

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

July 2011

Aerial Image of Kingston Ash Slide 07/06/2011
Water Surface Elevation : 740.67'



Date of Photography : 07/06/2011

Water Surface Elevation is the
Watts Bar Headwater Elevation
Tennessee Valley Authority
Geographic Information & Engineering

Prepared by:
Vickie Haynes

Issue (Date/Time)
08/11/2011 9:24:38 AM

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

July 2011

SAFETY

- Twenty-two (22) site-specific HSE orientations were conducted during July – 1,952 to date. Fifty-three (53) site-specific refresher courses were conducted during the month of June - 323 to date.
- One hundred twenty (120) Safety Observation Reports were submitted during July – 2,231 to date; 2,218 are closed.
- The last recordable incident occurred on December 22, 2010 and became a recordable on December 28, 2010.
- On July 1, 2011, a Virginia Tech field technician strained his shoulder when climbing into the skiff. The individual worked the rest of the day as well as Saturday and Sunday. On July 5, the employee went to the paramedic station for evaluation. Based on the description of injury, the paramedic referred him back to Virginia Tech to seek further medical evaluation. The doctor released and cleared the individual to return to work without prescriptions or limitations. Virginia Tech installed a boat ladder to provide better access in and out of the skiff.
- On July 5, 2011, a First Aid occurred when a GUBMK staff augmented laborer suffered a shoulder strain while mucking out the tracks on heavy equipment. The laborer's shovel became lodged between the track, roller, and the ash. In trying to free the shovel by twisting and pulling, the laborer felt a pop in his right shoulder and subsequent pain. The laborer was treated at the First Aid clinic and given instructions on how to care for his injury.
- On July 13, 2011, a GUBMK staff augmented Teamster was attempting to wet his load of rock by driving an articulating dump truck under the overhead water tank. He was using this as a means of dust control. The truck bed struck the tank because of a clearance problem. The tank is being evaluated for structural integrity. There were no injuries or environmental incidents. The investigation is ongoing and findings will be released as they become available.
- On July 25, 2011, a John Deere tractor pulling a set of pans was involved in a collision with an articulating dump truck. There were no injuries or environmental events as a result of this accident. The investigation is ongoing and findings will be released as they become available.
- Thirty-five (35) industrial hygiene personal air monitor samples were collected over 7 days and 13 Similar Exposure Groups (SEGs) during the month of July awaiting lab results.

INFRASTRUCTURE/ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.

ASH SLURRY & POND TSS CONTROL

- TVA Civil Projects dragline operated during the month of July and recovered 21,512 cubic yards of ash from the Sluice Trench.
- TSS sampling was performed throughout the ash slurry system. The total suspended solids (TSS) of the Sluice Trench discharge averaged 2,116 mg/L, the Main Ash Pond effluent TSS averaged 27.7 and the Stilling Pond effluent averaged 19.9 for the month.
- The plant effluent, Sluice Trench effluent, and Ash Pond effluent polymer addition rates were adjusted as necessary during the month.
- The 60% design package for the planned replacement Ash Pond outfall structure was received from Stantec on July 1, 2011 and review was completed. The 90% design package was received from Stantec on July 29.
- Data from the July 5 bathymetric survey was interpreted and new volumes calculated for each pond.

ASH PROCESSING / BALLFIELD PREPARATION

- Geosyntec completed installation of the Test Cell; completed lab tests and established target moisture and compaction for ash placement.
- Moisture reduction processing of the ash removed from the Sluice Trench was performed to ready ash for placement in the Interim Ash Storage Area.
- Plant ash placement was resumed on July 26 after receiving placement protocol from Geosyntec. July stacked total from truck count was 4,570 cubic yards. End of month total stored in the Interim Ash Storage Area from truck count is estimated as 13,321 cubic yards. Survey data and nuclear density testing will be used to more accurately calculate the placed tonnage in future reports.

- The number of KIF Plant units on line averaged 8.16 for the month and 9 units were operating at month's end.

DIKE REINFORCEMENT

- Completed the Skimmer Wall peninsula area.
- Completed removal of the causeway.
- The temporary siphons continue to function well.
- Civil Projects continued construction of the buttress in the Intake Channel.
- Approximately 5,115 feet (96%) of the buttress has been completed.

ROUTINE MONITORING

Surface Water Sampling

- There were rainfall events greater than 0.5" but less than 1" on July 4 and July 6 that triggered storm flow sampling in the Swan Pond Embayment only.
- There was a rainfall event greater than 1" that triggered storm flow sampling in Swan Pond Embayment and the Clinch and Emory Rivers on July 15.
- The Surface Water Plan was revised per negotiations with EPA/TDEC to eliminate storm flow sampling in the Emory and Clinch Rivers and remove the floating monitors from the rivers. Storm flow sampling will continue in Swan Pond Embayment when triggered by rainfall events >0.5 inches.
- Continued routine weekly surface water sampling at the Stilling Pond and Swan Pond Embayment.
- Continued daily pH and dissolved oxygen monitoring in the Dirty Water Ditch and the Settling Basin. The readings are collected twice a day and include run off ditches that empty into the Dirty Water Ditch.
- Continued daily TSS monitoring at the Sluice Trench, Ash Pond, and Stilling Pond

Air Sampling

- All air monitoring results for the month of July from the PM2.5 and PM10 TVA air samplers were below the current Ambient Air Monitoring Plan (AAMP) action levels.
- The Air Monitoring Plan is undergoing revision to reflect a significant reduction in scope of the required air sampling per agreements reached with TDEC and EPA.

Data Management

- The fish technical memorandum was issued to TVA for submittal to the regulators on July 21.

Biota Sampling

- Sample re-collection for the periphytometers is scheduled for week of August 5.

River System EE/CA Sampling and Analysis

- Continued weekly bulk replenishment water sampling in support of the bioassay testing for the Emory River.

Non-Routine Sampling

- Continued concurrence sampling in the North Embayment as sections are deemed ready by operational sampling.
- Continued geoprobe sampling in the North Embayment in support of the excavation operations.
- Collected drywall and siding samples from houses scheduled for demolition and submitted for lead analysis.
- Collected paint chip samples from several houses and barns scheduled for demolition and submitted for lead analysis.
- Assisted Duke University with research and development sampling and collected split samples from the Duke samples.
- Continued sample collection and on-site moisture testing in support of Dredge Cell and Ballfield operations.

DREDGE CELL

- Issued a revised set of technical specifications and quality control plans for construction of the Perimeter Wall Stabilization (PWS) for Segment 1 – North Dredge Cell (Dike C).
- Held a briefing with the regulators on the revised PWS design, including the revised specifications and QC plans.
- Completed installation of the shear walls for repair of the demonstration section of the PWS.
- Began construction of the full-scale PWS in the North Dredge Cell (Dike C), also referred to as Segment 1.
- Continued stacking in the central Dredge Cell.

LATERAL EXPANSION

- Began stacking ash in northern part of the Lateral Expansion.

NORTH EMBAYMENT

- Continued excavation of ash.
- Completed installation of clay berm for water diversion.
- Performed confirmation sampling and reporting process for verifying areas are clean of ash deposits.

COMMUNICATIONS

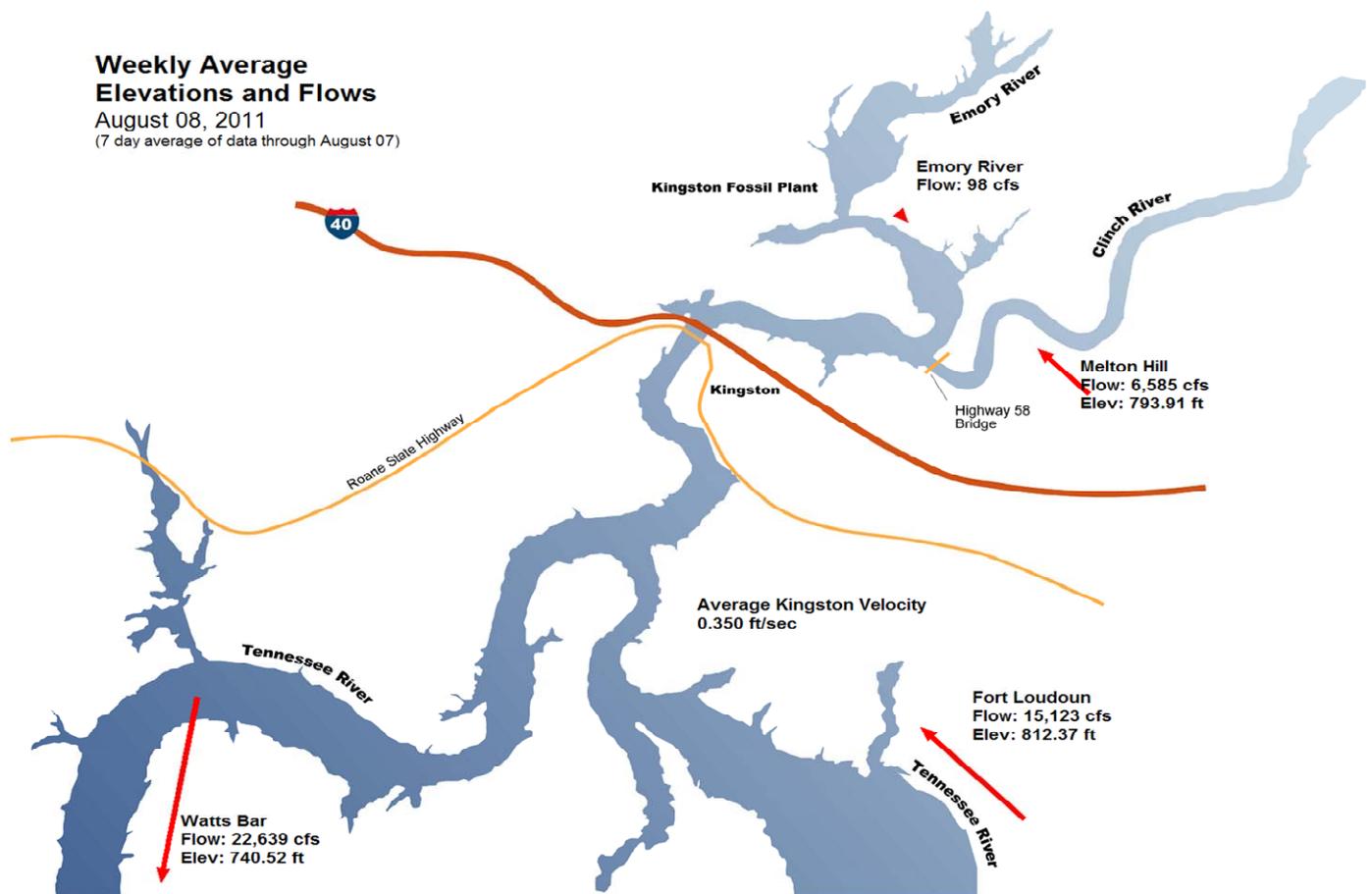
Communications:

- Added Weekly Dike C Reports and Weekly Area Resident Updates to Kingston Ash Recovery website.
- Sent weekly updates to the CAG, public officials and members of the public who have signed up to receive weekly emails.
- Updated Administrative Record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.
- Distributed *Inside the Cell* newsletter to site and plant employees.
- Updated site bulletin boards.

RIVER OPERATIONS

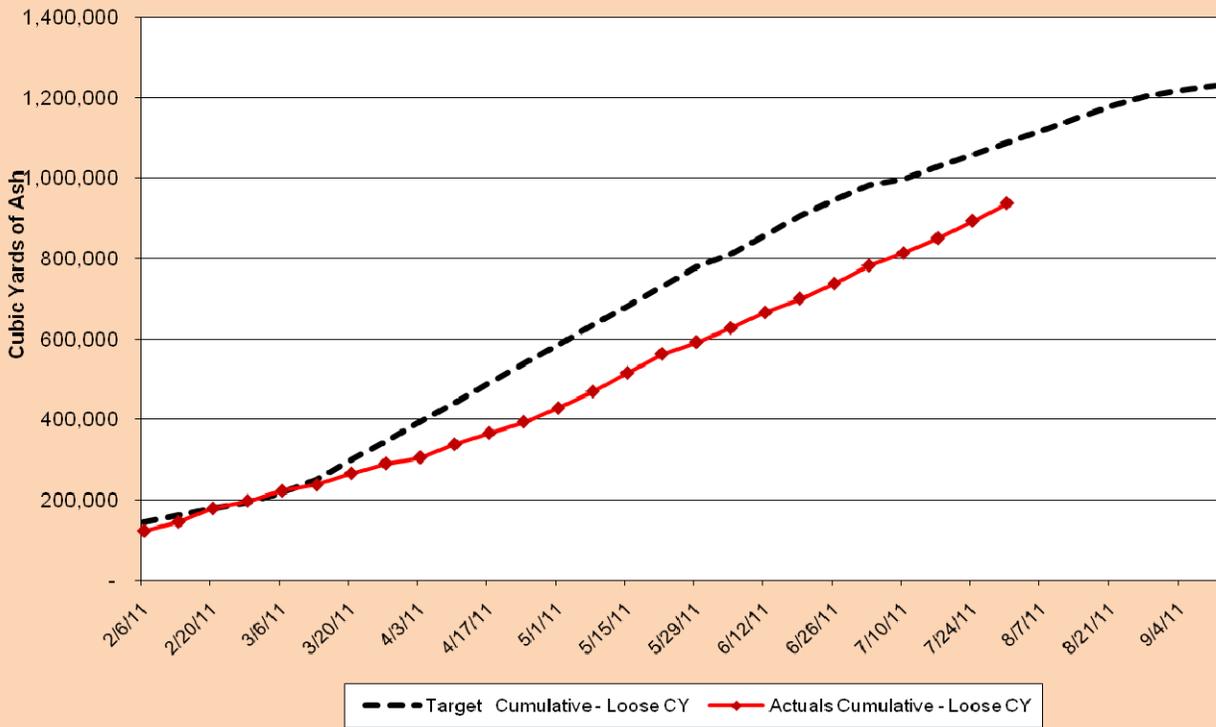
Weekly Average Elevations and Flows

August 08, 2011
(7 day average of data through August 07)

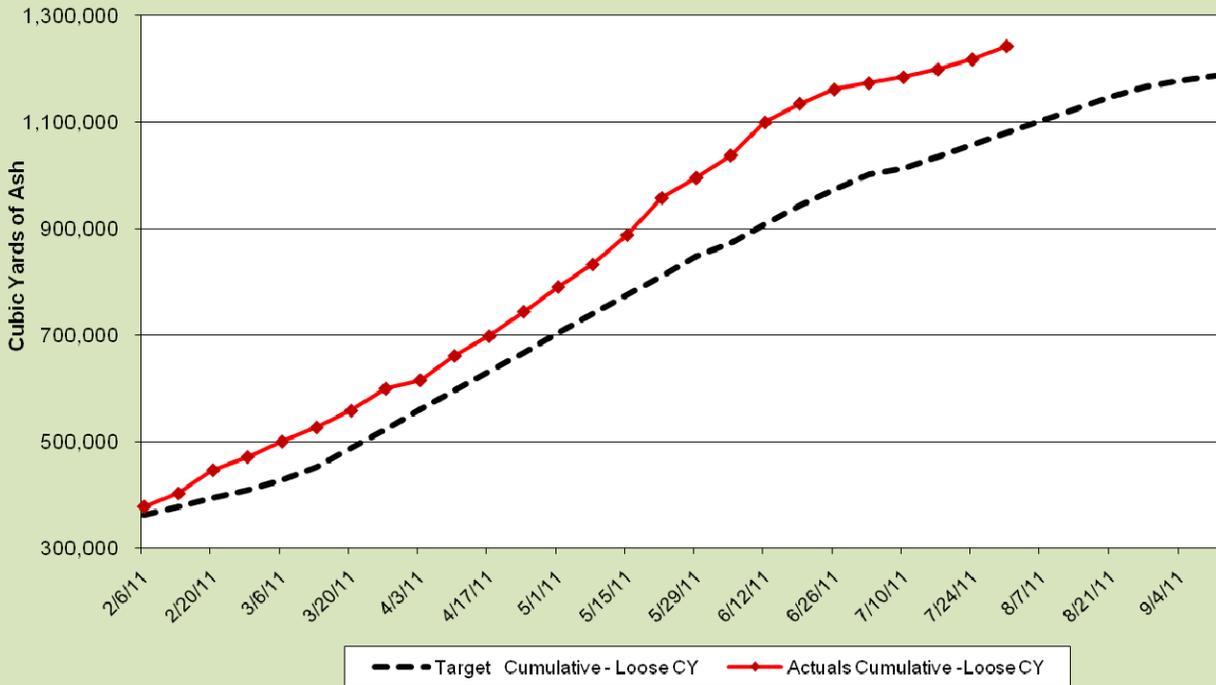


KINGSTON ASH RECOVERY PROJECT			JULY 2011		FIELD REPORT	
Safety			Monthly Total	FY - Cumulative Total		
Near Misses			2	2		
First Aid Incidents			2	11		
Recordable Incidents			0	2		
Recordable Lost Time Incidents			0	0		
Environmental			Matrix	Samples	Analyses	Results
Organization - TVA			Air - Real Time (Final)	--	--	267,188
Organization - TVA			Air - Fixed	5,334	--	7,794
Organization - TVA			Surface/Utility Water	5,431	46,657	230,045
Organization - TVA			Ground Water (spring & well)	211	2,166	10,836
Organization - TVA			Ash	751	1,289	9,754
Organization - TVA			Soil/Sediment	868	1,700	11,345
Organization - TVA			Biota	3,547	7,870	92,885
Ash Removal/Excavation			Non-Time-Critical		Cumulative Total	
From West Storage TC to Dredge Cell			Estimated CY (modified to an in-place volume) Time Critical		17,834	
Mid Embayment to Dredge Cell			Estimated CY (modified to an in-place volume)		204,596	
From Mid Embayment to Dredge Cell 1 - Relic			Estimated CY (modified to an in-place volume)		1,529	
North Embayment to Dredge Cell			Estimated CY (modified to an in-place volume)		394,068	
From Dredge Cell			Estimated CY (modified to an in-place volume)		5,336	
From Mid Embayment to Ballfield			Estimated CY (modified to an in-place volume)		48,516	
From North Embayment to Ballfield			Estimated CY (modified to an in-place volume)		130,072	
From Mid Embayment to Lateral Expansion			Estimated CY (modified to an in-place volume)		43,751	
From Settling Basin to Lateral Expansion			Estimated CY (modified to an in-place volume)		6,750	
From North Embayment to Lateral Expansion			Estimated CY (modified to an in-place volume)		111,604	
From North Embayment to Mid Embayment			Estimated CY (modified to an in-place volume)		19,164	
Ash Stacking			Non-Time-Critical		Cumulative Total	
Subgrade Recontouring Central Dredge Cell (Cell 3)			Estimated CY (modified to an in-place compacted volume)		30,930	
Subgrade Recontouring Lateral Expansion (Cell 2)			Estimated CY (modified to an in-place compacted volume)		167,538	
Ash Stacking Central/North Dredge Cell (Cells 2 & 3)			Estimated CY (modified to an in-place compacted volume)		735,245	
Ash Stacking South Dredge Cell (Cell 1)			Estimated CY (modified to an in-place compacted volume)		4,930	
Ash Stacking Lateral Expansion (Cell 4)			Estimated CY (modified to an in-place compacted volume)		0	
Ash Stacking Ash Pond			Estimated CY (modified to an in-place compacted volume)		0	
Ash in Temporary Storage			Estimated CY (modified to an in-place compacted volume)		94,846	

Ash Excavation from North Embayment - Weekly
as of July 31st



Ash Stacking in Dredge Cell - Weekly
as of July 31st



Perimeter Wall Stabilization Segment 1A - Weekly
as of August 7th

