

KINGSTON ASH RECOVERY PROJECT

MONTHLY REPORT

October 2011

Aerial Image of Kingston Ash Slide (09/28/2011)



Date of imagery: 09/28/2011

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Tennessee Valley Authority
Geographic Information & Engineering

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SAFETY

- Thirty-nine (39) site-specific HSE orientations were conducted during October – 2,042 year to date. Zero (0) site-specific refresher courses were conducted during the month of October - 356 year to date.
- Seventy-one (71) Safety Observation Reports were submitted during October – 2,474 year to date; 2,470 are closed.
- The last recordable incident occurred on December 22, 2010 and became a recordable on December 28, 2010.
- On Thursday, October 13, at 1:30 a.m., a Civil Projects worker strained her right wrist as she entered a work truck. The individual had grabbed the assistance handle with her right hand and pulled up to get into the truck. The next morning, the individual complained of swelling in the wrist, was seen at the on-site medical clinic, and returned to work with no restrictions.
- On Saturday, October 15, at 6:30 p.m., a Civil Projects worker pinched his right index finger while mucking tracks on an excavator. The individual was using a shovel to remove ash. When the material broke free, the individual's finger was pinched between the shovel handle and the equipment track. The individual was treated at the on-site medical clinic, and returned to work with no restrictions. A site-wide memo was issued by Steve Cherry stating mucking of tracks was no longer permitted by mechanical means and that any mucking would be completed by using a water cannon.
- Nine (9) industrial hygiene personal air monitor samples were collected over two (2) days and four (4) Similar Exposure Groups (SEGs) during the month of October; we are awaiting lab results.

INFRASTRUCTURE / ASH MANAGEMENT

- Efforts for site maintenance, dust control, and HAZWOPER control continued.
- Continued recovering cenospheres from the onsite ponds.
- Completed building new MAP area.

ASH SLURRY & POND TSS CONTROL

- TVA Civil Projects dragline did not operate during the month of October.
- TSS sampling was performed throughout the ash slurry system. The total suspended solids (TSS) of the sluice trench discharge averaged 25.9 mg/L, the main ash pond effluent TSS averaged 16.6 and the stilling pond effluent averaged 11.9 for the month.
- The plant effluent, sluice trench effluent, and ash pond effluent polymer addition rates were dropped to minimum operable levels as water met all criteria without treatment.
- The IFC design for the new ash pond outlet structure was completed during the month and initial bids received from within TVA. The decision was made to go out for bids and work on a request for proposals was underway at month's end.

ASH PROCESSING / BALLFIELD PREPARATION

- Geosyntec performed moisture testing and compaction verification throughout the month and is reporting weekly.
- Civil Projects performed moisture reduction processing of ash removed from the sluice trench to ready ash for placement in the interim ash storage area (IASA).
- Civil Projects performed plant ash placement on two days in October. The total ash stacked in the IASA from truck count was 3,104 cubic yards in October. End of month total stored in the interim ash storage area from truck count is estimated at 48,352 cubic yards. The surveyed placed volume in the IASA was 70,203 cubic yards on October 31, 2011.
- The KIF plant was off line with zero units online for the month. The plant was 35 days into a planned 60-day maintenance outage at month's end.

DIKE REINFORCEMENT

- The timeline for the OSC report began on October 14, 2011. The draft OSC report is due December 13, 2011.
- Old diffuser piping was removed from the site and sent to a recycler.
- The diffuser flow test was rescheduled for the week of November 28, 2011, due to the plant outage affecting flows in the intake channel.

ROUTINE MONITORING

Surface Water Sampling

- There were rainfall events greater than 0.5" that triggered storm flow sampling in Swan Pond Embayment for the month of October 11, 18 and 28.
- Continued routine weekly surface water sampling at the stilling pond and Swan Pond Embayment.
- Automated monitoring stations (Hydrolabs) are online continuously monitoring pH at three locations in the settling ditch system.
- Continued daily TSS monitoring at the sluice trench, ash pond, and stilling pond.

Air Sampling

- All air monitoring results for the month of October from the PM2.5 and PM10 TVA air samplers were below the current Ambient Air Monitoring Plan (AAMP) action levels.

Data Management

- The ash deposit, seasonally exposed sediment and submerged sediment technical memoranda was submitted to TVA on October 5, 2011 for transmittal to EPA and TDEC.
- The aquatic vegetation and periphyton technical memorandum was submitted to TVA for transmittal to EPA and TDEC on October 25, 2011.

Biota Sampling

- Raccoon trapping began the week of October 18, 2011, and continued through the end of October.
- Fall fish sampling for health and bioaccumulation studies was initiated October 3, 2011 and continued through the end of October.

Non-Routine Sampling

- Collected a waste profile sample of hydraulic fluid from two (2) excavators.
- Continued concurrence sampling in the North Embayment as sections are deemed ready by operational sampling.
- Continued geoprobe sampling in the Middle Embayment in support of the excavation operations.
- Continued sample collection and on-site moisture testing in support of dredge cell and ballfield operations.

DREDGE CELL

- Continued PWS construction of Segment 1 at the transition slope in the northwest corner of the dredge cell. Work locations are being spread out to avoid areas where subgrade has become wet (see sketch).
- Continued ash and spoils moisture processing in the central dredge cell and relic area.
- Stantec submitted the 90% removal design package RDP-0113-J for the north wall, Segment 8, which was transmitted to Regulators for review.
- Stantec also submitted the 90% removal design package RDP-0113-H for the North and Central Dredge Cell (Cells 2 & 3) closure, which was transmitted to Regulators for review.

LATERAL EXPANSION

- Continued stacking ash in the lateral expansion; expanding the area for stacking based on proof-rolling the subgrade.

RIVER EE / CA AND BERA

- Completed the draft deliverables for the Fish Baseline Bioaccumulation Evaluation, Spring Sportfish Evaluation, Fish Community Metrics Evaluation, Benthic Invertebrate Toxicity Tests (Emory), Omnivorous Mammal Evaluation, and the Piscivorous Bird Evaluation.
- Completed the Aquatic Plant Evaluation Technical Memorandum (of field work).

EMBAYMENT RESTORATION AND RECREATION AREA DEVELOPMENT

- Held a kickoff meeting for the development of a master plan.

NORTH EMBAYMENT

- Completed excavation of ash.
- Performed confirmation sampling and reporting for verifying areas are clean of ash deposits.
- Began writing initial sections of the EE/CA report.
- Completed ash removal and placing riprap along Swan Pond Circle Road slope.

TVA PROPERTY DEMOLITION

- Completed all abatement, demolition, and site restoration on Emory River Road.
- Removed all but one deck associated with contract.
- 90% complete with abatement, demolition and site restoration on Farr Lane.

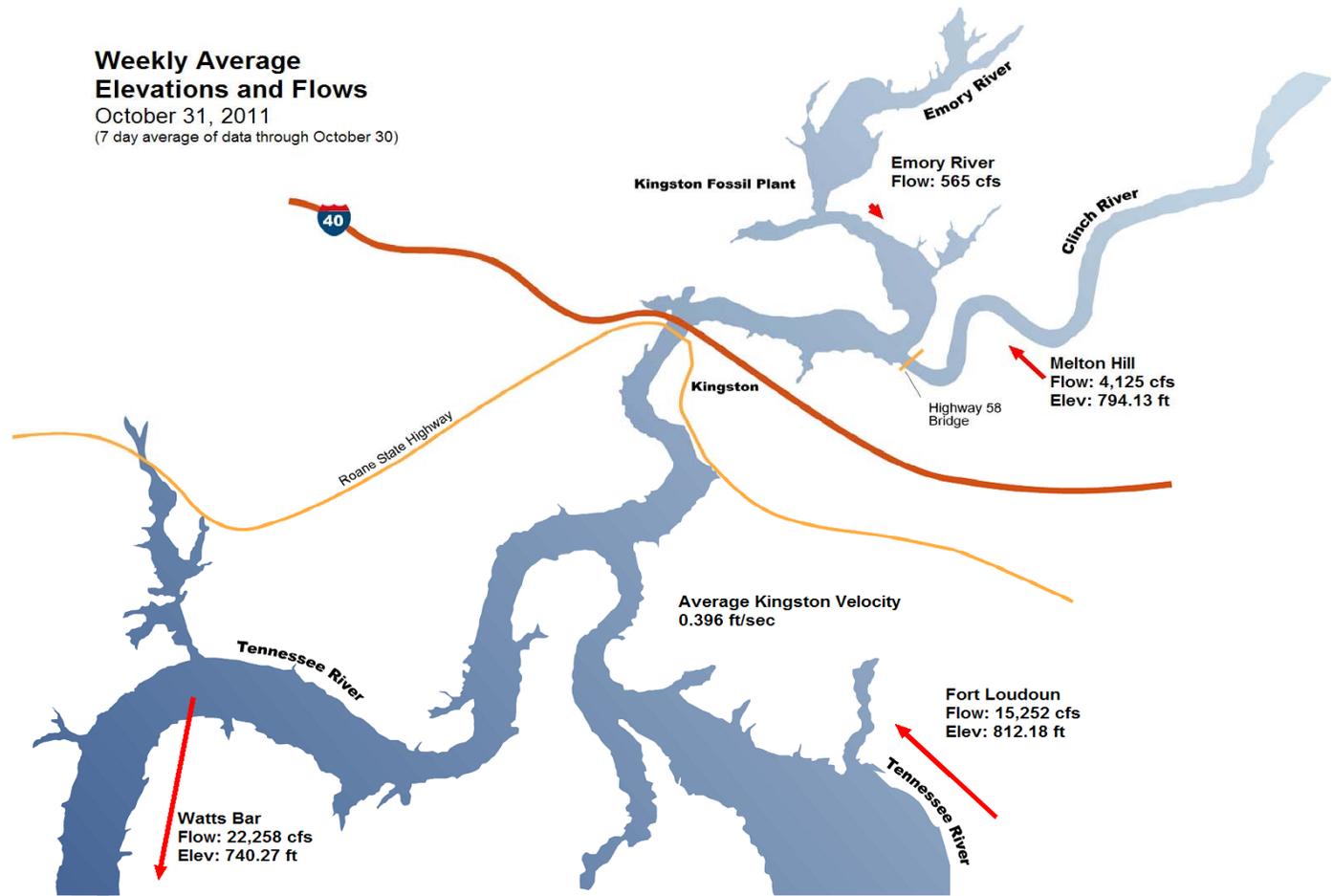
COMMUNICATIONS

- 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.
- Updated site bulletin boards.
- On October 4, Steve McCracken, General Manager Kingston Ash Recovery Project, attended a project dedication/open house at Midway Middle School, and on October 6, Katie Kline, General Manager Kingston Support Services, attended a project dedication/open house at Bowers Elementary School. Both school projects were paid for by the Roane County Economic Development Foundation (TVA funded). At Midway, renovations were made to the gymnasium and cafeteria, and at Bowers, a new wing was constructed with a library, tech classrooms, and a new gym. Both events were well attended by parents, school faculty and administrators, as well as local officials. The TVA representatives in attendance received numerous positive comments about the school improvements made possible by the funding from TVA.
- Held a site-wide safety luncheon to mark 1 million man-hours of work completed without a lost-time accident.

RIVER OPERATIONS

Weekly Average Elevations and Flows

October 31, 2011
(7 day average of data through October 30)

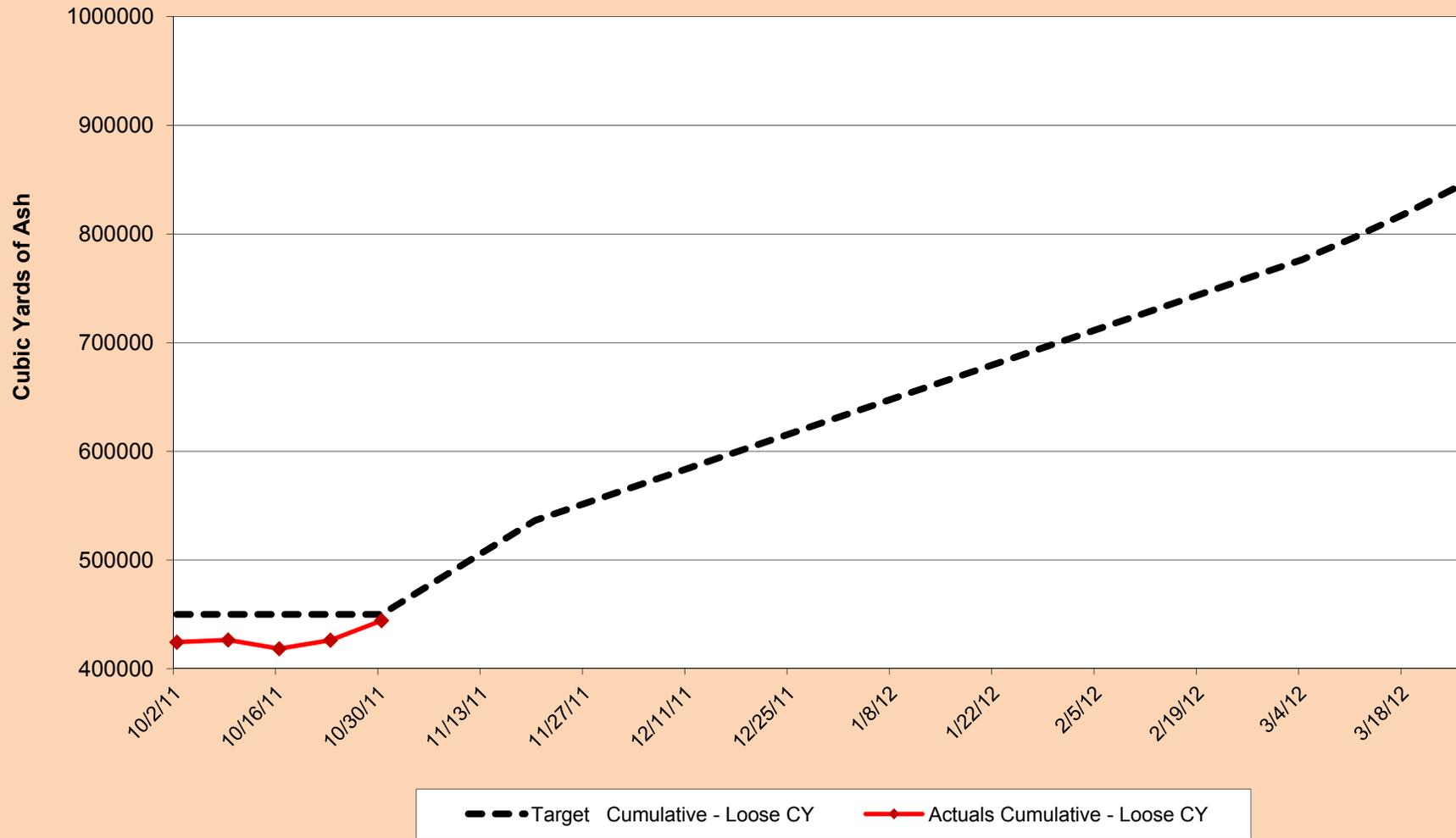


Kingston Ash Recovery Project		October 2011		Field Report
Safety		Monthly Total	FY – Cumulative Total	
Near Misses		0	2	
First Aid Incidents		2	15	
Recordable Incidents		0	2	
Recordable Lost Time Incidents		0	0	
Environmental	Matrix	Samples	Analyses	Results
Organization - TVA	Air – Real Time (Final)	--	--	267,188
Organization - TVA	Air – Fixed (as of 9/25/11)	5,704	--	8,212
Organization - TVA	Surface / Utility Water	5,472	46,977	247,215
Organization - TVA	Groundwater (spring & well)	215	2,174	12,940
Organization - TVA	Ash	756	1,333	9,973
Organization - TVA	Soil / Sediment	940	1,923	14,776
Organization - TVA	Biota	4,143	9,384	110,780

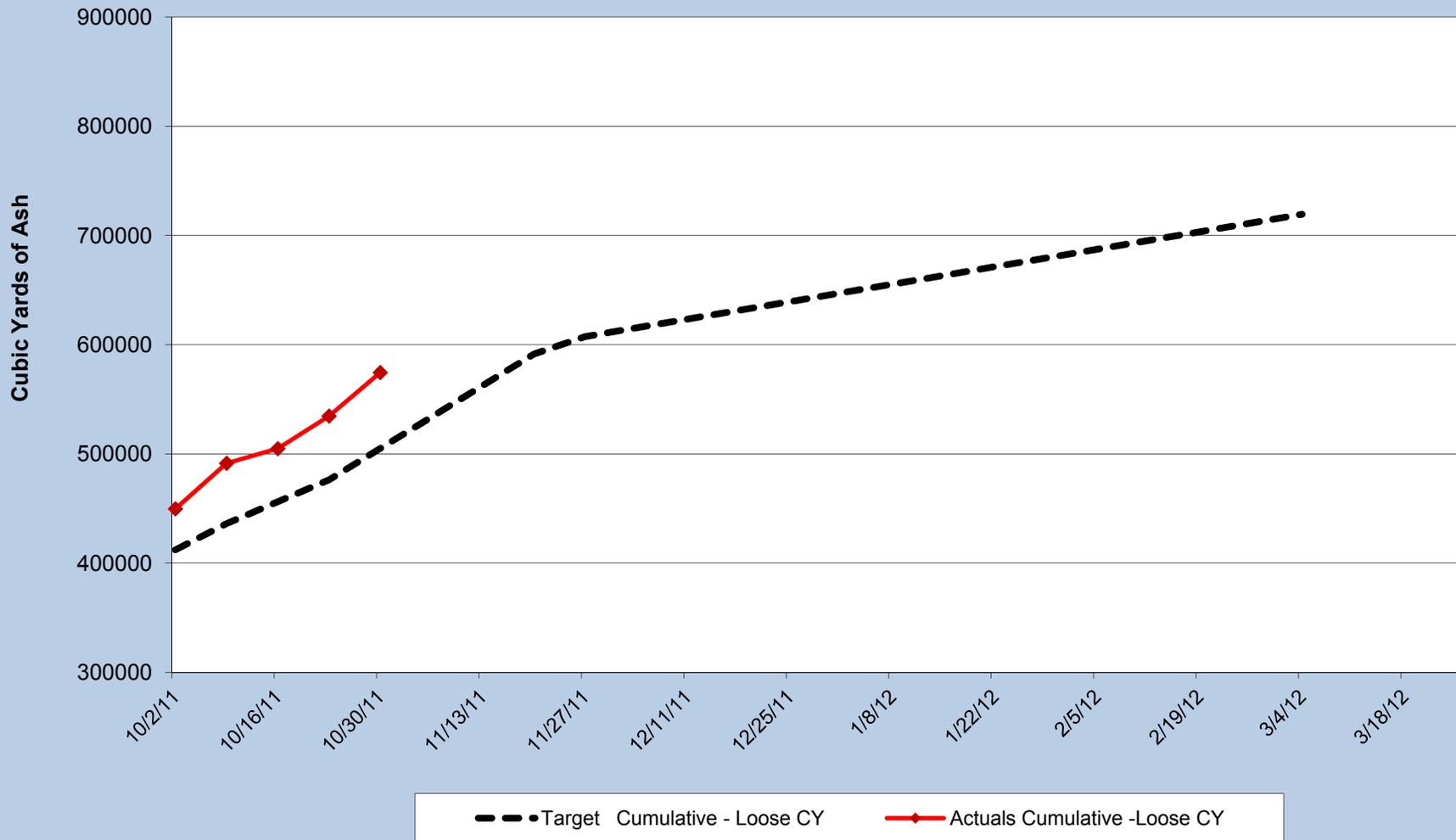
Work Description	Period Work Performed (CYIP)	PTD Work Performed (CYIP)
Ash Removal / Excavation		
Total Removed from Middle Embayment	18,048	349,767
Total Removed from North Embayment	51,839	867,391
Total Removed from Settling Basins / Dike 2	715	9,756
Excavated Total	76,601	1,226,914
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Placement		
Total Placed in Dredge Cell	6,652	812,710
Total Placed in Lateral Expansion	81,961	447,120
Total Placed in Ash Pond	10,223	16,168
Placed Total	98,836	1,275,997
Work Description	Period Work Performed (CCY)	PTD Work Performed (CCY)
Storage Handling		
Total Removed from Lateral Expansion	-	5,179
Total Removed from Dredge Cell	79,258	180,629
Total Removed from Ballfield	8,112	295,897
Removed from Storage Total	87,370	481,705
Net Removed to(from) Ballfield Storage	(8,112)	(109,405)

For period ending October 31, 2011

Ash Excavation from Middle Embayment - Weekly as of October 30



Ash Stacking in Lateral Expansion - Weekly as of October 30



**Perimeter Wall Stabilization Segment 1A & 1B -
Weekly as of October 30**

