

EXECUTIVE SUMMARY

During FY 82, the U.S. Army Corps of Engineers (COE) and the Environmental Protection Agency (EPA) established a joint five year research project called the Field Verification Program (FVP) designed to verify the results of existing and future laboratory testing protocols through in-situ field measurements. A second objective of the program is a comparison of the environmental effects resulting from open water disposal with those generated by wetland or upland disposal operations. The FVP is being directed by the Waterways Experiment Station (WES) in Vicksburg, Mississippi and implemented through cooperative efforts of the Narragansett Environmental Research Laboratory (NERL) of EPA and the New England Division (NED) of the Corps. At sea field measurements required for this program are coordinated by the NED through the on-going Disposal Area Monitoring System (DAMOS) which is managed by Science Applications, Inc. (SAI) under contract to the Corps.

In order to evaluate the laboratory/field prediction capability and to compare upland, wetland and open water disposal operations, an actual dredging operation was required which not only provided space for all three disposal options, but also consisted of sediments rich in possible contaminants which could cause adverse environmental impacts. The proposed dredging of Black Rock Harbor in Bridgeport, Connecticut, met all of these requirements and consequently was selected for study under the FW.

The selection of Black Rock Harbor (Fig. 1.0-1) as the dredging location dictated designation of an open water disposal site in Long Island Sound. The purpose of this report is to document the criteria that were used for selection of that site and to present baseline data obtained since March, 1982, to characterize the existing conditions in the disposal area.