Update on Superfund HQ Sediment Remediation Activities

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General Meeting of Federal Remediation Technologies Roundtable June 5, 2008

CSTAG – Contaminated Sediments Technical Advisory Group

- "monitor the progress of and provide advice regarding a small number of large, complex, or controversial contaminated sediment Superfund sites."
- 10 EPA regional staff, 2 ORD, 2 HQ, 2 from Army Corps
- Have visited 13 sites; more to come
- Reviews at: http://www.epa.gov/superfund/health/conmedia/s ediment/cstag_sites.htm

CSTAG Sites

- Ashland/Northern States Power Lakefront
- Kalamazoo River
- Housatonic River
- Palos Verdes Shelf
- Portland Harbor
- Lower Duwamish River

- Kanawha River
- Centredale Manor
- Pearl Harbor Naval Complex
- Anniston PCB Site
- Nyanza River
- Upper Columbia River
- Lower Passaic River

SAMS – Superfund Assessment and Monitoring Sheets

- Using Fish Tissue Data to Monitor Remedy Effectiveness - July, 2008
- Calculating and Using Surface-Weighted Area Concentrations (SWACs) to Characterize Sediment Contamination-EPA

EPA-Sponsored Corps Documents

- Technical Considerations for Environmental Dredging of Contaminated Sediments
- How to Evaluate Erosion of Caps
- How to Evaluate Contaminant Flux into Cap Isolation Layer
- Technical Considerations for Capping Contaminated Sediments

MOU for Collaboration on Contaminated Sediments Research April 10, 2007

- 1. Communicate programmatic needs in assessing and remediating contaminated sediment in order to focus research efforts to address the most important common questions,
- 2. Exchange ideas about recent, ongoing and planned contaminated sediment research across federal agencies in order to reduce unnecessary duplication of efforts,
- 3. Communicate and document existing areas of inter-agency collaboration,
- Identify areas and projects for active collaboration, and discuss potential mechanisms for executing collaborative projects, including field demonstrations,
- 5. Develop joint initiatives to implement research projects and leverage funding across agencies,
- Establish a mechanism to share preliminary research findings among all federal programs,
- 7. Establish a mechanism to facilitate technology transfer of completed products and tools,
- 8. Establish a procedure for convening future meetings.







ORD Research Questions

- What is best framework for F & T modeling to compare remedial alternatives?
- How effective are alternative technologies vs. sediment dredging?
- What are the critical tissue residues to use when screening bioaccumulatives?
- How develop better tools to characterize sediments?
- How identify remedial options that minimize risks to fish and benthos?

Superfund Sediment Resource Center - SSRC

- Virtual center to provide responses to RPMs on site-specific technical issues
- Up to 40 hours/request; completed in 30 days
- Access to Corps staff as well as consultants, ORD scientists, academicians
- 20 requests: sediment stability, modeling, remedial design, risk assessment

Other Activities

- Re-doing the modeling effort at New Bedford Harbor SF Site
- Support of research on effectiveness of dredging at Ashtabula river
- Support for use of artificial samplers (SPME, SPMD, PEDs) at sites
- Coordination with state organizations and other technical groups