UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F.K. FEDERAL BUILDING, BOSTON, MA 02203-2211

New Bedford
17.07
63838

MEMORANDUM

DATE: September 10, 1991

SUBJ: New Bedford Harbor Feasibility Study and Proposed Plan; Dredging Depths

FROM: Mary Sanderson
Remedial Project Manager

TO: The File

Dredging Depths

The 10 ppm alternatives require that 2 feet of sediment be removed in the estuary and 1 foot be removed in the lower harbor and bay. For the 50 ppm alternatives, 18 inches of sediment would be removed from the estuary and 1 foot of sediment in the lower harbor and bay.

The recommended dredging depths are based on best engineering judgment applied to the results of the Pilot Study and the distribution of PCBs across the site. The Pilot Study demonstrated that approximately 10 ppm was the lowest residual level that could be reasonably achieved through dredging.

The 10 ppm alternatives assure that a 10 ppm or potentially lower residual level would remain after dredging. Accordingly, the 50 ppm alternatives sought a 50 ppm or lower residual level. While the 50 ppm alternatives may in fact achieve a residual level of 10 ppm in many areas to be dredged, these alternatives did not explicitly seek a 10 ppm residual level.

For the 10 ppm alternatives in the estuary portion of the site, the 2 foot depth is substantiated by the data collection in the estuary. The data from the cores at 12 inch, 24 inch, and 36 inch depths (see the appendices to the FS) indicate that 2 feet of sediment removal will attain a 10 ppm residual level in most areas that would be dredged. Removal of 18 inches of sediment in the estuary will leave 50 ppm or less, and 10 ppm is the expected residual level in many areas to be dredged.

Examination of cores from the lower harbor and bay reveal less than 10 ppm at a 6 to 12 inch depth. Therefore, removal of 1 foot of sediment in these areas will achieve the 10 ppm residual level in these portions of the site.

These depths are set forth in the FS and translate into the sediment volumes that are carried throughout the FS alternatives. Based on best engineering judgment applied to the results of the Pilot Study, the COE recommends the 24" and 18" depths, and the sediment data for the site support this.

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