EXECUTIVE SUMMARY

The purpose of this Five-Year Review is to determine whether the remedial actions at the New Bedford Harbor Superfund site, located in Bristol County, Massachusetts (the Site) are protective of public health and the environment and functioning as designed. This Five-Year Review is for the entire Site (Operable Units One, Two and Three). The United States Environmental Protection Agency (EPA), Region I, conducted this review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121(c), 42 U.S.C. § 9621(c); National Contingency Plan (NCP), 40 C.F.R. § 300.400(f)(4)(ii); and OSWER Directive 9355.7-03B-P (June 2001). This is the second Five-Year Review for the Site covering the years 2005 through 2010.

EPA has segmented the 18,000 acre site into three operable units (OUs). OU1 covers the upper and lower harbor, with a Record of Decision (ROD) issued in 1998 (and modified to date by three Explanations of Significant Differences (ESDs) issued in 2001, 2002 and 2010)[1]. The OU1 remedy, as modified by the ESDs, includes removal of roughly 900,000 cy (approximately 260 acres) of PCB-contaminated sediment, and disposal of this sediment both offsite and in three shoreline confined disposal facilities (CDFs) in the upper harbor. Based on typical funding rates experienced to date, the OU1 cleanup will take many more years to complete. OU2 addressed the hot spot sediments, a five acre area near the Aerovox mill defined by PCB levels above 4,000 ppm. The hot spot ROD was issued in 1990, an Amended ROD was issued in 1999, and the hot spot remedy was completed in 2000. All OU2 contaminated sediments were disposed in a licensed off-site disposal facility. OU3 encompasses the entire 17,000 acre outer harbor area; that ROD has not yet been issued.

To summarize this Five Year Review, EPA continues to expect the upper and lower harbor OU1 remedy to be protective of human health and the environment upon completion, and in the interim, exposure pathways that could result in unacceptable risks have been, or are in the process of, being controlled to the maximum extent practicable. As described further below, the three exposure pathways of concern are: 1) consumption of local PCB-contaminated seafood, 2) dermal contact with PCB-contaminated shoreline sediments, and 3) ecological risks due to the highly contaminated sediments and water column at the site.

Given the 18,000 acre size of the site, coupled with the area's cultural diversity and reliance on local fishing, complete control of PCB-contaminated seafood consumption has been and will continue to be problematic until remediation is complete. In addition, as discussed further in this report, based on annual seafood monitoring performed by the Massachusetts Department of Environmental Protection (MassDEP) since 2003, EPA has determined that based on CERCLA risk standards, a state fishing ban issued in 1979 is not sufficiently protective regarding the human consumption of certain species of fish and shellfish in particular areas of the Harbor, including by certain sensitive populations. In addition to warning signs posted by EPA around the Harbor, EPA has recently reached agreement with the Massachusetts Department of Public Health (MDPH), the Massachusetts Division of Marine Fisheries (MDMF), and MassDEP to augment the 1979 fishing

[1] A fourth draft ESD proposing use of a confined aquatic disposal (CAD) cell was issued in June 2010 but has not yet been finalized .

Five-Year Review Report

Second Five-Year Review Report for the

New Bedford Harbor Superfund Site

Bristol County, Massachusetts

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