# KINGSTON ASH RECOVERY PROJECT WEEKLY REPORT

February 21-27, 2011

Aerial Image of Kingston Ash Slide (01/24/2011)



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# **HIGHLIGHTS**

• TVA and Stantec briefed EPA and TDEC representatives on the latest design configuration and construction plans for the Dredge Cell perimeter containment system.

# **SAFETY**

- Six (6) site specific HSE orientations were conducted for the week 1,785 to date. One hundred ninety-nine (199) HSE site orientation refresher courses have been conducted to date.
- Eleven (11) Safety Observation Reports were submitted for the week 1,673 to date; 1,668 have been closed.
- A First Aid occurred on February 23, 2011 when a Jacobs employee suffered a minor injury when hot liquid spilled. A
  topical treatment was applied by the paramedic and he returned to work.
- The last recordable incident occurred on December 22, 2010.

# **INFRASTRUCTURE/ASH MANAGEMENT**

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.
- Completed installation of cameras to monitor the North Embayment areas.

# STILLING POND DREDGING

• The next bathymetric survey of the main Ash Pond is scheduled for March 1, 2011.

#### **ASH DISPOSITION**

- All shipment and disposal tonnage data is now final.
- Project closure documentation and records turnover is underway. Final invoices have not arrived from all vendors.
- A meeting to review the 2011 rail yard inspection was held and maintenance plans are under development.

#### **ASH PROCESSING**

- S & S Railroad Construction completed removal of rails and ties from Ash Track 2 (AT-2) and began removal of rails from Ash Track 3 (AT-3).
  - Only three days of work were performed by S&S this week. All work was performed without incident or accident.
- Ballfield mass balance after LIDAR survey adjustment indicates that 47,916 cubic yards of ash remain to be removed to return the entire Ballfield to 770' elevation.

#### SKIMMER WALL

TVA Civil Projects is in process of procuring the navigational light and handrails across the top of the Skimmer Wall.

# **DIKE REINFORCEMENT**

- Stantec and TVA continued to revise the draft design for the diffuser area of the buttress.
- Continued construction on buttress along the intake channel. Approximately 3500 feet (60%) of the buttress has been completed.

# **ROUTINE MONITORING**

# **Surface Water Sampling**

- Automated samplers have been deployed at two locations in the Clinch River, three locations in the Emory River, and
  in the Swan Pond Embayment Clean Water Ditch in accordance with the NTCRA Surface Water Monitoring Plan. The
  samplers on the Emory and Clinch Rivers will be activated whenever local rainfall exceeds 1" in a 24-hour period
  and/or flow on the Emory River at Oakdale exceeds 10,000 cubic feet per second (cfs). The automated sampler in
  Swan Pond Embayment is activated whenever local rainfall exceeds 0.5" in a 24-hour period. There was a rainfall
  event that triggered storm flow sampling for the Embayment and the Emory and Clinch Rivers on Friday February 25,
  2011.
- Swan Pond Embayment surface water sampling continues routinely once per week at two locations along the Swan Pond Embayment drainage. A weekly Stilling Pond sample is also being collected.

#### Air Sampling

- All air monitoring results from TVA air samplers were below the current Ambient Air Monitoring Plan (AAMP) action levels.
- TVA operates five PM2.5 Beta Attenuation Monitors (BAMs) and one PM10 Tapered Element Oscillating Microbalance (TEOM) 24/7 at fixed stations encircling the KRP. These monitors output hourly gravimetric PM concentrations. BAM gravimetric PM concentrations are posted to the KRP regulator's webpage. TVA also collects filters for PM2.5 gravimetric lab analysis from one BGI sampler, filters for metals analyses from two HiVolume PM10 samplers and two Total Suspended Particulate (TSP) samplers, and filters for silica analysis from two low volume SKC samplers. All the filter samplers are 24-hour samples, located at PS07 (peninsula next to east embayment), and follow the 1/3 day EPA air quality schedule.

#### **Data Management**

- Electronic data deliverables are flowing into the Equis database.
- Data validation continues for electronic data packages received from the laboratories.

# **Biota Sampling**

Planning and preparation for spring amphibian sampling is ongoing.

#### River System EE/CA Sampling and Analysis

- Ash deposition and submerged sediment sampling was initiated on October 18. Sampling for ash deposits and submerged sediments has been completed in the Tennessee and Clinch River reaches and Emory River Reach A. Ash deposition and submerged sediment sampling continued in Emory River Reach B this week.
- Replenishment water collections continue in support of the first round of bulk sediment bioassay.

# Non-Routine Sampling

None to report.

#### DREDGE CELL

- Continued stacking in the Central Dredge Cell with ash removed from the North Embayment and with lime-treated ash from the Ballfield. Stacking operations were suspended Thursday and Friday due to wet weather conditions.
- Calculated correction factors for volumes removed from the embayments and stacked within the Dredge Cell based on aerial LIDAR survey results between August and January. These correction factors have been applied to the cumulative total quantities.
- Met with EPA and TDEC representatives to discuss the latest design configuration for the Dredge Cell perimeter containment system.

# LATERAL EXPANSION AND ASH POND

TVA Civil Projects conducted miscellaneous contouring and ash drying operations.

# PLANT ASH DISPOSITION

• TVA Civil Projects dragline excavated 644 CY of bottom ash from the south end of the Sluice Trench.

# **EMBAYMENT ASH PROCESS**

TVA Civil Projects excavated and hauled over 18,000 CY of ash from the North Embayment.

# COMMUNICATIONS

#### **Communications**

- Added the Weekly Report and Weekly Area Resident Update to Kingston Ash Recovery website.
- Sent weekly update to the CAG, public officials and members of the public who have signed up to receive weekly
  emails.
- Hosted a public meeting at Roane County High School on February 24 to update residents on the cleanup efforts.
- Updated the Administrative Record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.

#### Outreach

• Held the third class in the series of the Educational Initiatives at Roane County High School on February 22 & 23 for more than 515 students.

# **RIVER OPERATIONS** Kingston Flow Map 02/27/2011 -Weekly Average Emory River **Elevations and Flows** February 28, 2011 (7 day average of data through February 27) **Emory River** Kingston Fossil Plant Flow: 3,988 cfs Fle Highway 58 Bridge Average Kingston Velocity Tennessee Rive Fort Loudoun Flow: 12,761 cf Elev: 808.66 ft

Kingston Recovery Project		Date: February 21-2		21-27, 2011	27, 2011		Field Report	
Safety				Weekly T	Weekly Total		FY - Cumulative Total	
Near Misses				0		0		
First Aid Incidents				1	1		7	
Recordable Incidents				0	0		2	
Recordable Lost T	ime Incidents			0	0		0	
Environmental						1		
Org	Ma	atrix	Samples*	Analyse	Analyses*		Results*	
TVA	Air - Real-Time (Final)				<u>-</u>		267,188	
TVA	Air – Fixed		4,117				6,038	
TVA	Surface/Utility Water		5,203	45 088	45,088		220,491	
TVA	Ground Water (spring and		166		1,699		6,925	
TVA	well) Ash				104		1,689	
			78				,	
TVA	Soil/Sediment Biota		527		975		6,022	
TVA	*Week Ending 02/24/11		2,410	5,406	5,406		64,619	
A - I- D	vveek Engin	y 02/24/11					0 1	
Ash Removal /	Non-Time-C	ritical				eekly	Cumulative	
Excavation						Total	Total*	
Mid Embay to Dredge Cell	Estimated CY (modified to an in-place volume)					0	173,702	
North Embay to Dredge Cell	Estimated CY (modified to an in-place volume)				1	1,757	104,423	
From Dredge Cell	Estimated CY (modified to an in-place volume)					0	5,336	
From West Storage (TC)	Estimated CY (modified to an					0	17,834	
From Mid-Embay to	in-place volume) Estimated CY (modified to an					0	34,043	
Ballfield From North Embay	in-place volume) Estimated CY (modified to an							
to Ballfield	in-place volume)					6,458	31,040	
From Mid Embay to Lateral Expansion	Estimated CY (modified to an in-place volume)					0	26,189	
From North Embay to Lateral Exp	Estimated CY (modified to an in-place volume)					0	4,555	
	Non-Time-Critical				V	Veekly	Cumulative	
Ash Stacking	Non-Time-Cit	licai				Total	Total*	
Subgrade Recontouring Central Dredge Cell (Cell 3)	Estimated CY in-place compa	(modified to an acted volume)				0	30,930	
Ash Stacking Central/North Dredge Cell (Cells 2 & 3)		(modified to an acted volume)			1	19,792	268,550	
Ash Stacking South Dredge Cell (Cell 1)	Estimated CY (modified to an in-place compacted volume)					0	0	
Ash Stacking Lateral Expansion (Cell 4)		(modified to an				0	0	
Ash Stacking Ash	Estimated CY (modified to an					0	0	
Pond	in-place compa							
Ash Placement in Temporary Storage	Estimated CY in-place compa	(modified to an acted volume)			-	5,288	52,028	
*Cumulative Totals adjusted to LIDAR survey								



