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Community Advisory Group Meeting

Saratoga Spa State Park

September 30, 2010

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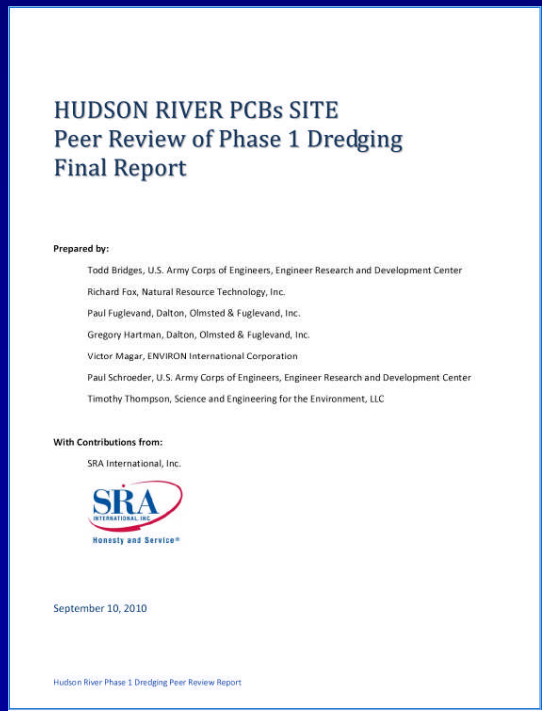
Phase 1 Peer Review

- Introductory Session, February, followed by deliberation session: May 4,5,6
- Draft Peer Review Report (August)
  - EPA and GE response
- Final Peer Review Report (September)

Available:

- www.epa.gov/hudson
- www.hudsondredgingdata.com



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Peer Review of Phase 1 Dredging
Final Report

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September 10, 2010

Hudson River Phase 1 Dredging Peer Review Report

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EPA Observations and Comments Regarding Peer Review Recommendations

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EPA Response to Draft Peer Review Report: EPA Observations and Comments

- Peer Review input will be helpful in moving next phase of the cleanup forward and restoring health of the Hudson River
- EPA is in agreement with the majority of recommendations set forth in the report; additional work and changes to performance standards are needed to proceed with Phase 2 successfully
- Detailed peer review recommendations being taken into account as EPA evaluates options for moving forward
- Final decision on how best to proceed with second phase of project will occur this fall

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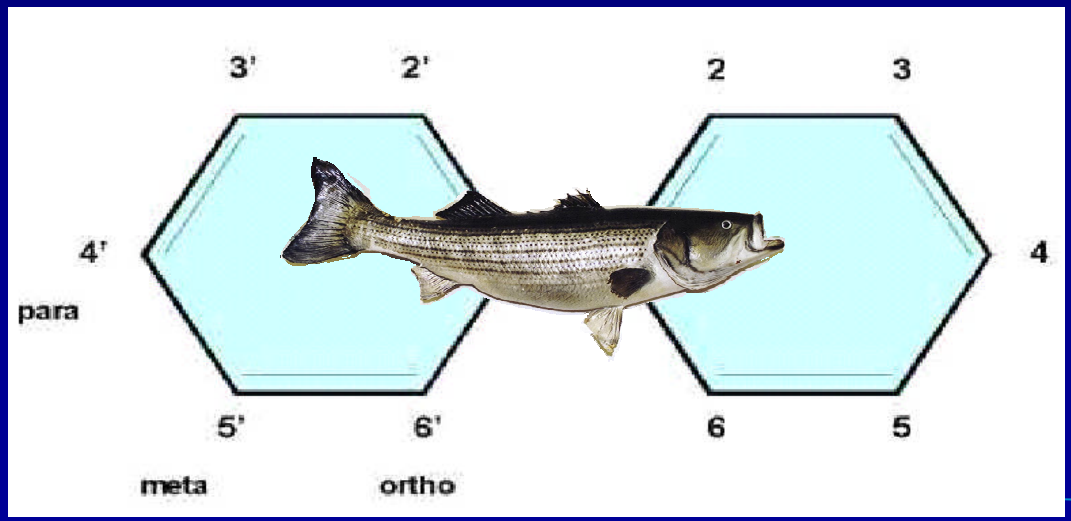
Resuspension: Tri+ vs. Total PCBs

- Important that PCB analyses and presentation be standardized for the project
- PCBs should be evaluated on basis of Tri+ concentrations, as expressed in ROD



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Resuspension: Additional Near-Field and Far-Field Data

Year 1 Phase 2: Collect additional near-field and far-field data to relate operational activities to sediment resuspension and PCB release

- **EPA's intention to include near-field and far-field studies on nature of PCB release, fate, and transport**
  - **Near-field PCB transects to isolate resuspension impacts from separate operational activities**
  - **Evaluate sediment deposition, e.g. sediment traps**

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Resuspension: Standard and Control Level Operational Changes

500 ppt total PCB threshold at the far-field monitoring stations should trigger operational changes

- **EPA will use the 500 ppt threshold as a basis to require actions be taken to reduce water column concentrations**
- **350 ppt threshold will be retained as an 'advisory level'**

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Resuspension: Engineering Controls

Silt curtains or other physical barriers to control resuspension are not recommended given the time requirements and logical complexities associated with their use, and what the Panel considers to be their limited effectiveness

- **There are a small number of areas of the river where engineering controls can be effective and should be considered, such as West Griffin Island channel**

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Residuals: Depth of Contamination (DoC) Determination

- Development of more accurate, reliable DoC requires further sampling
- New core sampling program began mid-September
  - Two 6-inch layers with Total PCBs below 1 ppm to define DoC
  - Samples from previously un-sampled locations (i.e. data gap locations) as well as “low-confidence” or “no-confidence” areas
  - 20% of the “high confidence” areas will be re-sampled
  - Two alternative sampling methods being tested: vibracoring with a core catcher and sonic drilling
  - Additional equipment and/or approaches may be necessary

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EPA Observations and Comments: Modeling

- EPA working with GE to evaluate GE's model
- If determined to be strong predictive tool, after peer review, model will be used to inform relevant decisions during Phase 2

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Resuspension: Transport Load Standard

Year 1 of Phase 2: Tri+ release rates measured at the Thompson Island Dam and Waterford: 2% and 1%, respectively, of Tri+ mass removed

- **Standards will be translated into estimated yearly and daily load standards based on estimated mass removal rates**
- **Standards will not be 'interim' but will be adjusted, as needed, as project progresses**
- **Model forecasts and fish impact measurements will also be considered**
- **Standards will be used to trigger operational changes, not operational shutdown**

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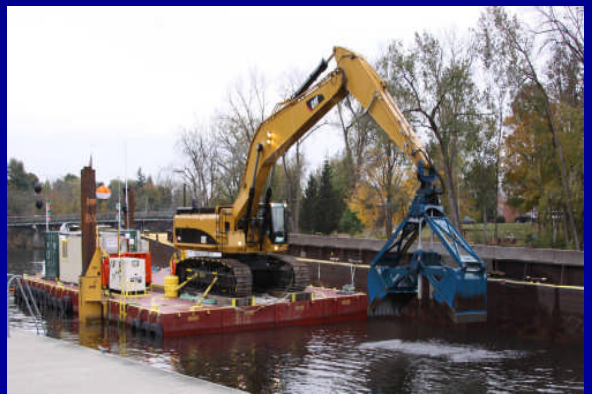
Resuspension: Adaptive Management

- EPA is in agreement with the peer review panel that an adaptive management approach should be used
- This would allow for adjustments to the project as additional information is obtained
- EPA and GE to agree on adaptive management structure moving forward
- EPA expects to engage with wide community of stakeholders in periodic assessments of data



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Residuals: One Pass

- Coring program underway to better define Depth of Contamination (DoC)
- EPA will evaluate success of attainment of DoC as project progresses; if appropriate, EPA may require changes to approach including
  - Increasing depth of first pass
  - Second pass in areas where inventory left behind
  - Additional sampling to better define DoC
  - Possible test pits in debris areas

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Residuals: Elevation-Based Depth of Contamination (DoC)

- 4-inch dredging tolerance is acceptable; separate criteria will be developed to allow for modification, as needed
- Goal: attainment of DoC elevation in 95% of CU prior to backfilling or capping

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Residuals: Compositing of Samples

- Compositing of samples may lead to increased capping in areas where it is not necessary
- Proposed alternative approach: analyze each post-dredging core using the top 6-inch segment in the cap/backfill decision
- Year 1 Phase 2: Individual cores will be analyzed to determine mass removed and mass remaining

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EPA Observations and Comments: Productivity

Drop Total Volume Productivity EPS criterion and set initial Annual Volume at 350,000 cy/yr

- **Productivity should be maximized while meeting the resuspension and residual standards**
- **EPA will continue to seek improvements in productivity rates during the life of the project**
- **Project likely to require more than five more dredging seasons**

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2010 Field Activities

- Continue off-season Baseline Monitoring Program (BMP)
- Continue off-site shipment of dewatered sediment (ongoing air sampling at Processing Facility)
- Habitat reconstruction efforts continue
- Various survey and other work (floodplain sampling, floodplain removal actions, Phase 2 cultural resource investigations)
- Sediment core sample collection in approximately 475 locations this fall

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Schedule

- EPA decision regarding changes for Phase 2 design: November 2010
- GE to provide notice to EPA regarding Phase 2 opt in/opt out decision by end of December

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Comments/Questions

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