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Commonwealth of Massachusetts
Executive Office of Environmental Affairs

Department of Environmental Protection

Superfund Remediation Center
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MEMORANDUM

To: Helen Waldorf, Section Chief, BWSC

Through: Brian Donahoe, Director, DWPC
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From: Lawrence Gil, Aquatic Biologist IV *LG*

Date: August 8, 1992

Subject: Division of Water Pollution Control Applicable or Relevant and Appropriate Requirements (ARARs) for the New Bedford Harbor Superfund Site. Estuary/Harbor/Bay Operable Unit

The purpose of this memo is to outline the Applicable or Relevant and Appropriate Requirements (ARARs) for the regulatory programs administered by the Division of Water Pollution Control.

314 CMR 1.000 to 7.000 Massachusetts Surface Water Discharge Permit Program

4.00 Massachusetts Surface Water Quality Standards

8.000 Supplemental Requirements for Hazardous Waste Management Facilities

9.000 Certification for Dredged Material Disposal and Filling in Waters

12.000 Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Dischargers

In developing this list, the Division has considered all alternatives proposed for the New Bedford Harbor Superfund project from the "Hot Spot" remediation to activities proposed for Upper Buzzards Bay. Applicable sections and performance standards for Wetlands Protection and Waterways regulations are listed below.

The Division is also concerned that untreated PCB contaminated sediments are proposed to be placed in unlined confined disposal



facilities. The Division is concerned that the CDFs may represent a secondary source for future PCB contamination of the Harbor. Additional steps should be taken to eliminate long term migration of PCBs from the disposal sites. The Division strongly recommends that the CDFs be lined with some type of reduced permeable material and that a monitoring plan be implemented to track PCB migration.

In addition, as plans for this Superfund Site evolve, additional impacts to water quality may be identified. The Division therefore reserves the right to request additional mitigation once final plans become available and submitted to us for our review and approval.

Specific Comments

The Federal Water Quality Act requires all states to restore and maintain the chemical, physical and biological integrity of the nation's waters. Under the Federal Act the waters of the nation must be able to support the propagation of fish, shellfish and wildlife and recreation in and on the water. These goals have been shortened in regulatory parlance to "fishable and swimmable". Massachusetts General Law Chapter 21, section 27 herein after referred to as the "Act" charges the Division of Water Pollution Control with the duty and responsibility to protect public health and enhance the quality and value of the water resources of the Commonwealth. The Commonwealth has recently revised its regulations which regulate activities within the surface waters under 310 CMR 4.00 Massachusetts Surface Water Quality Standards (310 CMR 4.00 et al) effective July 20, 1990. The Massachusetts Surface Water Quality Standards designate the most sensitive uses to be enhanced, maintained and protected and the minimum criteria to sustain the designated uses 310 CMR 4.01 (4).

The surface waters of the Commonwealth are segmented into finite portions and each segment assigned to a particular "Class" of water. Each class is identified by the most sensitive, and therefore governing, water uses to be achieved and protected. The classification of "SA" is applied to marine waters which are or should have the highest quality designations. The classification "SB" is applied to marine waters which are subject to natural conditions or human caused conditions or sources of pollution which may periodically reduce water quality. This classification implicitly acknowledges the urbanized nature of some of the Commonwealth's waters.

The two segments which encompass the upper estuary from the Main Street Bridge to the Route (6) "Fairhaven Bridge" and the inner harbor from the Route 6 bridge out to the Hurricane Barrier are classified as being SB waters. The segment seaward of the Hurricane Barrier i.e., New Bedford Outer Harbor is classified as SA.

The designated uses for "SB" waters whether they are being **attained or not** are "as habitat for fish, aquatic life and wildlife and for primary and secondary contact recreation. The Massachusetts Division of Marine Fisheries determines which SB waters shall be deemed suitable for shellfish harvesting with depuration".

The criteria which determine whether or not a segment is meeting its classification include dissolved oxygen, temperature, pH, Fecal Coliform Bacteria, solids, color and turbidity, oil and grease, aesthetics, bottom pollutants, toxic pollutants. Where limits for specific toxic pollutants are not listed, the Division will use limits provided by the EPA pursuant to Section 304(a) of the Federal Act or Site-specific limits based on toxicity testing procedures approved by the Director of Water Pollution Control. Human health risks associated with the toxic pollutants will be regulated using guidance issued by the Department's Office of Research and Standards.

Volume I Section 4.3.2.2.2 Ecological Target Clean-up Levels for Sediment page 4-22 indicates that under Best Scientific Judgment a sediment residual between 0.1 and 1 ppm PCB would be needed to protect most marine organisms. The WQS allow designating segments or portions thereof into a partial use subcategory. The criteria for establishing the subcategory are: when it is determined that natural background conditions prevent attainment of the use; human caused conditions or sources of pollution cannot be remedied or would cause more environmental damage to correct than to leave in place; or when controls more stringent than those proposed by Section 301 (b) and 306 of the Federal Act would result in substantial and widespread adverse economic and social impact.

It is likely therefore that all or substantial portions of the segments identified will have to be reclassified since all alternatives propose a minimum sediment residual of 10 ppm PCB or greater. In addition since the sediments are known to contain substantial concentrations of other toxic pollutants it would appear determinations would have to be rendered on all of the toxic pollutants identified.

The regulations for removing a national goal use or the establishment of a partial use subcategory require a public notice and the opportunity for a public hearing in accordance with M.G.L. C30A.

Most of the alternatives excepting the no action and capping alternatives follow up the dredging component with dewatering and disposal of the dredging spoils. Accordingly the applicant must receive a Massachusetts Division of Water Pollution Control Certification pursuant to regulations 314 CMR 9.00 et al. The certification procedure is typically incorporated into the application and issuance of a final Order of Conditions under the Wetlands Protection Act MGL C131 S40. Regulatory authority is established when activities alter wetland resources areas such as salt marsh, coastal banks, land under the ocean and land containing shellfish.

Presumably the permit conditions would draw upon the lessons learned from the pilot study.

Alternatives which generate some form of process water which in turn is discharged back into the estuary will be subject to regulations under 314 CMR 3.00 the Massachusetts Surface Water Discharge Permit Program. Section 4.03 of the MWQS outlines the procedures for establishing effluent limitations, the development of mixing zones, the hydrological conditions under which dredging would be permitted. Again permit requirements, effluent limitations etc would likely be based or modified after a thorough review of the findings and reports generated by the pilot study.

Should you have any questions please give me a call at 508 366-9181 x42.

cc:

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