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Review of "Appendix E, Draft Final Baseline Public Health
Risk Assessment; New Bedford Harbor
Feasibility Study, August 1989"

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This appendix contains two documents: a memorandum by Norton and a report by Pruell et al. The major problem with the appendix is that the memorandum by Norton is not substantiated in the report by Pruell et al.

In the memorandum, Norton attempts to use the argument that Aroclor 1260 is an appropriate surrogate for the mixture of congeners found in fish and lobster. This is based upon the analysis of a "selected" number of congeners, which were presumably enriched in the environmental samples compared to Aroclors 1254 and 1260. However, for other congeners this does not appear to be the case.

The report by Pruell et al. states that the congeners which may be the most toxicologically important are congeners 77, 105, and 126 (E-19). Of these three, #105 is present in the seafood samples in the greatest quantity. Congener 105 is present in Aroclor 1254 and comprises about 10% of the total. In the seafood samples, congener 105 comprises between 5-10% of the total. A similar exercise would show that the sum of congeners 77, 105, and 126 is not enriched in the seafood samples. Therefore, Norton has only made her

point by choosing the congener (#77) for her graphs very carefully. These Aroclors are very complex mixtures, and any simplistic analysis of the congener content will not necessarily provide answers regarding the effects of the total mixture.

The major problem with this type of analysis is that there is no consensus that the cancer promoting activity of PCBs in rodents is associated with the 3-methylcholanthrene type inducers. In fact, this promoting activity may very well be associated with phenobarbital-type inducers. So there is really no basis for the argument made in this memorandum.

The other issue that Appendix E does not address is the congener distribution of the sediments. The Aroclors used in New Bedford were predominantly 1242 with lesser amounts of 1254 and 1016. Those Aroclors have not been demonstrated to be carcinogenic in animals, or, at least, their potency is far less than that of Aroclor 1260.