

Hudson River PCBs Superfund Site 2011 Dredging Season Project Update

December 8, 2011

2011 Dredging Summary



- Dredging occurred between June 6 and November 8, 2011
 - Delayed start due to elevated river flows in Spring 2011
- Dredging completed in Certification Units (CUs)
 9 16 and 19 25
- Backfilling / capping operations completed November 18, 2011

Removed more than 363,000 cubic yards (C.Y.) of sediment

from 15 CUs

 Improved compliance with Engineering Performance Standards and Quality of Life Performance Standards



Resuspension Summary



- Phase 2 Resuspension Engineering Performance Standard comprised of two components:
 - 500 ng/L Concentration Standard: No exceedances at any far-field location
 - Load Standard: In-compliance at Waterford far-field location throughout 2011
- PCB monitoring program and "special studies" to assess resuspension and re-deposition
 - Will help to refine BMPs and identify necessary operational modifications going forward



Residual Summary



- 1 ft. backfill layer placed in all areas dredged
- In some locations capping of river sediments is necessary
- Phase 2 Residual Engineering Performance Standard specifies a limit on the extent of capping that is allowed:
 - Counted Area Capped to Date: 3.05% (11% allowed)
 - Counted Area with "Inventory" Capped to Date: 0% (3% allowed)
 - Non-Counted Area Capped to Date: 3.12% (Not tracked per Residual Standard)
- Only two nodes capped within the Navigation Channel

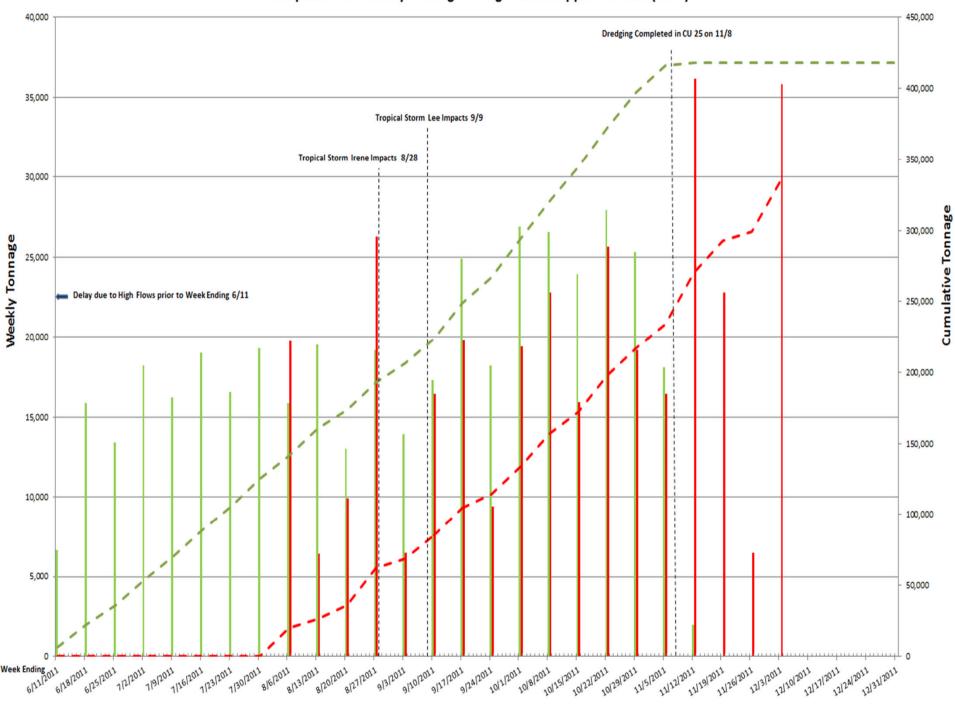


Productivity Summary

- Phase 2 Productivity Engineering Performance Standard specified a target removal volume for each dredging season of 350,000 C.Y. of sediment
- In 2011 season, more than 363,000 C.Y.
 of sediment was removed
 - Approx. 16,000 +/- C.Y. dredged per week
 - Dredged approx. 75 acres

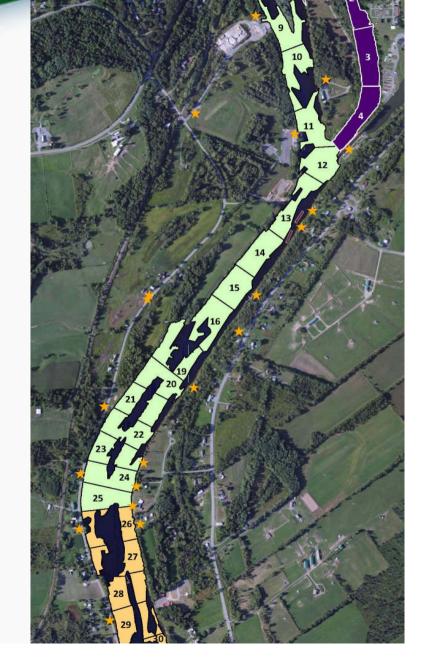






Quality of Life Performance Standards

- Significant decrease in the number of Air Quality of Life Performance Standard exceedances:
 - Processing Facility
 9 Air QoL Standard Level Exceedances (approx. 1% of samples)
 - Dredge Corridor
 7 Air QoL Standard Level Exceedances (less than 1% of samples)
- Noise, Odor, Light or Navigation QoL







Compliance with Project Performance Standards



- Refined dredging process
 - Limit of two dredging passes limits the number of "bucket bites"
 - Better delineation of the elevation of contamination (EoC)
 - On-going process
 - Design dredge prisms include an "overcut"
 to account for EoC uncertainty



Best Management Practices



- Refined Best Management Practices (BMPs)
 - Limiting the number of dredge passes, thereby limiting the number of "bucket bites"
 - Reducing the number of dredge platforms operating simultaneously
 - Stop dredging when clay / bedrock is encountered
 - Controlled bucket decanting
 - Begin placement of backfill material as soon as practicable
 - Limit tug boat propeller "wash"
 - "Proactive" approach to instituting additional BMPs for challenging areas
 - Oil absorbent and containment booms
 - Alternating dredge areas



Sediment Processing Facility

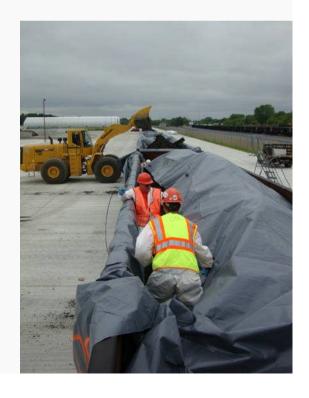




Off-Season Activities



- Completion of off-site sediment disposal
- Processing Facility Improvements:
 - Construction of:
 - Second barge unloading station
 - Additional size separation equipment
 - Second gravity thickener
 - Expansion of sediment staging areas

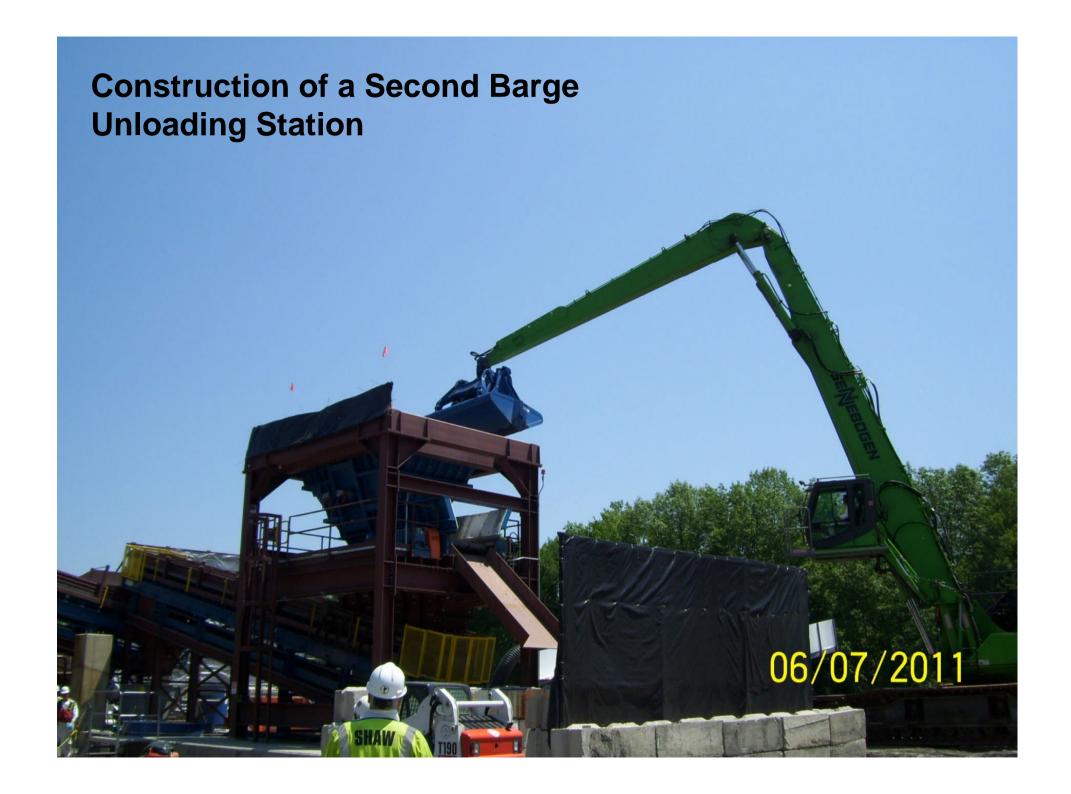




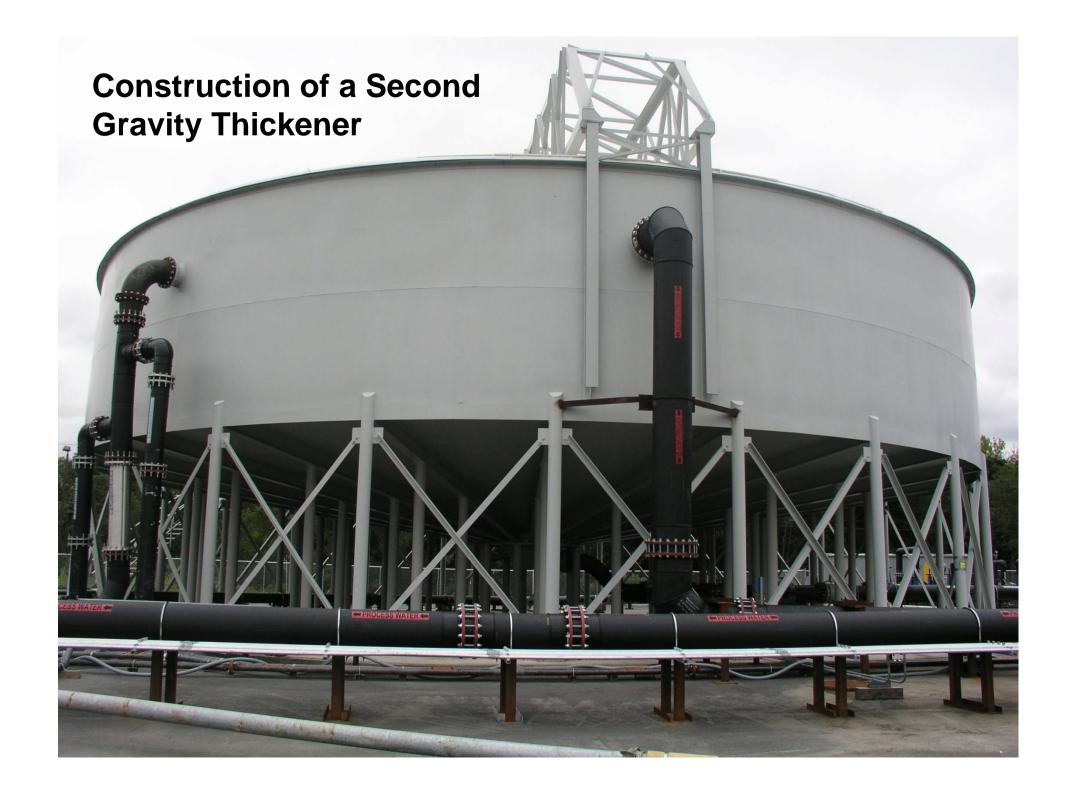
Processing Facility Improvements











2012 Dredging Season

- Resume dredging operations in CU 26
- GE anticipates dredging to CU 55 and removing more than 450,000 C.Y. of sediment
- Will include adaptive management changes based upon "lessons learned" in 2012
 - Update to 2011 documents, including:
 - Community Health and Safety Plan
 - Remedial Action Work Plan
 - Design documents
- West Griffin Island Area and Three Sisters Islands will be addressed







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