richness is a simple count of the total number of different benthic species present per station; and sediment toxicity is a measure of the lethality of the sediments to a test specie, in this case the amphipod *Ampelisca abdita*, under controlled laboratory conditions (sediments in which less than 80% of the test animals survive are generally considered toxic). For a more detailed description of these indicator parameters, see Nelson et al. (1996).

The baseline survey, while not differentiating between causitive agents (e.g., metals versus PCBs), found a highly stressed harbor ecosystem based on a number of different ecological indicators, with general gradients of decreasing stress from north to south (Nelson et al., 1996). The 1995 survey showed similar patterns of ecological injury, with increased contaminant concentrations and acute sediment toxicity levels primarily in the upper harbor compared to the 1993 baseline survey (Nelson et al., 1997). Species richness was on average the same for the upper harbor during the two surveys with a mean value of 16 benthic species per station (compared to average values of 20 and 41 species per station for the lower and outer harbors, respectively).

In conclusion, as summarized above in sections VI.A and VI.B and as elaborated in more detail in the Administrative Record, EPA has concluded that releases of PCBs at this Site present an imminent and substantial endangerment to public health, welfare and the environment.

VII. Development and Screening of Alternatives

A. Statutory Requirements and Remedial Action Objectives

Under its legal authorities, EPA's primary responsibility at Superfund sites is to undertake remedial actions that are protective of human health and the environment. In addition, Section 121 of CERCLA establishes several other statutory requirements and preferences, including: a) a requirement that EPA's remedial action, when complete, must comply with all federal and more stringent state environmental standards, requirements, criteria or limitations, unless a waiver is invoked; b) a requirement that EPA select a remedial action that is cost-effective and that utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and c) a preference for remedies in which treatment permanently and significantly reduces the volume, toxicity or mobility of the hazardous substances is a principal element over remedies not involving such treatment. For this operable unit, response alternatives were developed to be consistent with these Congressional mandates.

To assist in the development and screening of alternatives, and based on the contaminants at the Site, the environmental media of concern, and potential exposure pathways, remedial action objectives were developed to mitigate existing and potential future threats to public health and the environment. These remedial action objectives can be summarized as:

1. To reduce risks to human health by reducing PCB concentrations in seafood, by lowering PCB concentrations in sediment and in the water column;

DECLARATION FOR THE RECORD OF DECISION NEW BEDFORD HARBOR SUPERFUND SITE UPPER AND LOWER HARBOR OPERABLE UNIT NEW BEDFORD, MASSACHUSETTS

NBH 54.1 29857

Statement of Purpose

The attached Record of Decision sets forth the selected remedial action for the Upper and Lower Harbors of the New Bedford Harbor Superfund Site in New Bedford, Massachusetts, developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. Sections 9601 et. seq. and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) as amended, 40 C.F.R. Part 300. The Administrator for EPA-New England has been delegated the authority to approve this Record of Decision (ROD). The Regional Administrator has redelegated this authority to the Director of the Office of Remediation and Restoration.

The Commonwealth of Massachusetts has concurred with the selected remedy.

Statement of Basis

This decision is based on the Administrative Record which has been developed in accordance with Section 113(k) of CERCLA and which is available for public review at the New Bedford Public Library in New Bedford, Massachusetts, and at the EPA-New England Records Center in Boston, Massachusetts. The Administrative Record Index (Appendix C to the ROD) identifies each of the items comprising the Administrative Record upon which the selection of the remedial action is based.

Assessment of the Site

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this ROD, present an imminent and substantial endangerment to the public health or welfare or to the environment.

Description of the Selected Remedy

The major components of the selected remedy include the following:

• Approximately 450,000 cubic yards of sediment contaminated with polychlorinated biphenyls (PCBs) will be removed. In the upper harbor north of Coggeshall Street, sediments above 10 parts per million (ppm) PCBs will be removed, while in the lower harbor and in saltmarshes, sediments above 50 ppm will be removed.