

KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT

June 28 – July 4, 2010

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



Date of map imagery: 05/19/2010

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Tennessee Valley Authority
Geographic Information & Engineering

Prepared by:
Mary McDermott

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KINGSTON ASH RECOVERY PROJECT

WEEKLY REPORT

June 28 – July 4, 2010

HIGHLIGHTS

- Site activities shut down for the 4th of July Holiday (July 3 – 5, 2010).
- Time Critical river dredging was completed on June 28, 2010.
- Cumulatively, just over 3,520,950 cubic yards of ash have been removed from the river and east of Dike 2.
- To date, 278 unit trains have been loaded and approximately 2,671,800 tons of ash has been transported to Uniontown, Alabama.
- EPA Region 4 personnel performed a quarterly audit of the air monitoring program this week and found no problems.

SAFETY

Program Summary

- Twenty (20) site specific HSE orientations were conducted for the week – 1,610 to date. Eighty (80) site specific HSE orientation refresher sessions have been conducted to date.
- Six (6) Safety Observation Reports submitted for the week – 1,177 to date; 1,124 have been closed.
- Fifteen (15) 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 was an insect bite to a SWS employee on May 13, 2010.

First Aid:

- 7/2/10 - While installing Tenzar and felt in the underpass excavation site, an employee stated he became stuck in the mud. While attempting to free himself, he strained his right knee. The injury was not reported until Tuesday morning. Treatment: cold pack, ibuprofen, bio-freeze, and ACE bandage. Employee returned to normal duties.

INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Mayes Construction continued installation of the offsite utilities with 81% complete.

ASH DREDGING & PROCESSING

- A total of 1,188 cy of ash were removed from the river this week by Severson. One dredge operated for one day.
- Time Critical river dredging was completed on June 28, 2010.
- Demobilization of the filter press area continues.
- Work continued dipping from the rim ditch and sluice trench and dredging from the ash pond through June 30th.
- Efforts continued in the ballfield to move ash to the tracks and to dry the windrows through June 30th.

ASH DISPOSITION

- Loaded and transported five (5) unit trains this week.
- The weekly inspections of the rail in the yard continue and the recommendations evaluated and necessary work will be scheduled for completion.
- Continued monitoring moisture content of the ash and placing polymer in rail cars prior to shipping to Alabama.
- Working with the plant to minimize the impact of the delivery of coal trains, limestone cars, ammonia cars, and the loaded and empty ash trains.

CENOSPHERE RECOVERY

- River crews responded to three outreach calls on the Tennessee River. Cenospheres were light at all locations.
- SWS completed their reduction in forces. SWS will have one VTU crew to respond to outreach calls and one onsite crew working the Intake Channel until conditions allow the river crew to work both locations.
- Crews spent extra time on Friday to ensure the park areas were clean for the holiday weekend.
- Onsite crews worked on removing cenospheres from Intake Channel and the ponds.

- With the removal of construction roadways and the opening of the east embayment there have been an increased amount of cenospheres in the back of the cove. Crews cleaned the area and will continue to monitor.

SKIMMER WALL

- Aquarius Marine LLC, the Skimmer Wall Debris Removal contractor, completed removal of the third and last caisson and removal of fifteen (15) concrete beams from the Intake Channel. Aquarius decontaminated the A-frame barge and a barge containing the concrete caissons and beams in preparation for sending them off the project. Aquarius is making preparations for removal of the remaining beams.

DIKE REINFORCEMENT

- Construction on Segment C is suspended until November 2010.
- MACTEC continued installation of piezometers along Dike C as part of the AECOM's recommendations. Three of the six locations have been completed.
- Stantec continues to work design efforts for Segments A & B.
- Jacobs continues 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, June 28th, and Friday, July 2nd.
- 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 04/02/2010 and 05/28/2010. Comparisons to the F&AL are performed for dissolved concentrations only.
 - On the Tennessee River, arsenic was detected in 12 of 22 samples and selenium 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 was detected in a sample collected on May 21st at a concentration (0.0232 mg/L) exceeding the F&AL (0.011 mg/L).
 - On the Clinch River, arsenic was detected in 66 of 74 samples at concentrations well below the TDWS and F&AL. Selenium was detected in 6 of 74 samples. Thallium was detected in 1 of 74 samples. All thallium detections exceed the TWQC (0.00024 mg/L).
 - On the Emory River, Arsenic was detected in 65 of 92 samples and selenium was detected in 12 of 92 samples. All concentrations were less than the TDWS and F&AL. Thallium was detected in five samples. All thallium detections exceed the TWQC (0.00024 mg/L). Dissolved copper was detected in 51 samples, one concentration collected at ERM 12.2 exceeded the F&AL. Lead was detected in 56 samples, one concentration (0.00569 mg/L) collected at ERM 2.1 exceeded the TDWS (0.005 mg/L).
- 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 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 continued routinely twice per week at two locations along the Swan Pond Embayment drainage area.
- The revised Non-Time Critical Surface Water Monitoring Plan was transmitted to TVA for submittal to EPA and TDEC.

Sediment Sampling

- Vibrecore sampling in support of dredging operations was concluded in the mouth of the embayment.
- Vibrecore sampling was performed along the Skimmer Wall area to obtain ash samples for cesium-137 analyses.

Air Sampling

- Air monitoring results, including fixed-station and real-time monitoring, 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 proposed 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 personnel performed a quarterly audit of the air monitoring program this week. A report will be forthcoming. EPA also reviewed the revised Air Monitoring Plan. Approval is expected next week.

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

- Monitoring of activity at bird boxes continues.
- Turtle trapping and sampling occurred last week and will be continuing over the next several weeks.

Non-Routine Sampling

- Waste oil drums were sampled for disposition.

FINAL REMEDIATION

- Held a Readiness Review for Leaching Test (ash and lime-treated ash) with Jacobs, RSI, TVA, and Laboratories.
- Held a teleconference with TVA fate and transport modelers and Stantec to coordinate groundwater modeling assumptions and schedules.

DREDGE CELL

- Held a series of meetings with TVA and Stantec to discuss Central Dredge Cell Working Platform design and phreatic surface.
- Stantec received the preliminary report on seismic velocity geophysical investigation.
- Continued ash re-contouring in the Central Dredge Cell to build the subgrade for the working platform.

PLANT ASH DISPOSITION

- Developed mass balance estimates for long-term ash management plan for TVA discussions with TDEC. Assisted TVA in preparing slides for those discussions.
- A meeting was held to discuss the plan for CP's operation of Rim Ditch, Sluice Trench, and Ash Pond following Severson.

EMBAYMENT ASH PROCESS

- Civil Projects continued the ash consolidation in the north embayment.
- Started excavation of Swan Pond Circle Road underpass and held a kick-off meeting with the bridge erection contractor, Midstate Construction.

COMMUNICATIONS

Communications

- Posted to Website: Weekly Report and Weekly Area Resident Update.
- Sent weekly update to members of the public who have signed up to receive it.
- Continued to handle calls from the news media.
- Prepared and distributed communication on Swan Pond Circle bypass paving work.
- Picked up and delivered Dredge Report to site and plant employees.
- Worked with WBIR TV reporter on an interview with TVA Environmental Scientist on the testing of birds to monitor the environmental effects of the ash spill.
- Prepared and submitted ad copy for time critical and non time critical work plans comment period to be published in the Roane County News and The Shopper.

Outreach

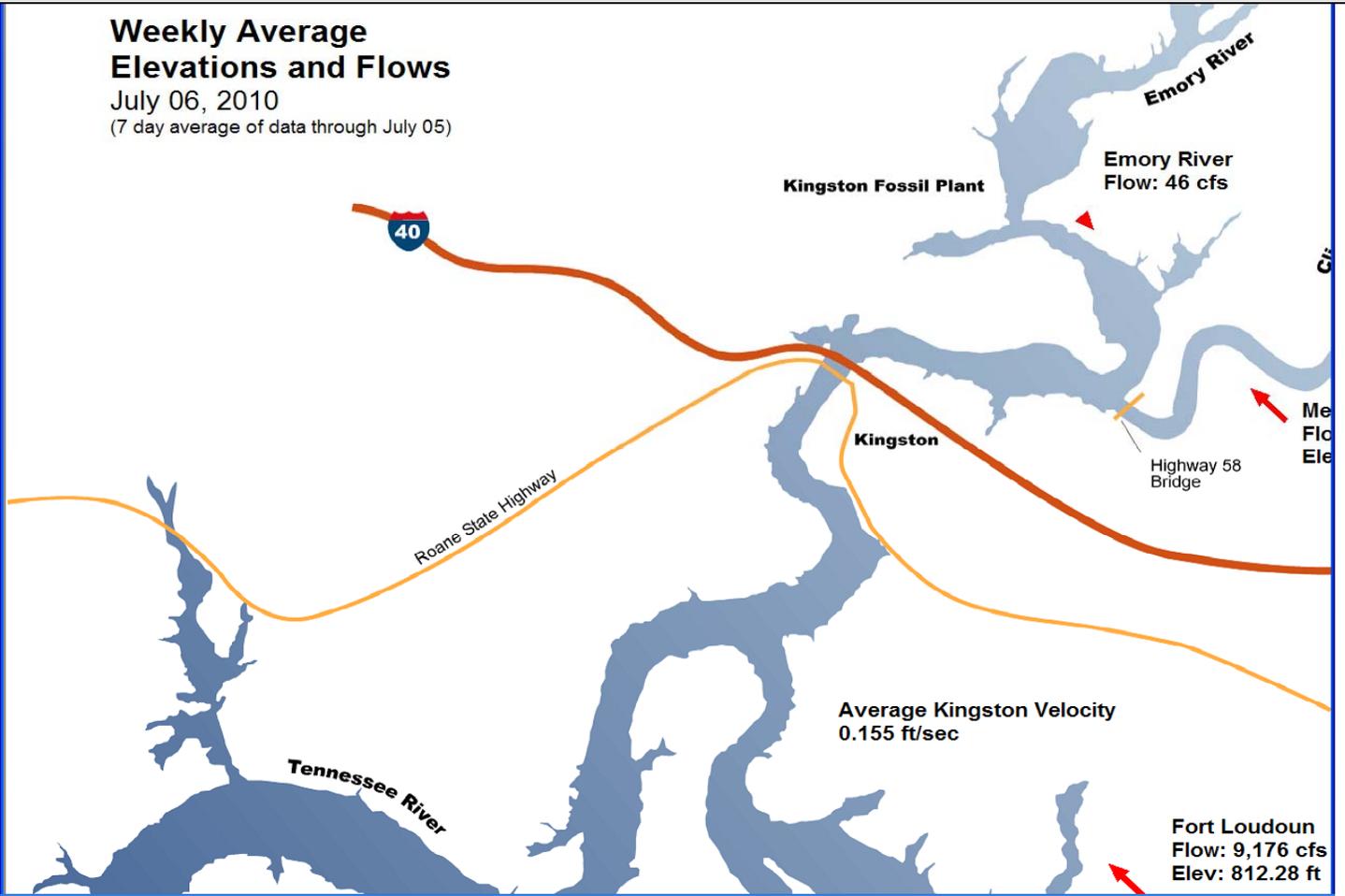
- Provided updates to employees, customers, residents, and public officials about site activities.
- Updated Administrative Record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.
- Updated message boards along Swan Pond Road announcing road construction areas.
- Attended Roane County Community Advisory Group monthly meeting.

RIVER OPERATIONS

Weekly Average Elevations and Flows

July 06, 2010

(7 day average of data through July 05)



MEETINGS/CONFERENCE CALLS

Date	Time	Subject
07/06	0930	BCP Meeting (ICP Conference Room)
07/06	0930	Communications (Team Room)
07/06	1000	TVA Communications (Team Room)
07/07	0900	Non-Time-Critical Weekly Meeting (ICP Conference Room)
07/07	1000	EOR Comments (Team Room)
07/07	1300	TVA, Jacobs, Stantec Status/Issue Meeting (ICP Conference Room)
07/07	1430	Supply Chain (Team Room)
07/07	1330	Test America Weekly Call (Conference Call)
07/07	1400	Dike and Dam Safety Meeting (Trailer 1 Meeting Room)
07/07	1430	Data Management Meeting (ICP Conference Room)
07/07	1430	Construction Organization Discussion (Trailer 1 Meeting Room)
07/08	0900	Monthly TDEC Meeting (ICP Conference Room)
07/08	1000	Progress Meeting Utility Project (Team Room)
07/08	1000	Pace Telephone (Conference Call)
07/08	1000	FCN/FCR/RFI Process (Old ICP Conference Room)
07/08	1100	Environmental Webpage Discussion (Team Room)
07/08	1130	HSE Staff Meeting (ICP Conference Room)
07/08	1230	Monthly TDEC Dredge Cell Design Status Meeting (ICP Conference Room)
07/08	1300	Construction Readiness Review (Trailer 1 Meeting Room)
07/08	1300	Accident Investigations (Team Room)
07/08	1400	SOP Meeting (Team Room)
07/08	1400	WMA (Trailer 1 Meeting Room)
07/09	1000	Shmierboc with State (ICP Conference 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: June 28 – July 4, 2010		Field Report	
Safety			Weekly Total	Cumulative Total	
Near Misses			0	50	
First Aid Incidents			0	37	
Recordable Incidents			0	11	
Recordable Lost Time Incidents			0	12	
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)		475	108,344	
Total	Tons of Light Debris		0	959.57	
Cenosphere Slurry	Gallons		63,000	14,403,000	
Environmental					
Org	Matrix	Samples*	Analyses*	Results*	
TVA	Air - Real-Time	--	--	250,382	
TVA	Air – Fixed	2,398	--	3,560	
TVA	Surface/Utility Water	3,985	34,506	168,298	
TVA	Ground Water (spring and well)	95	1,099	4,409	
TVA	Ash	78	104	1,689	
TVA	Soil/Sediment	267	445	3,342	
TVA	Biota	1,048	2,467	27,090	
*Week ending July 2, 2010					
Ash Dredging & Excavation				Weekly Total	Cumulative Total
River	Estimated Cubic Yards (including mechanical dredging)			1.188	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			51,300	2,671,800

NOTE: Total dredged from the river has been adjusted to include ongoing survey adjustments and all of Severson (current dredging contractor), TransAsh (prior dredging contractor), mechanical dredged from Severson and Aquarius, and TVA 4reported hydraulic and mechanical dredging to date.

Ash Loading to Trains - Weekly as of July 3rd

