## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

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DATE: NOV 0 3 2000

SUBJECT: Biological Technical Assistance Group Review

**Hudson River PCBs** 

FROM: Miney J. Pensak, Coordinator

Biological Technical Assistance Group (DESA-HWSB)

To: Alison Hess, Remedial Project Manager Special Projects Branch (ERRD-SPB)

The following comments represent the consensus of the Region II Biological Technical Assistance Group (BTAG) review as discussed during the September 14, 2000 Conference Call. As per your request, the BTAG has evaluated the potential ecological impacts from bank to bank dredging of sediments in the Hudson River for the Hudson River PCBs site, located in Fort Edward, Saratoga County, New York.

The 1984 Record of Decision (ROD) indicated that bank to bank dredging of the entire river could be environmentally devastating. As a result of these impacts the ROD further noted that this type of alternative cannot be conducted. However, one of the proposed remedial alternatives included in the Feasibility Study (FS) may contain some bank to bank dredging.

There are differences between the statement from the ROD and what may be proposed in the FS. The ROD indicates devastation due to the entire river being dredged. In the FS the bank to bank dredging would not encompass the entire river. The need for bank to bank dredging may only be necessary in certain areas. Additionally, the implementation of the remedy would not occur at one time. A more localized approach (i.e., one segment of the river at a time) would be conducted, therefore, facilitating the recolonization of these sections of the river.

Bank to bank removal of the substrate would temporarily disrupt the habitat of the river. However, it is our belief that over time this habitat will most likely return. Along with sediments, vegetation would drift downstream through water movement or bird dispersal. Additionally, benthic communities will move downstream and recolonize these areas. More mobile organisms may take refuge in areas outside of the section being remediated.

Therefore, contrary to the 1984 ROD, the BTAG does not agree with the statement that bank to bank dredging would be environmentally devastating to the river in this scenario because of the phased approach and the limited area involved. Consequently, it would be acceptable to include a dredging alternative in the FS.

The following are examples of projects which involved some form of bank to bank dredging.

The upper half mile of the Housatonic River is being dredged bank to bank for the GE-Housatonic River PCB site (Massachusetts). As this project is currently under way there are no data regarding habitat regeneration.

Bank to bank removal for part of the inner harbor in Wisconsin along with portions of Sheyboygan River will be conducted to address PCBs. This project has not been implemented (the ROD has been signed), therefore, restoration data are unavailable (RPM - Tom Short [312 353-8826] and Jim Chapman Ecological Risk Assessor - [312 886-7195]).

There was a bank to bank dredging project conducted in the Sitcum Waterway in Commencement Bay, Washington which is a dead end marine embayment approximately 1 mile long. Monitoring data illustrated regeneration of the benthic community within 3 years to comparable density. However, this is a marine system and may not necessarily be comparable to the Hudson River.

Bank to bank dredging was implemented in a small stream channel associated with the Strandley Manning (Dave Croxton - RPM [206 553-6694]) site in Washington as part of a voluntary cleanup action. One foot of sediment was removed using small machines and shovels to address PCB contamination. Quarterly monitoring data regarding the regeneration of habitat and biota may be available. The fish in this case were removed prior to the dredging and were subsequently returned.

A small tidal stream in Kent, Washington which drains into the Duwamish River and Puget Sound was dredged from bank to bank to remove metals and PAHs. The main concern for the dredging in this case was the potential for downstream migration. This issue was addressed by damming the stream. Monitoring data may be available for this site (Western Processing - RPM - Lee Marshall [206 553-2723]).

Tidal creeks in a salt marsh associated with the LCP Chemical site in Brunswick, Georgia were involved in bank to bank dredging to remove the areas with the highest concentrations. The dredging removed 1-2 feet of sediment using a small hydraulic dredge. A silt curtain was used to prevent potential releases of contaminated suspended sediment off the site to Purvis Creek and the Turtle River. There may not be any post-dredging monitoring data available.

The remediation of Lake Järnsjön, Hultsfred, Sweden involved bank to bank dredging to address sediment PCB contamination. Habitat regeneration information was not available although there was a noted decline in fish tissue concentrations of PCBs.

If you have any questions, comments, or require further information, please contact Michael Clemetson at (732) 321-6712.

cc: Robert Vaughn, ERRD-SPB
Melvin Hauptman, ERRD-SPB-SP/CT
Gina Ferreira, ERRD-PSB
John Cantilli, DEPP-WPB

Steve Ferreira, DEPP-SPMMPB Lisa Rosman, NOAA Charles Merckel, USFWS Christina Dowd, NYSDEC