

53697-5

October 16, 1989

Mary Sanderson
Remedial Project Manager
Uniter States Environmental
Protection Agency
Region I Office
Boston MA 02203

Re: Comments on Cleanup Plain for PCB "Hot Spot" Area in New Bedford

Dear Ms. Sanderson:

These comments concern the Draft Final Baseline Public Health Risk Assessment; New Bedford Harbor Feasibility Study, August 1989.

1. The Executive Summary should be considerably shortened (13 pages is too long) and should emphasize facts and conclusions, not structure of the report and methodology. The structure of the report is provided by the Table of Contents and discussions of methdology belong in the text.
2. Tables 2-7 and 2-14 list no references for the exposure assumptions given.
3. Table 2-8 uses reported seafood consumption for the Greater New Bedford PCB Health Effects Study (1984-1987) which is described on pp 2-38 through 2-41. As discussed on p. 2-40, only 840 individuals out of 1482 eligible chose to participate in this study. This results in a participation rate of 57%, much less than the rate of 80% considered acceptable for drawing conclusions from a cross-sectional study. As such, the seafood consumption reported in this study cannot be assumed to be representative of the population eligible for study. In addition, the individuals not included in the study are more likely to be non-English speaking and lower income. They are thus more likely to consume seafood from New Bedford Harbor whether from lack of knowledge about contamination or out of economic need to obtain food by fishing. Therefore it is likely that any uncertainty in the amount of seafood consumed is in the direction of underestimating consumption.

Given the emphasis on seafood consumption as a route of exposure in this risk assessment, it is essential that the magnitude of the uncertainty regarding the amount of seafood consumed be addressed.

4. The tables in Appendix C which compute a body dose for noncarcinogens use a nonconservative assumption by calculating a time-weighted average. This is not consistent

with EPA policy. (It is my understanding that instructions regarding this issue will be included in the Revised Superfund Public Health Evaluation Manual.) The tables in Appendix C calculate an average daily body dose and then compare it to a standard for lifetime daily exposure. The exposure scenario, for example, is for a child being exposed 20 days/year. Calculating an average daily body dose ignores the fact that on 345 days the child receives a dose of zero and on 20 days receives a dose 15 times greater than the dose calculated in the table. Risk should be evaluated for the actual dose received, not for a time-weighted average dose.

5. Appendix B PCB Toxicokinetic Factors for Use in New Bedford Harbor Risk Assessment

The term "toxicokinetic factor" is too broad and could be used for any of a variety of metabolic or physiological processes. A more appropriate and accurate term would be "relative absorption factor."

Pp. B-3 through B-5: The development of the gastrointestinal absorption factor for Norback and Weltman (1985) study clearly describes the absorption percents for all six studies considered as "minimum." A discussion should be included which makes clear whether or not the use of minimum absorption percents is a conservative assumption which is protective of public health.

6. Bibliography (pp B-1 through B-30)

The Bibliography needs to be proofread. Several citations do not have a title. (These appear to be primarily from Appendix B PCB Toxicokinetic Factors.) One reference (Cordle, 1982) gives no journal. A systematic style should be adopted e.g. the titles of some books and government publications are underlined while others are not (Alexander, 1973 vs. Adriano, 1986). Also a consistent style should be used for chapters in books regarding the use of quotation marks.

If you need any further clarification regarding these comments, I can be reached at 3354-7048.

Sincerely yours,



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