UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE August 19, 1987

SUBJECT Derivation of Action Levels for Airborne PCBs: New Bedford Harbor, Massachusetts

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TO Renate Kimbrough
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As I mentioned to you over the telephone, the Regional Office is at a stage in the assessment of the New Bedford Harbor Superfund Site where a pilot project is needed to assess the effectiveness of dredging PCB contaminated sediments from the Harbor. The Army Corps of Engineers has been working with the Regional Office on the design of the pilot dredging project scheduled to begin in December of this year and run through by mid '88. Excerpts from the Corps' Report describing the pilot project in greater detail are enclosed.

As PCB contaminated sediments are to be dredged from a portion of the Harbor and moved to the confined disposal facility (CDF), the Regional Office has begun working with the contractors (Ebasco and E.C. Jordan) to develop an air monitoring program. The air monitoring program will be designed to evaluate the impacts on the air quality during dredging and subsequent drying of PCB contaminated sediments in the confined disposal facility. The Regional Office must also identify an action level(s) for airborne PCBs that will be protective of the public's health during pilot project activities. A draft version of the contractor's derivation of action levels for airborne PCBs during the pilot project activities is enclosed. Your comments and or suggestions on the action levels would be greatly appreciated.

Several thoughts you may want to keep in mind:

1. The estimated duration of the pilot project is roughly nine months from the initial construction of the confined disposal facility (CDF) through the drying of contaminated sediments. (Note that the contractor has based their risk estimates on a two month exposure period). The anticipated schedule for pilot project activities is as follows:

Construction of Confined Disposal Facility	Dec '87 - Feb '88
Dredging of contaminated sediments	March '88 - May '88
Drying of sediments in CDF	May '88 - Aug '88

   It is important to notice that PCB contaminanted sediments placed in the CDF are to be dried out (dewatered) during the summer months. As such, the CDF poses the most concern to the Air Management Division after it has been dewatered as this is the time when we forsee the greatest potential for release of contaminants to the atmosphere. The actual

dredging itself will take place under water, and the transport of dredged sediments to the disposal sites will be completely enclosed. Discharge of the dredged materials into the CDF will also take place under water.

2. The 10-day health advisory (page 3 of the report) is not ODW's health advisory but came from OHEA's document entitled "Development of Advisory Levels for PCB Cleanup" that was prepared for Superfund. Should values from this document be used to derive action levels for air given that they don't represent the peer reviewed health advisories generated by ODW? If they shouldn't be used, what should be used to derive short term levels?

3. It may be of interest to you to know that previous air monitoring surveys conducted at the site have revealed PCB concentrations as high as 500 - 700 ng/m^3. Background levels seem to be about 10 ng/m^3. The cancer risk associated with "background" levels of contamination is likely to be an issue that we'll have to deal with in the near future, particularly if Massachusetts Acceptable Ambient Level (AAL) of 8 ng/m^3 is observed.

I appreciate you taking the time to review the information enclosed. Any help or suggestions you can offer on the derivation of target levels for air during the nine month pilot dredging study would be greatly appreciated by those of us in the Region working on this project. If I can help clarify any questions you may have, please feel free to call me at FTS-835-3232. Thank you once again.

Enclosures.