

KINGSTON ASH RECOVERY PROJECT MONTHLY REPORT February 2012

Aerial Image of Kingston Ash Slide (02/03/2012)



0 1,000 2,000 3,000 4,000
Feet

Date of imagery: 02/03/2012

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Tennessee Valley Authority
Geographic Information & Engineering

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KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

February 2012

SAFETY
<ul style="list-style-type: none"> • Thirty-five (35) site-specific health, safety and environment (HSE) orientations were conducted during February – 2,088 year to date. Zero (0) site-specific refresher courses were conducted during the month of February - 356 year to date. • Fifty-four (54) safety observation reports (SORs) were submitted during February – 2,697 year to date; 2,694 are closed. • An injury occurred on February 13, 2012 and became a recordable incident on February 23, 2012.
INFRASTRUCTURE / ASH MANAGEMENT
<ul style="list-style-type: none"> • Efforts for site maintenance, dust control, and HAZWOPER control continued. • Continued recovering cenospheres from the onsite ponds.
ASH SLURRY AND POND TOTAL SUSPENDED SOLIDS (TSS) CONTROL
<ul style="list-style-type: none"> • Daily total suspended solids (TSS) sampling and pH monitoring were performed throughout the ash slurry system. The TSS of the sluice trench discharge averaged 35.8 mg/L, the main ash pond effluent TSS averaged 79.9 and the stilling pond effluent averaged 6.9 for the month. • The sluice trench effluent and ash pond effluent polymer addition rates were adjusted based on TSS levels during the month. The sluice trench influent polymer addition remained offline during February. • The new ash pond outlet structure construction was completed, and lowering of the ash pond operating level was on schedule at month's end. The high TSS for the ash pond effluent water is the result of scouring during lowering of the operating pond elevation.
ASH PROCESSING / BALLFIELD PREPARATION
<ul style="list-style-type: none"> • Trans Ash performed area maintenance. Geosyntec provided quality control and assurance during the month. • The Kingston Fossil Plant (KIF) plant was offline for the month. • Ballfield photos from the silo cameras were provided to Geosyntec for their construction record.
CENOSPHERE CONTROL ACTIVITIES
<ul style="list-style-type: none"> • Daily pond inspections indicated the need for cenosphere removal from near the outlet structures for all ponds. Skimmer pumping from near outlet to cenosphere collection zones was carried out on all three ponds on Mondays, Thursdays, and Fridays. Booms were adjusted for operation of the new ash pond outlet. • Work on the new cenosphere storage pond was completed and cenosphere collection by the hydro-vacuum truck was performed February 26-29, 2012.
ROUTINE MONITORING
<p>Surface Water Sampling</p> <ul style="list-style-type: none"> • There were rainfall events greater than 0.5-inches that triggered storm flow sampling in Swan Pond embayment for February 1, 19, and 29, 2012. • Continued routine weekly surface water sampling at the stilling pond and Swan Pond embayment. All monthly stilling pond results received to date have shown compliance with the outfall National Pollutant Discharge Elimination System (NPDES) permit. • Automated monitoring stations (Hydrolabs) are online continuously monitoring pH at three locations in the settling ditch system. The real-time pH results from the settling ditch system are monitored daily and used to make acid-dosing decisions to control the pH of the outflow. • Continued daily TSS monitoring at the sluice trench, ash pond, and stilling pond. • Received regulatory approval to move the ISCO automated sampler in the clean water ditch farther out toward the river to accommodate construction of Dike 3. The ISCO move was completed on March 1, 2012.

Air Sampling

- All air monitoring results for February from the PM2.5 and PM10 TVA air samplers were below the current ambient air monitoring plan (AAMP) action levels.

Data Management

- The benthic invertebrate technical memorandum was submitted to TVA for transmittal to the regulators on February 17, 2012.
- The bulk sediment and pore water technical memorandum is in process and is expected to be ready for internal TVA review by March 9, 2012.

Biota Sampling

- Virginia Tech researchers completed installation of bird boxes for tree swallow collection this spring.

Non-Routine Sampling

- Continued sample collection and on-site moisture testing in support of dredge cell and ballfield operations.
- Continued disposal effort of approximately 30 pallets of surface water and groundwater samples returned from the analytical subcontractors.
- Collected waste profile samples from used oil drums.

DREDGE CELL

- CP completed installation of French drains in Segment 7 platform; Geo-Con stabilized a portion of the platform with soil-cement.
- Geo-Con continued repair of perimeter wall stabilization (PWS) wall in Segment 1A. Began construction of PWS wall in Segment 7 Geo-Con conducted testing of jet grouting for cold joint repairs.
- Griffin Dewatering completed the dewatering demonstration test in the Segment 8 platform.
- CP continued excavation of the toe road for construction of the rock buttress outboard of the PWS wall.
- Minimal stacking was done in the north dredge cell as conditions became too wet due to excessive rainfall.

LATERAL EXPANSION

- Restrictions remain due to wet weather that limit stacking to a maximum of 1 foot per day.
- Stacking continued in the lateral expansion using a mixture of lime-treated and untreated ash, as conditions allowed.
- Wet ash and spoils were placed in the ash pond in preparation of the subgrade prior to stacking. Ash pond water levels were pumped down to facilitate material placement.
- CP completed construction of the ash pond outlet structure, and flows from the sluice trench began bypassing the ash pond through the new structure to the stilling pond.

RIVER ENGINEERING EVALUATION / COST ANALYSIS (EE/CA) AND BASELINE ECOLOGICAL RISK ASSESSMENT (BERA)

- Continued preparation of the EE/CA alternatives development.
- U.S. Army Corps of Engineers Waterways Experiment Station, (USACE WES) uploaded bathymetric data into their sediment model and began initial transport modeling of the river system.
- Arcadis continued integration of ecological risk across the site for the BERA.
- Completed internal review of the baseline human health risk assessment (BHRA).

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Jacobs began design of the embayment restoration and Lakeshore area park development.

MIDDLE EMBAYMENT

- Continued bulk excavation work from west to east.

TVA PROPERTY DEMOLITION

- Continued demolition of additional scope work on Swan Pond Circle.
- Continued restoration activities for additional scope on Swan Pond Circle.
- Installed erosion control measures on river side of Lakeshore Drive.
- An extension of TVA's internal environmental assessment document is necessary before removal of the final two properties can be completed. The project is expected to be completed by the end of March.

COMMUNICATIONS

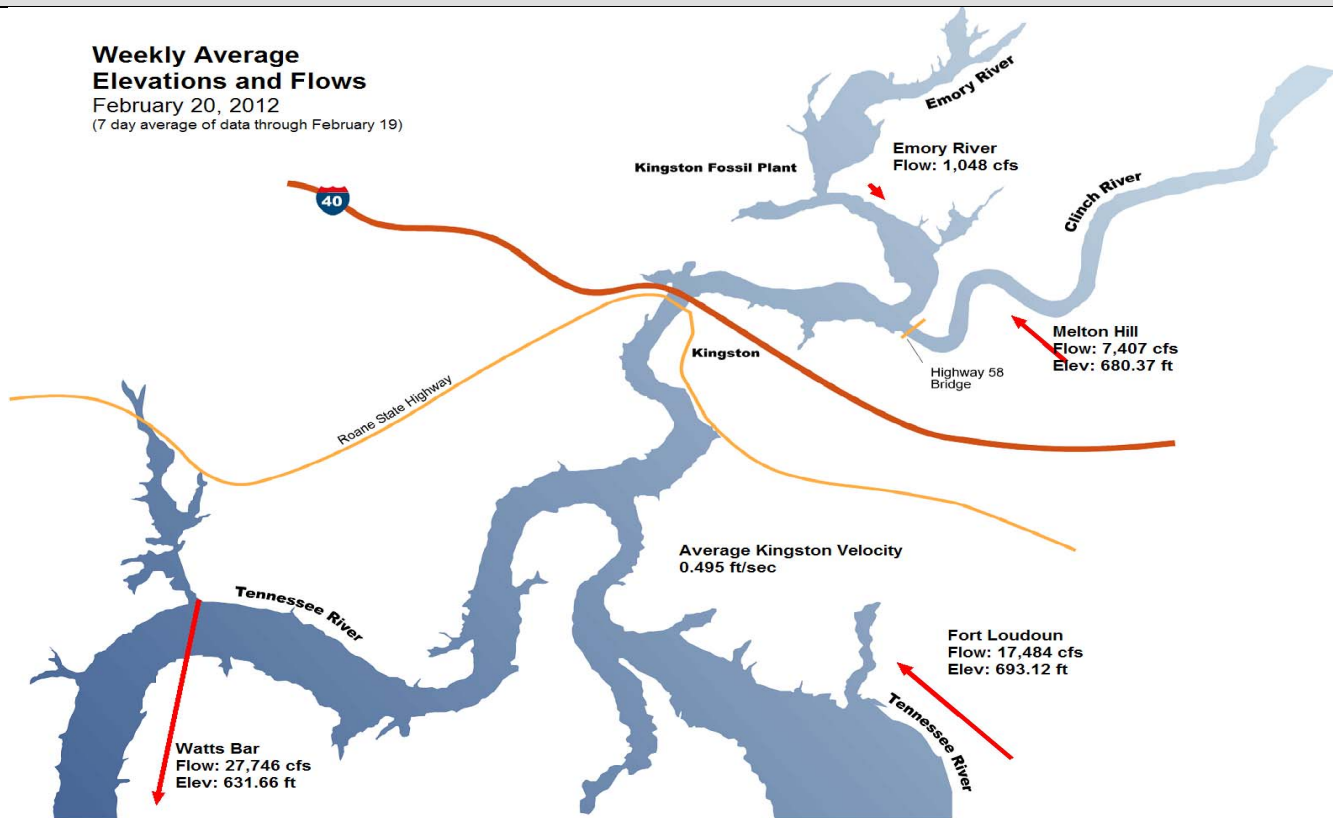
- Added weekly area resident updates to Kingston Ash Recovery website.
- Sent weekly updates to the Community Advisory Group (CAG), public officials and members of the public who have signed up to receive weekly emails.
- Updated administrative record with work plans and relevant documents.
- Continued to respond to calls and visits from residents.
- Updated site bulletin boards.
- Knoxville's WBIR Channel 10 News was onsite Tuesday, February 7, to interview Steve McCracken, General Manager of the Kingston Ash Recovery Project, for a story on PWS construction along Swan Pond Road.
- Bob Deacy, John Kammeyer, Kathryn Nash and Katie Kline provided a briefing to the Roane County Commission Monday, February 27, 2012. TVA reiterated its commitment to the community and covered the progress at the ash recovery site, including future property use, as well as an update on the gypsum pond and the conversion of the wet to dry ash storage system recently implemented at Kingston. The presentation was well-received.
- A group of middle school students from a private school in North Carolina visited the site on February 28, 2012, for a presentation and tour by Kingston Ash Recovery Project General Manager Steve McCracken. The students were also briefed on the wet-to-dry ash conversion at the KIF earlier in the day.

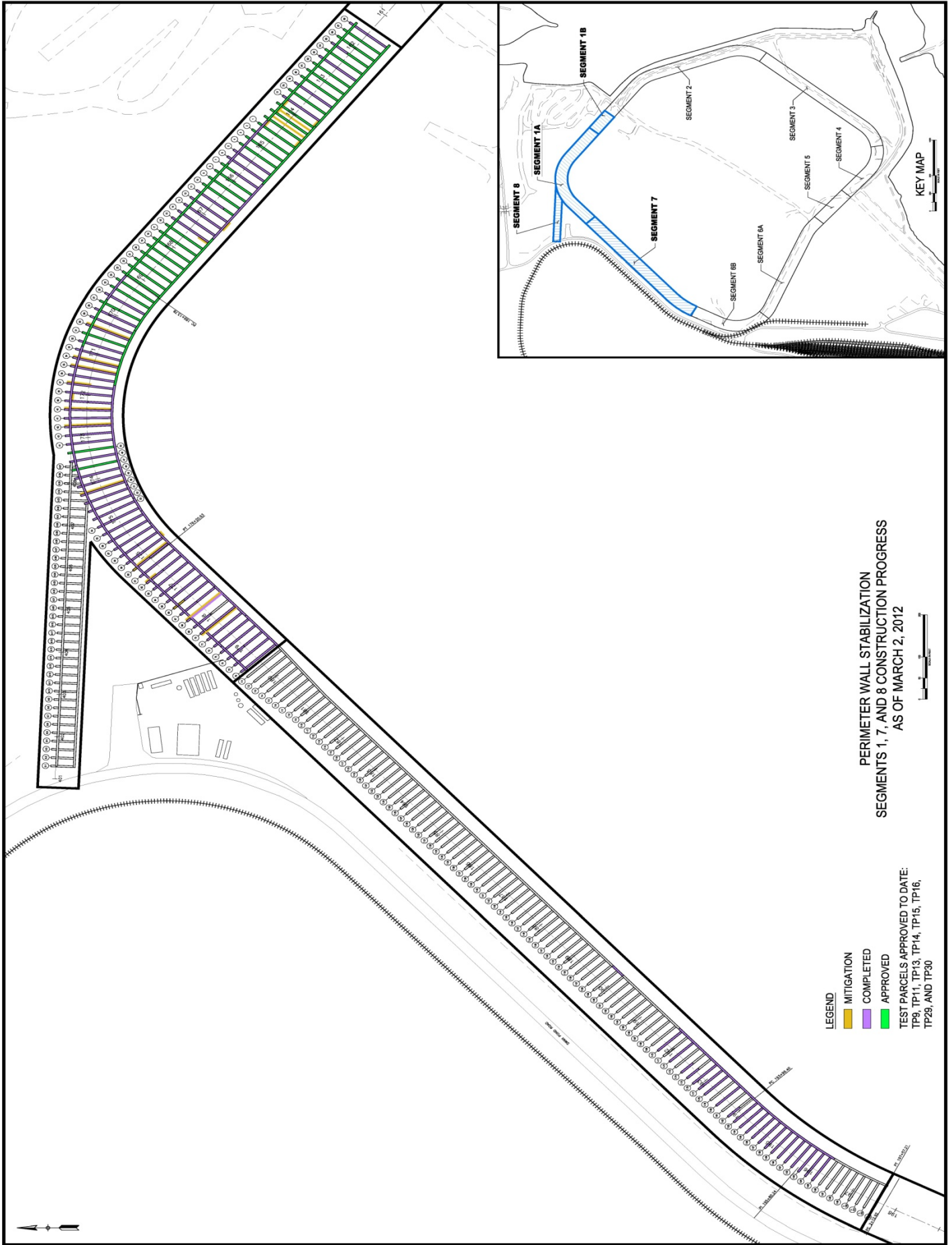
RIVER OPERATIONS

Weekly Average Elevations and Flows

February 20, 2012

(7 day average of data through February 19)



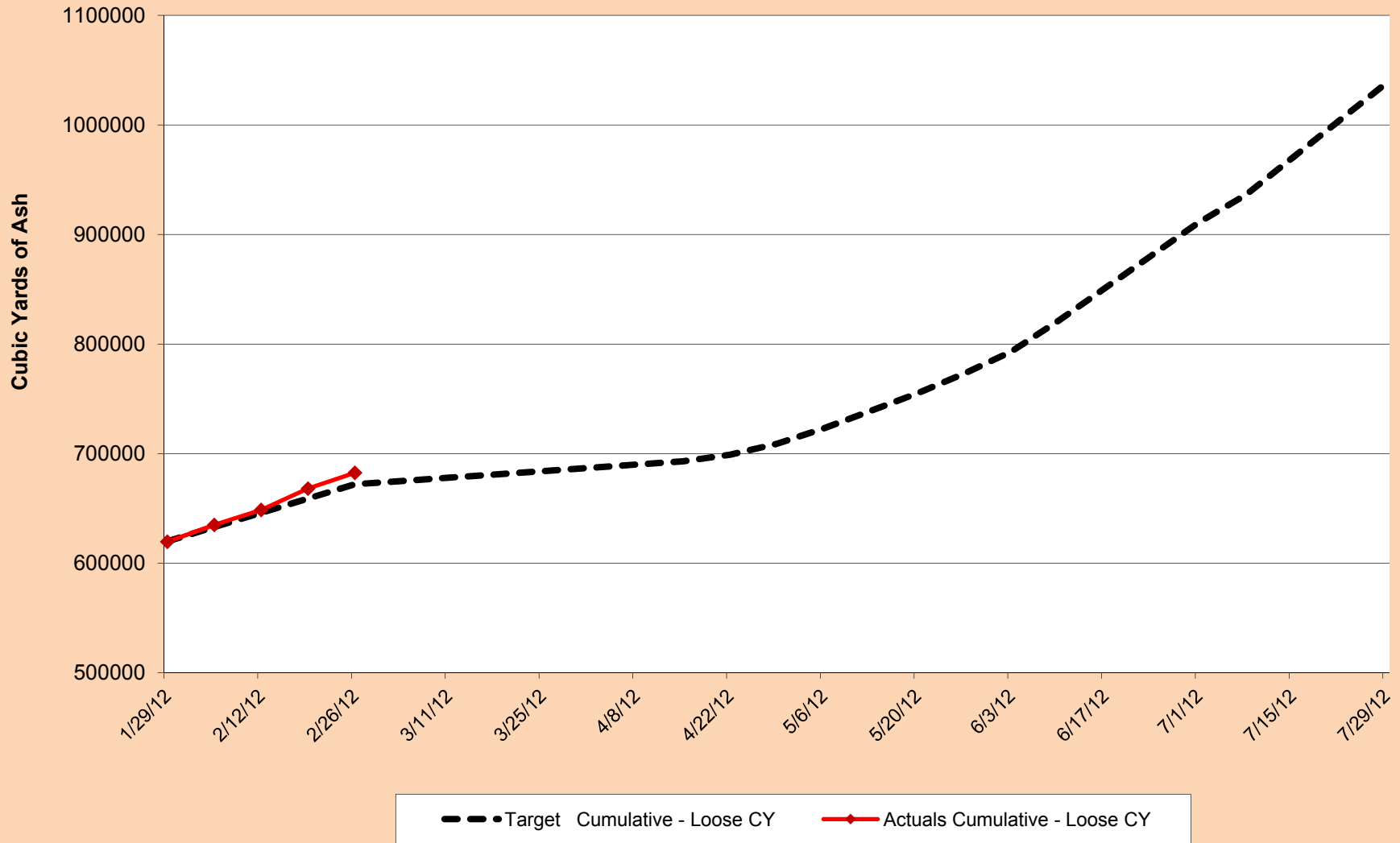


Kingston Ash Recovery Project		February 2012		Field Report
Safety		Monthly Total	FY – Cumulative Total	
Near Misses		0	0	
First Aid Incidents		0	7	
Recordable Incidents		1	1	
Recordable Lost Time Incidents		0	0	
Environmental	Matrix	Samples	Analyses	Results
Organization - TVA	Surface / Utility Water	5,582	47,626	257,862
Organization - TVA	Groundwater (spring & well)	244	2,518	14,796
Organization - TVA	Ash	756	1,333	9,973
Organization - TVA	Soil / Sediment	1,168	2,261	16,902
Organization - TVA	Biota	4,646	10,727	122,988

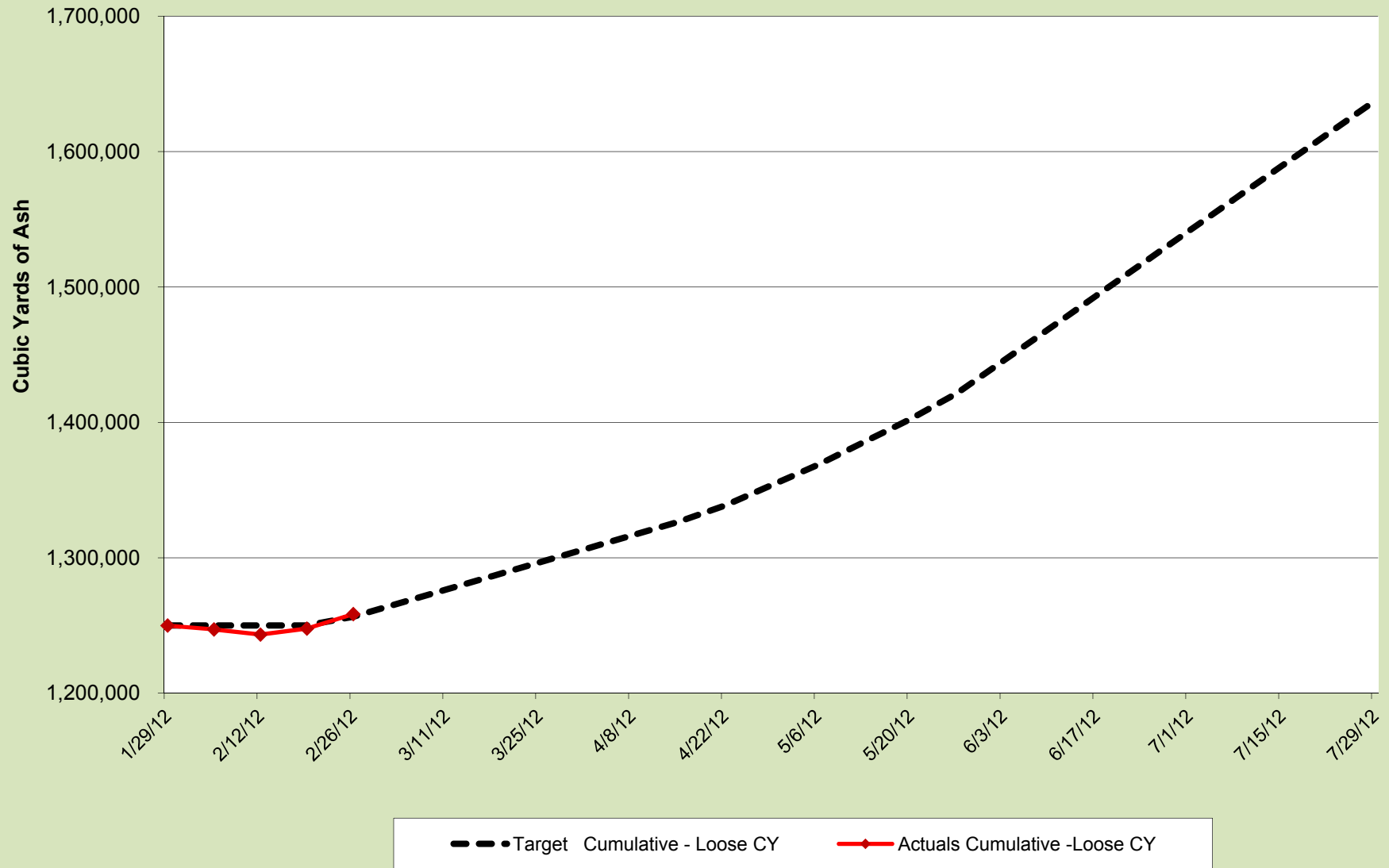
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	44,907	498,440
Total Removed from North Embayment	-	1,010,322
Total Removed from Settling Basins / Dike 2	2,632	19,568
Excavated Total	47,538	1,528,331
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	8,671	777,724
Total Placed in Lateral Expansion	12,867	516,318
Total Placed in Ash Pond	63,928	199,710
Placed Total	85,465	1,493,753
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	-	5,179
Total Removed from Dredge Cell	3,892	227,012
Total Removed from Ballfield	33,317	359,194
Removed from Storage Total	37,210	591,384
Net Removed to(from) Ballfield Storage	(14,974)	(110,665)

For period ending February 29, 2012.

Ash Excavation from Middle Embayment Weekly as of February 26, 2012



Ash Stacking in Dredge Cell Weekly as of February 26, 2012



**Perimeter Wall Stabilization Segment 1A,1B,8 & 7
Weekly as of February 26, 2012**

