



Memo

To: Manna Jo Greene
From: Peter deFur, TAG consultant
Re: PCB in surface sediments/fish tissues

Several issues have arisen concerning the PCB levels in surface sediments and in fish in the upper Hudson R as the remediation proceeds. First, with the additional acreage of PCB contaminated surface sediments, will fish PCB contamination remain and the cleanup goal be compromised? Next, will the focus on human consumption of fish present any issues for the cleanup?

I have the following concerns about the issue raised by these questions:

- 1) Surface sediments will be most available for fish and other plants and animals, thus, leaving PCBs in surface sediments will result in more direct and short term uptake of PCBs by fish and other animals and plants. The reduction of PCBs will be compromised by leaving surface PCB contaminated sediments in place. Surface sediments with PCBs may be washed downstream, buried or lose PCBs very slowly. The PCBs will not break down and will persist.
- 2) As overall PCB levels decline in sediments, water column and biota, the dynamics of PCB movement will change. At lower levels of PCBs, the efficiency/effectiveness of PCB migration will change.
- 3) The PCB removal needs to target absolute levels of PCBs in fish tissue and environmental media because the effects occur at specific and low PCB levels.
- 4) As laudable it may be for EPA to target human fish consumption, mink and bald eagles are more sensitive to PCBs and the cleanup needs to be sure and lower PCBs to the point where wildlife are not at risk.
- 5) PCBs now exist in several parts of the river system, including sediments, water, plants and animals. These PCBs move from one part of the system to the next and will continue to move for years to come, existing as another PCB sink.
- 6) The effectiveness of the PCB-sediment removal in decreasing fish tissue levels and other biota will be demonstrated over time and after some years because of the PCB persistence. As a result, in order to avoid the need to return to the site and repeat the remediation, PCB removal in the present effort is needed.