Document:	EPA Response to Comments from NYSDEC on Engineering Performance Standards – Public Review Copy Hudson River PCBs Superfund Site
Document Date	October 10, 2003

Reviewer	#	Comment	Topic	Response
NYSDEC	1	Once EPA has considered the public comments it has received and revised the standards accordingly, the draft standards will undergo an independent scientific peer review as described in ROD. Due to the need for close monitoring of the dredging operations, particularly during Phase 1, implementation of the proposed standards will result in a large quantity of data being generated that will need to be assimilated and responded to on a timely basis. Therefore, it is recommended that the peer review team's charge include an evaluation of the implementability of the proposed standards. Accordingly, expertise and experience with implementation of large scale environmental dredging projects should be a consideration in evaluating the qualifications of the candidate peer review panelists.	**General** Peer Review Team	EPA will consider the first part of this comment as it develops the charge for the peer review panel. With respect to the second part of this comment, please note that Eastern Research Group, Inc. (ERG), an EPA contractor, is responsible for administering the peer review and selecting the independent experts for the peer review panel. ERG is required to select a panel of peer reviewers who collectively have expertise in the areas covered by the draft Engineering Performance Standards.
NYSDEC	2	The proposed standard for dredging productivity calls for backfilling and shoreline stabilization at each area dredged in a particular season to be completed prior to demobilization at the end of each dredging season. The Department supports ensuring that each dredged area is adequately stabilized within the given season it is dredged. The ROD calls for backfill of dredged areas with	**Residuals** Backfill areas and materials Consultation with the Department	Comment acknowledged. As EPA's support agency for this project, NYSDEC has had a formal role in reviewing earlier drafts of the engineering performance standards developed by EPA, and will continue to be closely involved with EPA's finalization of the engineering performance standards. DEC also has an ongoing role in reviewing the remedial design prepared by General Electric Company

		approximately one foot of clean material to isolate residual PCB contamination and to expedite habitat recovery, *where appropriate*. In some cases, backfilling with clean material may not be the most appropriate action for fostering habitat recovery. Determining what is most appropriate in order to expedite habitat recovery will likely be largely dependent upon the ecological setting/location of the specific area dredged and its corresponding residual PCB level. Once the areas to be dredged are delineated, and the habitat delineation and assessment portion of the Remedial Design is completed, the Department will be able to provide more specific guidance and recommendations on this issue. In areas where backfilling may not be advisable for habitat recovery based upon their location, the final determination of whether backfilling is appropriate will also depend upon the residual PCB levels following dredging. Therefore, consultation with the Department on this issue during remedy implementation is warranted.		pursuant to the Administrative Order on Consent issued by EPA, which includes design of the habitat replacement program.
NYSDEC	3	The proposed standard for residual PCB levels provides for capping dredged areas following only one dredging attempt in specified cases where the certification unit mean is greater than the objective of approximately 1 mg/kg Tri+ PCBs. In areas of the river where dredging is difficult due to the nature of the substrate, making only one good effort at removal as provided for in the proposed standard may be appropriate provided the targeted dredging depth was achieved to the extent practical and where we are certain the established cut elevation was representative of the depth of contamination. However, since the ROD calls for removal rather than containment of the contaminated sediments, the individual cases where dredged areas with	**Residuals** Dredging pass and backfilling	It is important to distinguish between capping of PCB inventory (mass) and the capping of residual concentrations of PCBs after the PCB inventory is dredged. The Residuals Standard requires that the dredging cut lines established during remedial design be met prior to application of the standard, including the capping contingency. With the bulk of the PCB mass then removed during dredging, the role of the cap at a dredged location is only to contain the residual concentration of PCBs. USEPA and/or its authorized representatives will be present on-site during the dredging to

		greater than the 1 mg/kg Tri+ PCB residual are capped after only one dredging pass should be carefully evaluated on an ongoing basis during Phase 1 dredging. EPA should have a high level of certainty that the initial dredging pass not only met the targeted depth of removal but that the operation of the dredge was conducive for maximum removal of contaminated sediment. This is of particular concern in areas where backfilling would not be the best means for fostering habitat recovery.		ensure that the dredging is conducted properly and that the cut-lines approved during remedial design are met in the field during construction. While the field-based decisions to cap within a certification unit do not require formal USEPA approval, the Residuals Standard has been modified to require a Certification Unit Completion Report which would describe, among other things, the circumstances leading to a decision to cap within a certification unit. Thus, USEPA will confirm compliance with the Residuals Performance Standard. Consistent with the 2002 Record of Decision, following the Phase 1 dredging USEPA will compare the operations with the Engineering Performance Standards and evaluate whether any adjustments are necessary to the dredging operations or to the standards in Phase 2. As noted in Section 4.0 of the Residuals Standard, the number of dredging attempts required and the use of non-dredging technologies (e.g. capping) during Phase 1 will be evaluated and such evaluation may lead to a refinement of the Residuals Standard for Phase 2.
NYSDEC	4	The Resuspension Standard provides for notification to downstream public water suppliers when the total PCB concentration at the Waterford far-field station is predicted to be 350 ng/L or greater. The monitoring and notification required by the Resuspension Standard is in	**Resuspension** CHASP	EPA agrees that protection of human health is fundamental to the development of the Resuspension Performance Standard. Compliance with the Resuspension Performance Standard will ensure that the

		addition to monitoring and notification requirements that will be developed separately for the Community Health and Safety Plan for the remedial work activities. Per the ROD, the Community Health and Safety Plan will provide for community notification of ongoing health and safety issues, monitoring of contaminants and protection of the community from physical and other hazards. The plan will include a section that outlines the actions to be followed should monitoring of PCBs show contaminant levels above certain levels to be identified in the plan. EPA should ensure that the resuspension standard will be protective of water users, including drinking water, industrial and agricultural applications. Insofar as remedy implementation may cause a release of PCB at levels of concern, the Community Health and Safety Plan will likely need to build off of the engineering performance standard for resuspension so that appropriate protective measures will be followed.		public water supplies that draw from the Upper Hudson meet the Maximum Contaminant Level established under the Safe Drinking Water Act, which is 500 ng/L Total PCBs. Further, as noted in the comment, the Resuspension Standard requires notification when the Total PCB concentration at the Waterford far-field station is 350 ng/L Total PCBs (i..e., 70% of the MCL). Under the Resuspension Standard for Phase 1, monitoring of Lower Hudson River water quality is required to provide the data needed to evaluate whether there are any impacts to the Lower Hudson from dredging in the Upper Hudson and to inform decisions regarding any necessary actions. In addition to being protective of drinking water users, EPA believes that the Resuspension Performance Standard is protective of industrial and agricultural users. Both industrial and agricultural users should be able to use the river water during dredging, given that Total PCB concentrations at far-field locations during dredging are expected to be within the variability of baseline concentrations of the river system, despite unavoidable increases in PCB concentrations in the vicinity of the dredge. Additional concerns regarding this issue can be addressed during remedial design when, for example, the precise locations of the areas to be dredged are known.