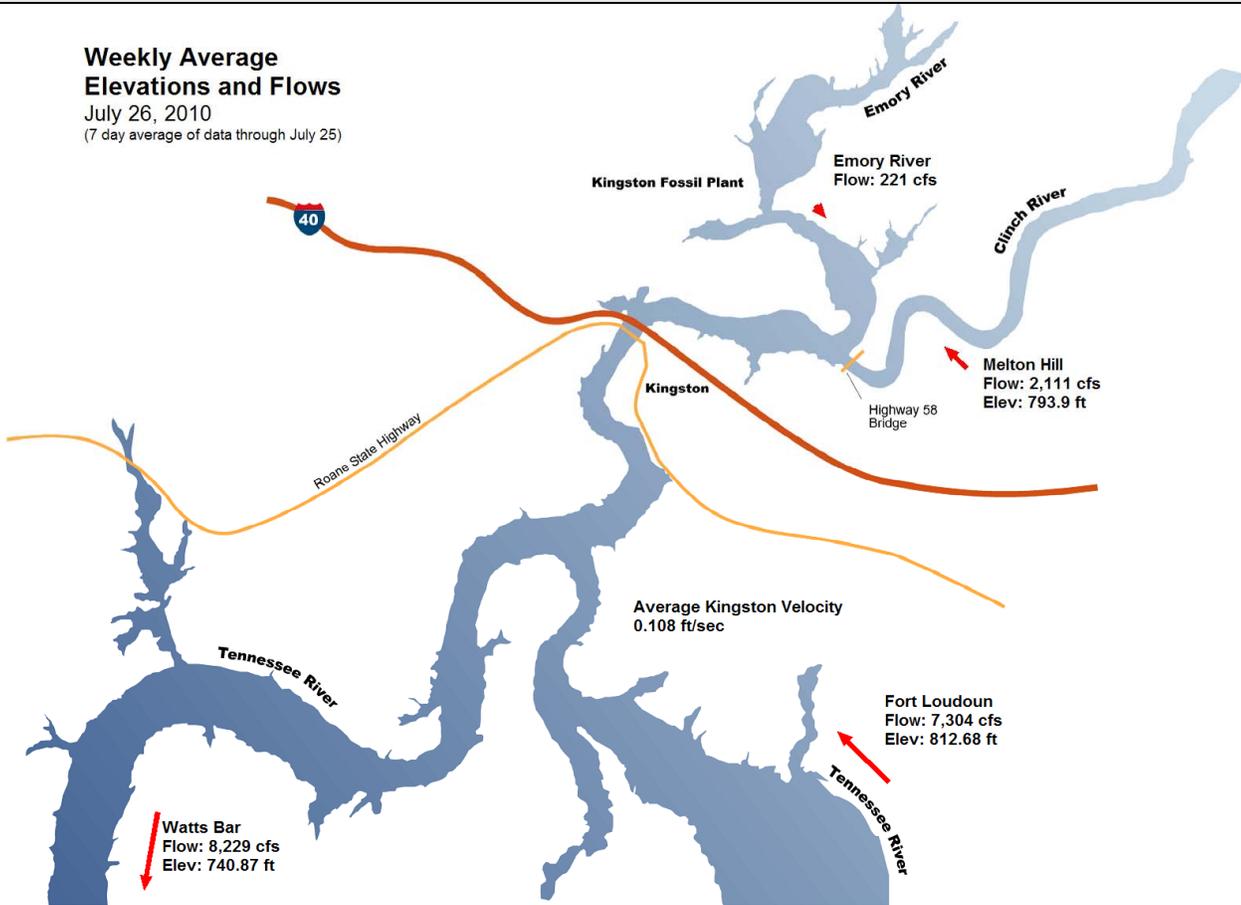
Outreach

- Provided updates to employees, customers, residents, and public officials about site activities.
- Updated Administrative Record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.
- Updated site bulletin boards with information regarding safety and site activities.

RIVER OPERATIONS

Weekly Average Elevations and Flows

July 26, 2010
(7 day average of data through July 25)



MEETINGS/CONFERENCE CALLS		
Date	Time	Subject
07/26	0800	Environmental Meeting (ICP Conference Room)
07/26	1000	Aquatic Resources Studies (Team Room)
07/26	1000	Stantec White Plan
07/26	1100	Jacobs Senior Managers Meeting (ICP Conference Room)
07/26	1300	Environmental Staff Meeting (Team Room)
07/26	1400	Schedule Updates (ICP Conference Room)
07/26	1500	Financial Controls (Trailer 1 Meeting Room)
07/27	0800	Readiness Review for NTC Surface Water Monitoring (ICP Conference Room)
07/27	0930	BCP Meeting (ICP Conference Room)
07/27	1100	Jacobs Monthly Staff Meeting (ICP Conference Room)
07/27	1300	Jacobs ORP (ICP Conference Room)
07/27	0930	Communications (Team Room)
07/27	1000	TVA Weekly Communications Meeting (Team Room)
07/27	1300	MAXIMO Trend Codes (Team Room)
07/28	0900	Non-Time-Critical Weekly Meeting (ICP Conference Room)
07/28	1100	MRC Meeting (ICP Conference Room)
07/28	1400	TVA, Jacobs, Stantec Status/Issues Meeting (ICP Conference Room)
07/28	1330	Test America Weekly Call (Conference Call)
07/28	1430	Data Management Meeting (ICP Conference Room)
07/29	0900	EarthTec Meeting (ICP Conference Room)
07/29	0900	Kingston Update (Team Room)
07/29	1000	Pace Telephone (Conference Call)
07/29	1100	Environmental Webpage Committee (Old ICP Conference Room)
07/29	1130	HSE Staff Meeting (ICP Conference Room)
07/29	1400	OSC Report (ICP Conference Room)
07/29	1400	SOP Meeting (Team Room)
Daily	0730	TVA Monitoring Wells Meeting (Trailer 1 Meeting Room)
Mon & Thur	0730	Site Safety Orientation (Old ICP Conference Room)
Daily	1500	Continuation of Dredge Progress & Contingency Plan (ICP Conference Room)
Tue & Thur	1600	Planning Meeting (ICP Conference Room)
Daily	1630	Ash Disposal Daily Recap (Team Room)

Kingston Recovery Project		Date: July 19-25, 2010		Field Report	
Safety				Weekly Total	Cumulative Total
Near Misses				0	26
First Aid Incidents				1	64
Recordable Incidents				0	17
Recordable Lost Time Incidents				0	12
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	263,004	
TVA	Air – Fixed	2,480	--	3,691	
TVA	Surface/Utility Water	4,204	36,782	178,645	
TVA	Ground Water (spring and well)	109	1,256	5.052	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	268	447	3,368	
TVA	Biota	1,203	2,778	31,301	
*Week ending July 23, 2010					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards (including mechanical dredging)			0	2,762,105
Ash Excavation (east of Dike 2)	Estimated Cubic Yards **Modified to an in-place volume			0	758,849
Ash Excavation (other)	Estimated Cubic Yards **Modified to an in-place volume			0	73,000**
Ash Disposal	Estimated Tons			70,200	2,876,600

Note: River dredging was completed on June 28, 2010.

Ash Loading to Trains - Weekly as of July 26th

