

**October 2003 Draft Engineering Performance Standards – Peer Review Copy**  
**Hudson River PCBs Site**  
**Summary of Changes from May 2003 Public Review Copy**

Resuspension Standard

- Expressed the dredging-related PCB load limits at the Control Level in terms of Tri+ PCBs that are equivalent to the Total PCBs load limits presented in the May 2003 draft for public review. The Tri+ PCB load export limit is 22 kg for the first year of remediation (Phase 1) and 44 kg per year for the remaining five years (Phase 2).
- Calculated risks to humans and ecological receptors, based on the projections of fish tissue recovery presented in the May 2003 draft, to further support the conclusion that dredging operations performed in compliance with the Resuspension Standard will be protective of human health and the environment. The calculations show that non-cancer hazards and cancer risks to humans, as well as risks to ecological receptors, are well below those calculated under the Monitored Natural Attenuation (MNA) scenario.
- Clarified that the monitoring locations will be adjusted periodically to account for changing river conditions and dredge locations. Clarified that the means of verifying that the downstream monitors are placed to capture the resuspension plume will be specified as part of the remedial design.
- In a related matter, prepared a White Paper on Phase 1 monitoring costs as part of EPA's October 10, 2003 response to General Electric Company's public comments. The White Paper provides a reasonable cost estimate for the Phase 1 monitoring program and is based on mostly routine monitoring with limited time at the higher Action Levels that trigger increased monitoring. The White Paper notes that Phase 1 monitoring costs should not be used to estimate Phase 2 costs, because the Phase 1 monitoring program is intended to be modified and optimized for Phase 2, which is expected to reduce costs.

Residuals Standard

- Explicitly stated EPA's preference for dredging over capping to isolate PCB residuals.
- Simplified the capping contingency actions by eliminating the concept of a residuals cap (i.e., enhanced backfill). Added design objectives and design criteria for the isolation cap and provided citations for relevant EPA and USACE guidance documents on cap design.
- Provided further support for the number of samples to be collected per Certification Unit, including output from EPA's Decision Error Feasibility Trials (DEFT) software package.
- Added requirements for weekly progress reports and Certification Unit Closure Reports.
- Added a review of corrective action requests submitted by the Construction Manager as information to be considered in evaluating refinements to the standard following Phase 1. Also, suggested that the standard may be refined in Phase 2 to limit the extent of the area capped, based on the Phase 1 results.
- Provided further support for use of the 0-6 inch sampling interval and clarified the requirements for characterizing the potential thickness of dredging residuals.

Productivity Standard

- Clarified the statement that dredging is unlikely at river flows in excess of 10,000 cfs, to refer specifically to river flow measured at Fort Edward.
- Reduced the number of dredges operating simultaneously on the west side of Griffin Island by using a dredge with a higher production rate. Modified the Example Production Schedule accordingly.