New York-New Jersey Harbor Estuary Program
TOXICS WORK GROUP
Meeting Minutes
February 26, 1999 @ 290 Broadway, Room 27D

(DRAFT April 13, 1999)

The Toxics Work Group (TWG) was convened at 10:00 am by Bob Nyman.

The minutes from the December 10, 1998 meeting were adopted as written.

1. Bob Nyman distributed two page draft copies of the suggested *Roles of Toxics Related HEP Work Groups* including a proposed organizational chart. He noted that the CARP Management Committee would be reviewing the information at their next meeting and that this was just an FYI. It was reaffirmed by the TWG would like to keep its charge broad and would like to have oversight over the entire Toxics chapter of the CCMP.

2. Water Quality.

A revised table of the toxics water quality criteria for EPA and the two states (dated February 10, 1999) was distributed. No review was requested. There was discussion of the title of the table *(Parameters of Concern in the New York/New Jersey Harbor-Water Quality Criteria for Toxics*) and it was suggested that the title may be miss leading. The group agreed to change the name to "*Reference Table of Parameters of Interest in the New York-New Jersey Harbor*".

It was noted that for sediment criteria that the concept of how criteria are to be derived would be presented to the EPA Science Advisory Board in April.

3. Mercury.

John Zambrano gave a presentation on *The Anatomy of Mercury* which discussed the different standards for mercury and how they were derived. See attachment table.

4. Biota.

John Zambrano continued by presenting a comparison of the Skinner et. al biota data with risk based criteria and presented a table based on a cancer risk factor of 10^{-6}. The calculation for water quality standards (WQS) is as follows:

$$WQS(ug/l) = \frac{\text{Substance Dose(ug/kg-day) x Body Weight (kg)}}{\text{BAF(l/kg) x Biota Consumption (kg/day)}}$$

Biota criteria were determined using the substance dose, body weight and biota consumption from the above equation. John stated that the FDA numbers are set for the market to protect humans from consuming biota that is contaminated. WQS are numbers that are set to protect the resource in a preventative mode. He stated that all the data presented were adjusted to 2.8% lipid content. A report finalized after the meeting in March 1999 summarizes the presentation. It also documents the decision of the TWG to remove heptachlor, heptachlor epoxide, hexachlorobenzene, and gamma-BHC from the biota column of the HEP Chemicals of Concern list. Mercury was added in the biota column with the notation of an "open circle" indicating exceedances of unenforceable criteria. In that same column, the designation for DDT and metabolites was changed to a "solid circle" indicating exceedances of enforceable standards. Alan Stubin noted that some of the chemicals listed on the original HEP list were based on one or a few data points and the QA associated with them may have been questionable. Therefore, decisions to add or remove chemicals from the biota column were based on the new Skinner et. al data.

There was considerable discussion about whether or not lead and cadmium should be included in the biota column. Some data indicates that there are exceedances of FDA numbers in fish and shellfish with the highest numbers for cadmium occurring in crab and lobster. John Z. agreed to look into this and get back to the TWG at its next meeting. John indicated that he would be retiring at the end of May, so the TWG will meet prior to then.

5. Sediment.

At the previous TWG meeting, the group had been discussing how to proceed with addressing sediments given the lack of sediment quality criteria. In an attempt to make some progress, it was agreed that the group should begin by looking at the new REMAP data.

Darvene Adams gave a presentation on the REMAP data for the Harbor. The data, based on surface sediment chemistry, were compared to the Long and Morgan ER-L and ER-M values. The numbers indicated that there was a concern with mercury, chlordane, PCBs and high weight PAHs. The reliability of some ER-L and ER-M values were called into question.

Jim Lodge presented data on federal dredging projects that failed testing based on toxicity. He also presented data on bulk sediment toxicity for *Ampelisca* from REMAP, NOAA Status and Trends, and Maxxus data sets. Using those three data sets, Mr. Lodge showed the theoretical estimates of tissue contamination (TBP) for PCBs, PAHs, dioxin and DDT. While sampling did not have equal geographic coverage, contamination was widespread.

Dennis Suszkowski then gave an overview of the types of data expected to come out of the CARP study, including water, sediment and biota. He said that based on the preliminary sampling conducted for CARP, the analytes for the full scale sampling would be re-evaluated in April.

Dennis said that a decision needs to be made within several weeks on which species of metals will be measured for biota and sediments. Dennis questioned how TMDLs would be developed for biota. It was pointed out that arsenic was not indicated as a problem by REMAP, but other data suggested it may be a problem. There was also an indication that lead may be a problem in Flushing Bay.

There was considerable discussion about what sediments should be evaluated for environmental concern. Some work group members felt that only the surface sediments within the bioavailable zone should be considered, while others felt that buried sediments which could potentially be dredged should also be considered. Some members suggested that dredged sediments are not an environmental problem, but rather a problem for the dredger that needs to dispose of them in locations other than the aquatic environment.

It was noted by a few people that for a thorough evaluation, mercury should be measured as both total and methyl forms and both of these forms in the total and dissolved phases. It was also noted that this would be very expensive.

Bob Nyman then summarized the recommended changes to the biota column based on the days discussion (See item 4 above).

The meeting was adjourned at 2:30 pm.