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Explanation of Significant Differences

for the

Upper and Lower Harbor Operable Unit

New Bedford Harbor Superfund Site

New Bedford, Massachusetts

Draft for Public Comment

February 2002

U.S. Environmental Protection Agency - New England Region

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I. Introduction

A. Site Name and Location

Site Name: New Bedford Harbor, Upper and Lower Harbor Operable Unit (o.u.) #1
Site Location: Bristol County, Massachusetts

B. Lead and Support Agencies

Lead Agency: United States Environmental Protection Agency (EPA)
Contacts: David Dickerson, Co Remedial Project Manager (617) 918-1329
Jim Brown, Co Remedial Project Manager (617) 918-1308

Support Agency: Massachusetts Department of Environmental Protection (MA DEP)
Contact: Paul Craffey, Project Manager (617) 292-5591

C. Legal Authority for Explanation of Significant Differences

Section 117(c) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Section 300.435(c)(2)(1) of the National Contingency Plan (NCP) requires that, if any remedial or enforcement action is taken under Section 106 of CERCLA after adoption of a final remedial action plan, and such action differs in any significant respect from the final plan, the EPA shall publish an explanation of the significant differences (ESD) and the reasons such changes were made. While not required by Section 300.435(c), EPA is exercising its discretion to hold a public comment period on this proposal to ensure that all interested parties have an opportunity to provide input to EPA before it makes its final decision on this modification to the remedy.

D. Summary of Proposed ESD

The Record of Decision (ROD or ROD 2) for this phase or operable unit of the site cleanup was issued on September 25, 1998. The ROD's cleanup plan calls for approximately 450,000 cubic yards of PCB laden sediment to be dredged from the harbor bottom and surrounding wetlands, and to be disposed in perpetuity in four shoreline confined disposal facilities (CDFs A, B, C and D). See Figure 1. Since that time EPA has gathered additional site information and refined the cleanup approach for the upper and lower harbor area. A prior ESD was issued in September 2001 to address five of these refinements: additional intertidal cleanup areas; mechanical dewatering; use of the pilot study CDF as an interim TSCA (Toxic Substance Control Act) facility; change in CDF D wall design; and use of rail at CDF D.

This proposed ESD for ROD 2 seeks public comment on EPA's assessment that offsite disposal for the dredged sediments slated for CDF D is a better approach for the harbor cleanup than constructing CDF D and disposing PCB-contaminated sediments in it. At approximately 17

acres, CDF D is the largest of the ROD's four CDFs and has been sited for the north terminal port area of the harbor. As described more fully in Section III, EPA has compared the refined cleanup approach discussed in the first ESD to a modified approach that eliminates CDF D, and instead disposes the sediment slated for CDF D at a licensed offsite facility. EPA now believes that this proposed modified approach is better and more cost-effective than constructing and filling CDF D.

While this ESD proposes elimination of the 17 acre CDF D, it does not eliminate extension of the rail spur into this area discussed in the September 2001 ESD. If this proposed ESD is supported by public comment and incorporated into the remedy, a smaller shoreline facility would be constructed in the same area to support both the sediment dewatering building and the rail car (or truck or barge) loading area required for offsite disposal of the dredged sediments. See Figure 2 for a conceptual plan of this smaller dewatering and loading facility. Figure 3 illustrates the larger area of fill that would be required for CDF D, based on its current conceptual design.

It should be emphasized that this proposal only addresses the elimination of CDF D, and proposes off-site disposal of only those sediments that would have been disposed in it. While the current cost-estimate (see Table 1) indicates that it would be cost-effective to dispose all site sediments at an offsite facility, thus eliminating construction of CDFs A, B and C as well as D, EPA stresses that this cost estimate will need to be reevaluated at least annually once actual offsite disposal costs are determined. Other project factors will be included in these reevaluations along with these actual disposal costs, such as the compliance status of the offsite facility(ies), potential growth of the total sediment volume requiring disposal, and annual funding levels for the harbor cleanup. If in the future construction and filling of one or more of CDFs A, B or C is deemed no longer necessary, EPA will issue an additional decision document.

Compared to the fully funded project cost of $325 million for the refined remedy discussed in the first ESD (disposal of dewatered dredged sediments in CDFs C and D), the alternative proposed in this ESD - elimination of CDF D and offsite disposal of dredged sediment - is estimated to cost $317 million (a two percent difference). As described below in Section III, cost considerations are not the only reason EPA believes the offsite disposal alternative to be the best approach.

E. Public Comment Period

EPA will solicit public comment on the proposed modification to the remedy discussed in this ESD for a period of thirty days after the publication of this draft ESD. To make it easy for the public to comment, EPA will allow oral, written and e-mailed formal comments to be entered for the record. Oral comments can be provided at the public hearing portion of a March 6, 2002 public meeting at the New Bedford Free Public Library, 613 Pleasant Street. (An informational presentation and question and answer session from 6:30 to 7:30 pm will precede the public hearing from 7:30 pm to 9 pm at the March 6, 2002 public meeting.)

Written comments post-marked by March 26, 2002 may be submitted to:

David J. Dickerson
Remedial Project Manager
U.S. EPA New England Region
1 Congress Street
Suite 1100 (HBO)
Boston, MA 02114

E-mailed comments can be sent by March 26, 2002 to the following e-mail address:

comments.nbh@epa.gov

F. Public Record

When the public comment period closes, EPA will consider all formal comments before issuing a final ESD. EPA will prepare a Responsiveness Summary that answers all formal comments received during the public comment period. The Responsiveness Summary, along with all comments, will be attached to the ESD and will become part of the official public record for the site that is available for public review at the two locations listed below.

EPA New England Records Center
1 Congress Street
Boston, MA 02114
(617) 918-1440
Monday-Friday: 9:00am - 5:00pm; (closed first Friday of every month and federal holidays)

New Bedford Free Public Library
613 Pleasant Street, 2nd floor Reference Department
New Bedford, MA 02740
(508) 961-3067
Monday-Thursday: 9:00am - 9:00pm
Friday-Saturday: 9:00am - 5:00pm

EPA supplemented the public administrative record file in October 2001 with various documents generated since the 1998 ROD, including those that supported the September 2001 ESD.

II. Summary of Site History, Contamination Problems and Selected Remedy

A. Site History and Enforcement Activity

Identification of PCB (polychlorinated biphenyl) contaminated sediments and seafood in and around New Bedford Harbor was first made in the mid-1970s as a result of EPA region-wide

sampling programs. In 1978, the manufacture and sale of PCBs was banned nationally by TSCA. In 1979, the Massachusetts Department of Public Health promulgated regulations prohibiting fishing and lobstering throughout the site due to elevated PCB levels in area seafood. Due to these concerns, the site was proposed for the Superfund National Priorities List (the NPL) in 1982, and finalized on the NPL in September 1983. Pursuant to 40 CFR 300.425(c)(2), the Commonwealth of Massachusetts (the Commonwealth) nominated the site as its priority site for listing on the NPL.

EPA's site-specific investigations began in 1983 and 1984. Site investigations continued throughout the rest of the 1980s and early 1990s, including a pilot dredging and disposal study in 1988 and 1989, computer modeling of the site completed in 1990, and an updated feasibility study for site cleanup also completed in 1990.

Collectively, these investigations identified the Aerovox manufacturing facility on Belleville Avenue in New Bedford as the primary source of PCBs to the site. PCB wastes were discharged from the facility's operations directly to the upper harbor through open trenches and discharge pipes, or indirectly throughout the site via CSOs (combined sewer overflows) and the City's sewage treatment plant outfall. Secondary inputs of PCBs were also made from the Cornell Dubilier Electronics, Inc. (CDE) facility just south of the hurricane barrier in New Bedford.

Based on the investigations' results, state and federal enforcement actions were initiated against both the Aerovox and CDE facilities as well as the City of New Bedford (though the City is not a Potentially Responsible Party for this site) pursuant to CERCLA, Massachusetts General Law c.21E, and other federal and state environmental statutes. For a summary of these enforcement actions and resulting settlements please see Section II of the 1998 ROD for the site (this ROD can be found as document 5.4.1 in the administrative record discussed above). The site cleanup is being managed by EPA, in partnership with the U.S. Army Corps of Engineers and the MA DEP.

In April 1990, EPA issued a ROD for the hot spot operable unit of the site (o.u. #2). The hot spot ROD called for dredging and on-site incineration of the site's most highly PCB-contaminated sediments located in the vicinity of the Aerovox facility. The ROD defined these hot spots as areas above 4,000 ppm (parts per million) PCBs. Dredging of these sediments - about 14,000 cubic yards (cy) in volume and 5 acres in area - began in April 1994 and was completed in September 1995. However, due to a vehement and congressionally-supported reversal in local support for on-site incineration, EPA suspended the incineration component of the hot spot remedy. Pursuant to an October 1995 ESD the dredged hot spot sediments were temporarily stored in a shoreline confined disposal facility at Sawyer Street in New Bedford, and then, pursuant to an April 1999 amendment to the 1990 Hot Spot ROD, the sediments were dewatered and transported to an offsite landfill for permanent disposal. This final phase of the hot spot remedy was completed in May 2000.

In September 1998, EPA issued the second ROD for the site for cleanup of the upper and lower New Bedford Harbor areas (o.u. #1). The remedy selected in this 1998 ROD (also known as ROD 2) is summarized in Section II.C below. As discussed above in Section I, the remedy was subsequently refined in a September 2001 ESD.

B. Contamination Problems

As noted above, the main site concern is the widespread PCB contamination in New Bedford Harbor sediments. Although the hot spot remedy removed approximately 14,000 cy of the most contaminated sediment, elevated levels up to and, in isolated areas, above 4,000 ppm total PCBs remain in both sediments and wetlands. The highest levels are generally found in the northern reaches of the upper harbor, with PCB levels decreasing in a southerly trend. Because of this sediment contamination, PCBs are also found in elevated levels in the water column and in local seafood, and to a lesser extent in the air along certain areas of the shoreline. In addition to the PCB contamination, harbor sediments also contain high levels of other contaminants including heavy metals (e.g., cadmium, chromium, copper and lead).

As described more completely in Sections V and VI of the 1998 ROD, EPA found the PCB contamination to result in unacceptable risks to human health and the environment. The biggest human health risk was found to be from frequent (e.g., weekly) ingestion of local seafood, although secondary risks were also found from frequent human contact with PCB-contaminated shoreline sediments or soils. Ecologically, EPA's investigations concluded that the harbor's marine ecosystem is severely damaged from the widespread PCB contamination.

C. Summary of Remedy Originally Selected in the 1998 Record of Decision as Modified by the September 2001 ESD

Due to this contamination and risks to human health and the environment, EPA in the 1998 ROD selected a cleanup remedy for the entire upper and lower harbor areas. The ROD calls for the dredging and containment of approximately 450,000 cubic yards of PCB-contaminated sediment spread over about 170 acres. In the upper harbor north of Coggeshall Street, sediments above 10 ppm PCBs will be dredged, while in the lower harbor and in salt marshes, sediments above 50 ppm PCBs will be dredged. To protect human health against risks due to dermal contact with PCBs, intertidal sediments or soils in areas adjacent to homes will be removed if PCB levels are above 1 ppm, while those adjacent to parks or recreational shoreline areas where people spend less time than in areas adjacent to residences will be removed if PCB levels are above 25 ppm (the "beachcombing standard").

As discussed above in Section I, the ROD originally called for the dredged sediments to be placed in four shoreline CDFs (CDFs A, B, C and D; see Figure 1). Seawater decanted from these sediments is to be treated to very stringent levels before discharge back into the harbor. The ROD also requires that institutional controls, including the continuation of a state-sanctioned fishing ban, be in place until PCB levels in seafood reach acceptable levels.

The September 2001 ESD set forth further refinements of the remedy that arose as the design phase progressed since 1998. These changes included the use of mechanical dewatering for the dredged sediments and the incorporation of a rail spur at CDF D.

III. Description of Significant Differences and the Basis for These Differences

As summarized in Section I, EPA has evaluated the benefits of eliminating CDF D and disposing its sediments offsite to those of the original remedy as modified by the September 2001 ESD. As described below, this evaluation leads EPA to believe that this ESD's proposed modification is a better approach than building and filling CDF D.

A. Use of a licensed, offsite TSCA-authorized facility (or facilities) instead of CDF D avoids filling approximately 15 acres of New Bedford Harbor

The most direct physical advantage of this ESD's proposed modification is that it reduces the required filling of intertidal and subtidal areas from the original 17 acres to only 2 acres. By expanding existing filled tidelands with an additional 2 acres of fill, both the sediment dewatering and offsite loading facilities can be located within a smaller area, with a net savings of 15 acres of tidelands that are no longer disrupted. See Figures 2 and 3 attached. This proposal to decrease the amount of filling, along with dewatering, is consistent with EPA's mandate under both state and federal laws to consider actions that are least damaging to the environment and to minimize, to the maximum extent possible, adverse environmental impacts.

B. Implementation of CDF D poses significant engineering challenges

During the course of an extensive post-ROD sediment boring program for CDF D, the Corps of Engineers identified a problematic layer of soft, fine grained sediments. From a geotechnical and structural standpoint, these soft underlying materials are an unsuitable base or foundation for any wall design for the CDF. As explained in the September 2001 ESD, a number of different CDF wall designs were examined but all required removal of these soft, weak sediments.

Even though these weak underlying sediments do not exceed ROD 2 cleanup levels, approximately 250,000 to 300,000 cubic yards of this material would need to be removed and disposed before building CDF D. This would be a large and costly sediment volume to manage which would not otherwise have been required by the harbor cleanup (i.e., the PCB levels would not be above the 50 ppm lower harbor cleanup level). It was primarily this fact, as well as market experience gained in sending the hot spot sediments to an offsite facility in 1999 and 2000, which prompted a closer evaluation of an offsite alternative in lieu of CDF D.

Elimination of CDF D would also avoid other engineering challenges, that, although less significant than managing these weak foundation sediments, could impact the harbor and surrounding communities. These include, among others, managing a complex, in-water construction and filling project within the busy harbor, dewatering the CDF prior to filling with filter cake (see Section IV) and controlling air emissions from within the large CDF footprint.

C. Given the strain on CERCLA funding nationally, eliminating CDF D and sending its sediment offsite avoids the possibility of having a partially completed and unusable CDF D linger amidst the working waterfront

To date the ROD 2 cleanup has been implemented using dedicated site-specific funds resulting from previous CERCLA litigation (see Section II.A above). During fiscal year 2002, however, these settlement funds will likely be exhausted, and the cleanup will be funded by a combination of the remainder of these funds and national Superfund program funds. Beginning in fiscal year 2003 (which begins in October 2002) the harbor cleanup will be entirely dependent on annual funding from the national Superfund program. This national funding is currently limited, and is projected to be insufficient to meet all needs across the country.

The specific affect on the harbor cleanup from a shortfall in annual funding, absent this ESD's proposed modifications, could either be a partially constructed CDF or a constructed CDF with insufficient funding to fill it. Not only would this present technical challenges in terms of managing air emissions and minimizing potential PCB leakage from an uncapped facility, it would also significantly delay the beneficial reuse of the CDF and stymie redevelopment of the working waterfront.

Instead, this proposal provides an alternative that allows both dredging and redevelopment to move forward simultaneously. Once the dewatering and water treatment facilities are in place, dredging can begin and move forward as dictated by available funding.

D. Construction of the infrastructure required for offsite disposal has less adverse impacts on abutting waterfront dependent businesses than construction of CDF D

Although the proposed modification does impact certain abutters, its decreased size would significantly lessen these impacts to abutters compared to the originally planned CDF D. Proceeding with CDF D would displace a number of water dependent businesses within the designated port area for an undetermined period until its completion. The proposed, smaller scale structure reduces the number of businesses affected. EPA has had preliminary discussions with impacted landowners and tenants about the proposed smaller structure, and through the cooperation of these affected parties, acceptable arrangements that accommodate both their needs and the project's needs appear viable.

E. The shoreline facility required for offsite disposal can be more easily reused and integrated into the working waterfront than CDF D

In terms of beneficial reuse, the proposed smaller facility presents significantly less challenges than the full scale CDF D. This is an important consideration since both facilities would be located in the state-designated port area (DPA) of the harbor (see p.32 of ROD 2).

Under the CDF D option, EPA would create a 17 acre area which would have to be capped and maintained to prevent the release of the stored PCB-contaminated sediments. Redevelopment of this new acreage would need to be carefully controlled and limited in order to preserve the integrity of the CDF. In addition, the full scale CDF D would require significant long term monitoring and maintenance (O&M) costs. These Superfund O&M costs would be eliminated with the smaller facility.

Under the offsite disposal option, the smaller scale shoreline facilities - the bulkhead, dewatering warehouse and rail spur - would be designed for future commercial marine reuse. Thus beneficial reuse of these facilities within the DPA once the cleanup is complete would be vastly streamlined and much less limited. Figure 4 shows a plan view of these features as currently designed.

F. The Proposed Remedy Change Allows for a Quicker Cleanup of Contaminated Sediments North of Wood Street

Switching to offsite disposal in lieu of CDF D would allow the "North of Wood Street" cleanup to be fast-tracked, since the excavated soils and sediments from this area could be disposed offsite rather than waiting for CDF D to be completed. Remediation of this area is important since it contains high contamination levels (up to 33,000 ppm PCBs) in a stretch of the Acushnet River with homes and two public parks along its shores.

Remediating this river stretch in 2002 also benefits the harbor cleanup by making use of property formerly occupied by a truss manufacturing facility as an important shoreline staging area. Since this property is slated to become a shoreline park in the City's Master Plan, an earlier cleanup avoids the dilemma of locating a park near the contaminated shoreline and allows the restoration and replanting process of the remediation to cost-effectively dovetail into the park design.

G. Offsite disposal in lieu of CDF D is estimated to save $8 million

As discussed above in Section I.D and below in Section III.H and Table 1, the current, fully funded cost estimate for this proposed modification to eliminate CDF D is $317 million, approximately $8 million less than the current $325 million estimate if CDF D is retained (see the September 2001 ESD). Since this represents only a two percent savings, and is likely to be within the margin of error of the estimates, EPA does not believe that this savings is an over-riding reason to implement the proposed modification. Rather, it is just one of the many reasons explained herein that point towards the elimination of CDF D and the proposed remedy modification. EPA does believe, however, because less of the cost of the proposed remedy would go towards in-water construction, that there is less potential for construction related cost growth.

H. Updated Cost Estimate

The current, fully funded cost estimate to implement ROD 2 as proposed in this ESD is $317 million, using 2001 price levels, three percent per year inflation, and full contingency. Table 1 attached outlines the major cost components of this estimate. Note that the total project cost could become greater if actual funding levels are so low as to cause significant project delays and inefficiencies, or if the assumptions the cost estimate is based upon change significantly. Alternatively, total costs could decrease to an estimated $298 million if annual funding levels are high enough to allow the project to be implemented more efficiently.

As explained below, this current, fully funded $317 million estimate is a different type of cost estimate than used in the 1998 ROD. The ROD's estimate - $129 million for EPA costs - is a present worth estimate, and was based on 1995 price levels. The ROD's cost estimate included all dredging related costs as well as the costs of CDFs A, B, C and D.

Present worth is the amount required to fund a project assuming that amount can be invested at the start of the project for a given rate of return as the project progresses. Present worth estimates help evaluate various options on an equal basis, but they do not represent the actual funding levels that will be required for a project of this type. The fully funded estimate, on the other hand, includes inflation and reflects the total of the actual annual funding levels required to implement the harbor cleanup. In addition, since the ROD cost estimate is based strictly on a conceptual (rather than a more detailed) project design, EPA guidance acknowledges that actual project costs could be up to 50% higher than the cost estimate developed for the ROD (USEPA, 1999).

The following table shows the comparative process used by EPA and the Corps of Engineers to evaluate whether the current, fully funded estimate of $317 million is within the initial, present worth estimate of $129 million included in the ROD.

Type of Cost Estimate	**$ - in millions**
EPA ROD 2 cost at 1995 price level, **present worth**	129
EPA ROD 2 cost at 1995 price level, **present worth basis removed**	188
EPA ROD 2 cost **at 2001 price level, present worth basis removed** (increases due to inflation)	223
EPA ROD 2 cost at 2001 price level, acceptable upper limit (**$223 million times 1.5** per EPA guidance)	335
Current fully funded cleanup estimate (2001 price level including inflation)	317

Since the current, fully funded estimate for offsite disposal of $317 million as explained

in this ESD is $18 million less than this last $335 million threshold, EPA believes that the remedy has been maintained within the acceptable range of the original ROD cost estimate.

IV. Offsite Disposal "ARARs" (Applicable or Relevant and Appropriate Requirements)

Consistent with ROD 2, PCB-contaminated sediment above EPA's clean up levels must be handled and disposed of in accordance with 40 CFR 761.61(c) of TSCA, which requires that the methods used will not pose an unreasonable risk of injury to health or the environment. See Table 8 of the ROD, Action Specific ARARs. This section describes the cleanup methods to be used that will be compliant with TSCA's standards.

Except for a limited amount of sediment removal discussed below, all dredged sediment over 50 ppm PCBs in situ (i.e, as measured in place) will be subject to a coarse material separation process and a dewatering process before being disposed in a CDF or, as proposed in this ESD, transported offsite for disposal at a licensed TSCA facility. After removing larger debris such as large shells and stones at the dredging platform, the dredged sediments will be first piped to a coarse material separation facility located at the debris disposal area (DDA) at Sawyer Street. A temporary soil cap will be placed on top of the DDA as well as an asphalt pad before construction of this separation facility (see Section III.C of the September 2001 ESD for more information on the DDA).

At the separation facility, the sediment will be subjected to a mechanical process to separate coarse material (sand, gravel, shells, etc.) from the finer grained organic silts. This separation process will be done in an enclosed building where point source air emissions will be collected and treated. Removal of this coarse material will improve the efficiency of the dewatering process and reduce the wear and tear on the equipment used to dewater the organic silts.

As an additional benefit, EPA believes that the separated coarse material is likely to contain much lower PCB levels than the finer grained organic silts. Additional site specific studies are being performed to confirm this. The PCBs would not be lost or diluted by this process but rather the cleaner sand and gravel would be separated from the more highly contaminated organic silts. The resulting water from this process will be sent to the site's water treatment plant at Sawyer Street, treated to applicable water quality standards, and discharged into the harbor. The air and groundwater monitoring already in place at Sawyer Street will be tailored to the separation operations to ensure that emissions are within acceptable levels. Other engineering controls such as odor control or dust suppression will be implemented as necessary.

After coarse material separation at Sawyer Street, the remaining dredged sediments will be piped approximately 5,000 feet south via double-walled underwater pipes to a dewatering facility at Hervey Tichon Avenue. Here, the dredged material will be processed through filter presses to remove excess water, resulting in a dewatered "filter cake" similar to damp soil in texture. The process will be completely enclosed within the dewatering building, and point

source air emissions within the building will be treated. If necessary, dust suppression measures will be implemented inside the building as well. Ambient air monitoring will be performed to ensure that neighboring workers and residents are not adversely impacted by the dewatering operations. As proposed in this ESD, the filter cake will be sent offsite to a licensed TSCA-authorized facility or to CDFs A, B and C; the water removed by the presses will be sent back to Sawyer Street, again via underwater pipes, for water treatment.

The separated sand and gravel from the separation facility at Sawyer Street will be sampled and, if less than 50 ppm total PCBs, will be transported offsite to a non-TSCA facility, similar to disposal practices outlined in 40 CFR 761.61(a)(5)(ii) for self-implementation. As to the larger separated debris, it will be decontaminated or washed in a controlled process so as to avoid spills or releases. This debris will then be sampled to determine if it can be disposed as TSCA or non-TSCA waste. This process will capture regulated PCBs and dispose of them properly, most likely by treating the wash water at the onsite water treatment plant.

To optimize cost-efficiency, EPA may identify harbor sediments which contain PCBs above ROD 2 cleanup levels but below 50 ppm in situ as separate dredge management units (DMUs). This material will be subjected to the same separation and dewatering processes explained above for sediment exceeding 50 ppm. However, provided confirmational sampling shows this dredged sediment to be below 50 ppm, the resulting filter cake will be sent offsite to a non-TSCA facility as allowed under 40 CRF 761.61(a)(5)(ii).

In addition to the full scale dredging process explained above, some construction related dredging will be required in the north terminal area of the harbor as part of the harbor cleanup. After removing all sediments with PCB levels at or above EPA's cleanup level of 50 ppm in this area, limited additional sediments which do not exceed this clean-up level will likely need to be removed to enable construction of the dewatering facility and associated navigational dredging (see Section III.C, above). Instead of being subjected to the active separation and dewatering processes described above, this less contaminated material may be passively dewatered on an asphalt pad constructed on nearby filled land. Levels of pollutants in the water runoff from this process may exceed allowable discharge levels set in accordance with Section 402 of the Clean Water Act and the State's surface water discharge requirements. The runoff will be captured and sent to the City of New Bedford's publicly owned treatment plant (POTW) if it meets applicable Clean Water Act standards, 40 CFR 403. (See Table 8 of the ROD, Action Specific ARARs.) If the runoff does not meet applicable standards for discharge to the POTW, it will be transported to EPA's water treatment facility at Sawyer Street, where it will be treated to applicable discharge standards before being discharged either to the POTW or the Harbor. Once sufficiently dried, this dredged material will be sampled, and, if found to have 1 ppm or less of PCB concentration (and no longer regulated under TSCA), it will meet state and federal standards for unlimited reuse or may be disposed of as Solid Waste.

Another area where sediment handling will be different than in the full scale separation and dewatering process is in the river stretch north of Wood Street. Because recent sampling has

revealed extremely high shoreline PCB levels (up to 33,000 ppm), and since residences and two public parks are located in this stretch, EPA has prioritized the cleanup of this area to start in July 2002 (see Section III.C above). Because the separation and dewatering facilities explained above will not be in place until approximately one year later, EPA will use specialized techniques such as "roll-off" containers to drain excess water from the excavated soil and sediments from this area. This removed water will be captured at the containers and sent to Sawyer Street or the POTW for water treatment, as appropriate. For excessively wet sediment, some materials (e.g., cement) may be added within the roll-off containers to dry the sediments sufficiently for offsite transport and disposal. All such activities will take place on a bermed, asphalt pad, and air monitoring will be performed to ensure that neighboring residents and workers are not adversely impacted by this cleanup effort. Similar techniques may be used in other areas of the harbor where it may not be feasible to slurry (or pump) excavated material to the dewatering facility.

In accordance with Section 761.61(c) of TSCA, the Regional Administrator must make a determination that the proposed offsite disposal discussed above does not pose an unreasonable risk of injury to human health or the environment. A draft determination is attached to this ESD as Appendix A. A final determination will be made after the close of the public comment period and will be attached to the final ESD.

V. Supporting Agency Comments

In a February 21, 2002 letter to EPA New England, the MA DEP expressed its agreement with the changes proposed in this draft ESD.

VI. Statutory Determinations

As discussed above in Section IV, this ESD includes EPA New England's Regional Administrator Robert W. Varney's draft determination under TSCA 40 CFR Sec. 761.61(c) that the dewatering and proposed offsite disposal does not pose an unreasonable risk of injury to health or the environment.

EPA believes that the proposed modification herein remains protective of human health and the environment, complies with all Federal and State requirements that are applicable or relevant and appropriate to this remedial action (and which were not waived in the 1998 ROD), and is cost-effective. In addition, the revised remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable for this site.

VII. Public Participation Activities

EPA and DEP meet regularly with site stakeholders to keep the community up to date with the site's cleanup status, including the issues described above in Sections III and IV. For example, EPA and DEP meet quarterly with the facilitated New Bedford Harbor Superfund Site Community Forum, as well as monthly with the Forum's subcommittee. Additional meetings

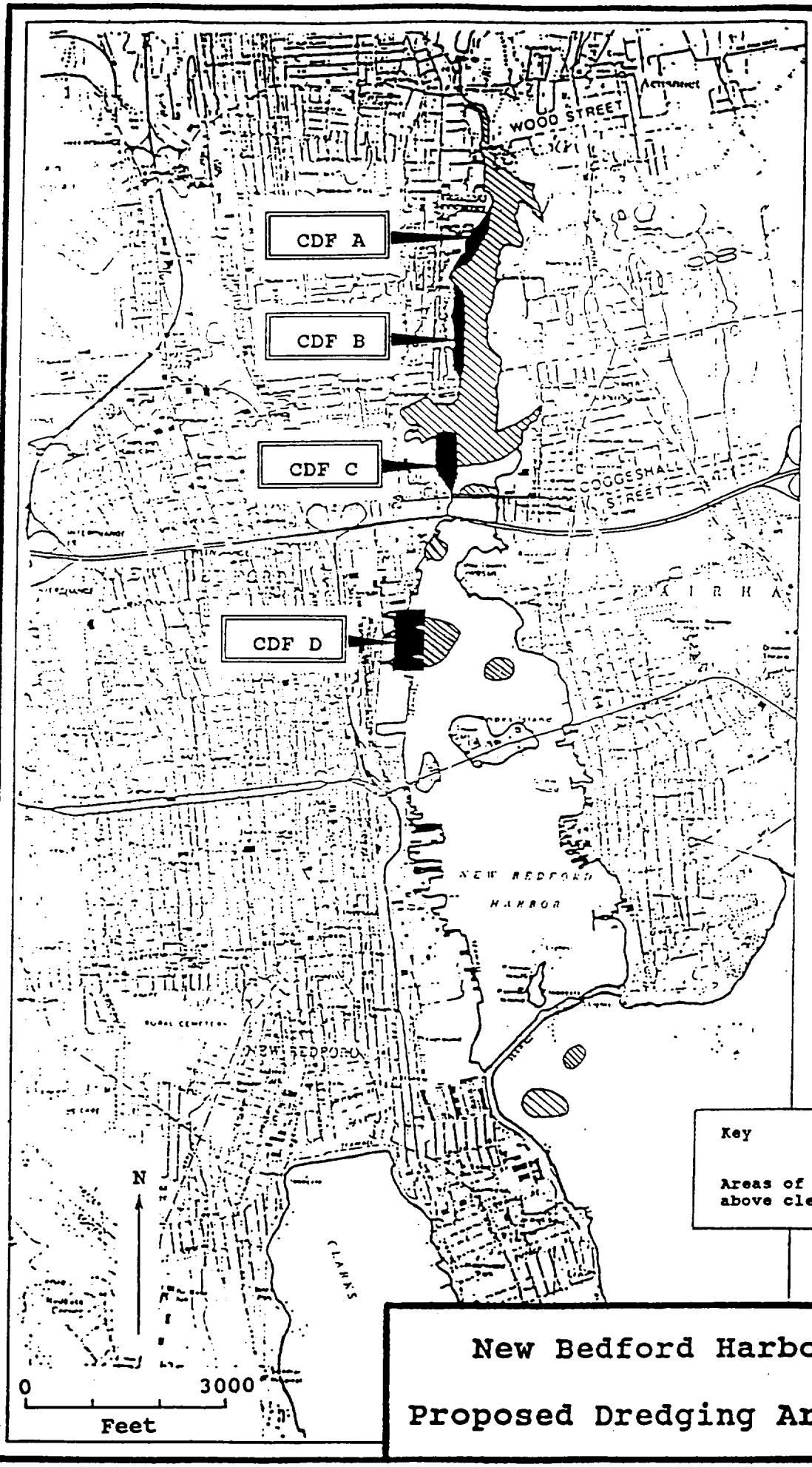
and outreach efforts with other groups occur as necessary to successfully implement the cleanup program.

Also, as explained above in Section I.E, EPA will hold a public meeting on March 6, 2002 specifically to discuss the modified remedy proposed herein, and to take formal comments on it.

_____ _____

Patricia Meaney, Director
Office of Site Remediation and Restoration
EPA New England

Date



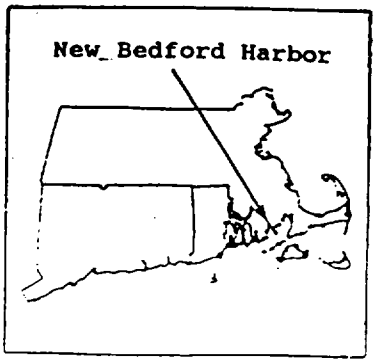


Figure 1

Key

Areas of sediment above cleanup levels

New Bedford Harbor ROD II

Proposed Dredging Areas and CDFs

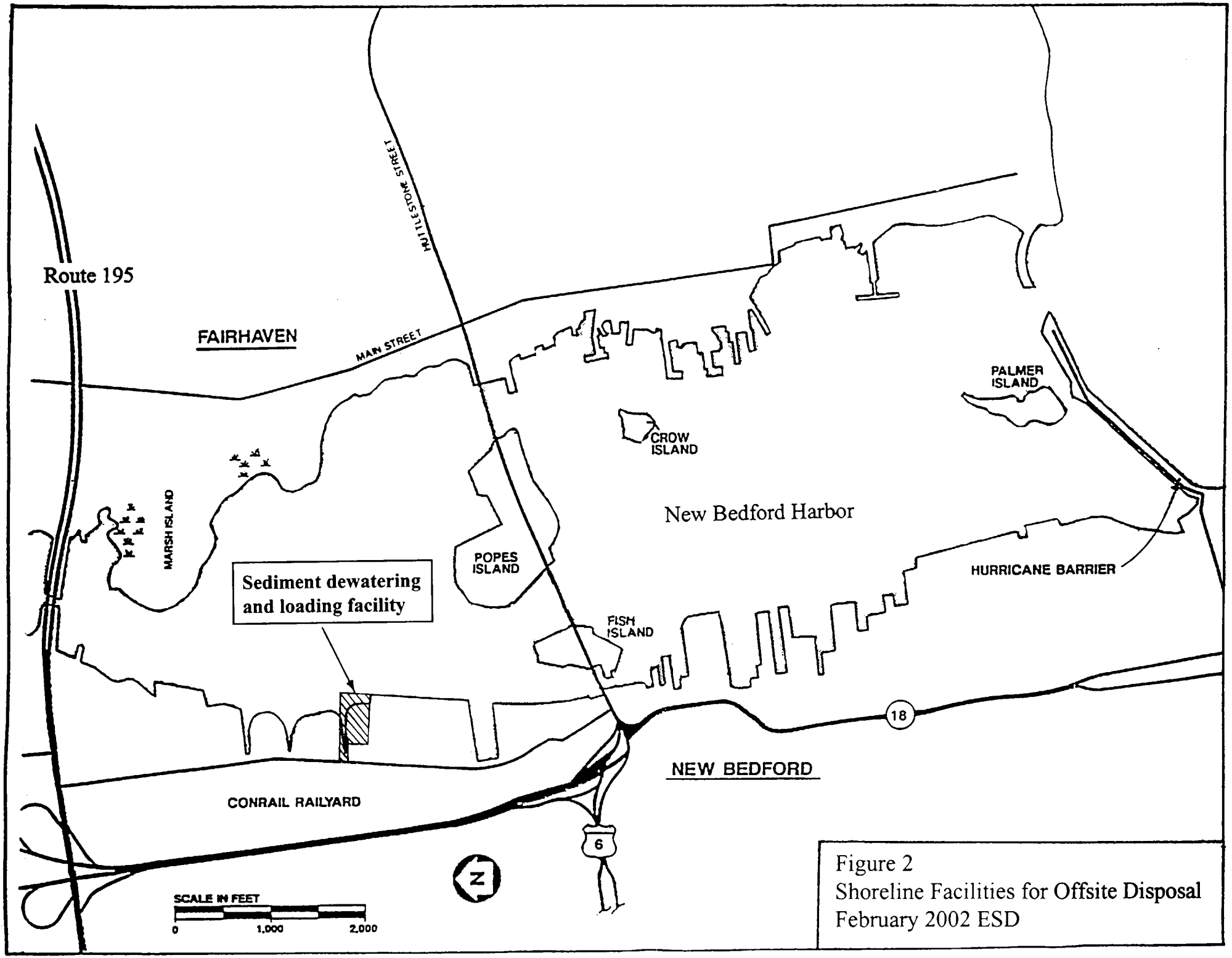


Figure 2
Shoreline Facilities for Offsite Disposal
February 2002 ESD

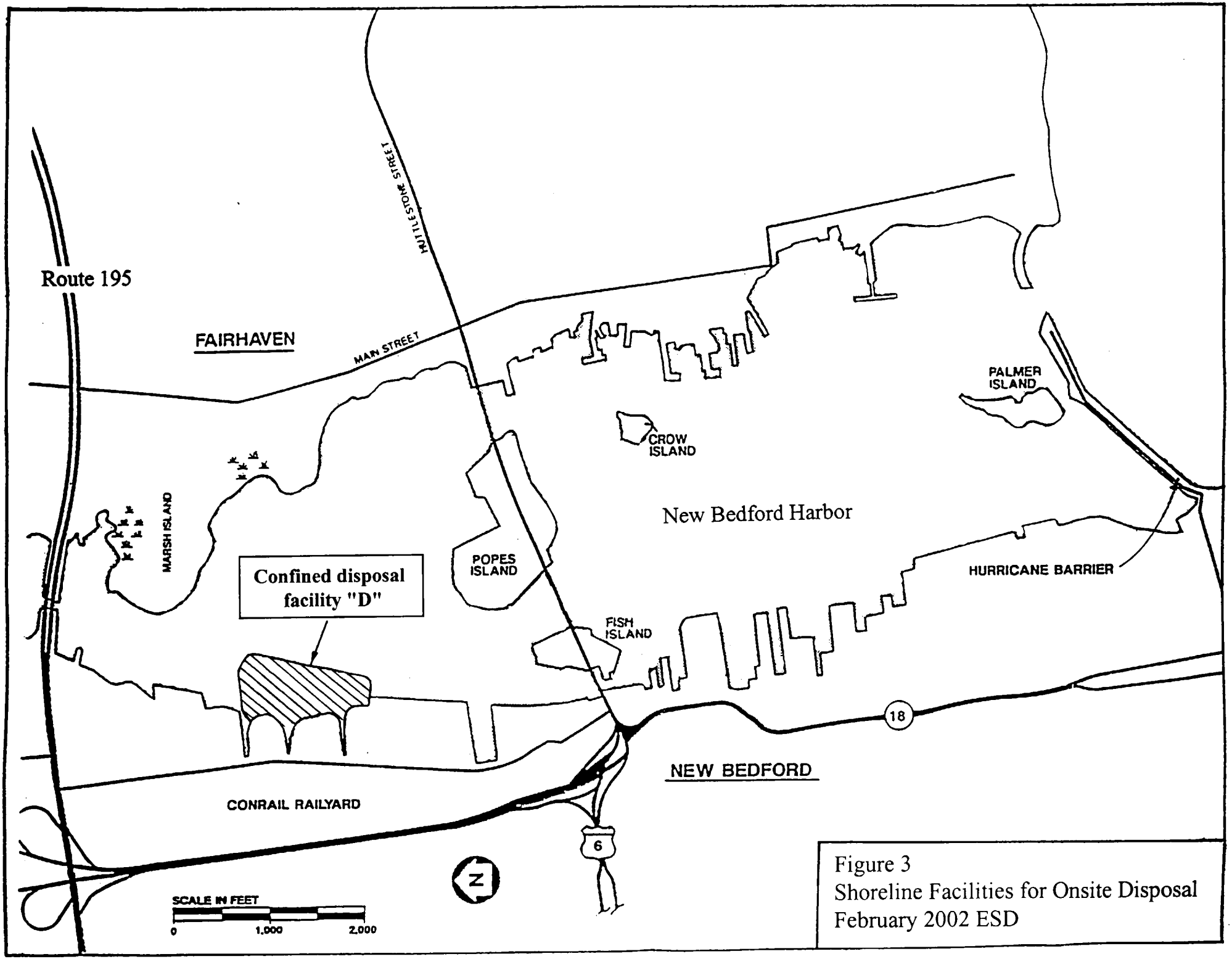


Figure 3
Shoreline Facilities for Onsite Disposal
February 2002 ESD

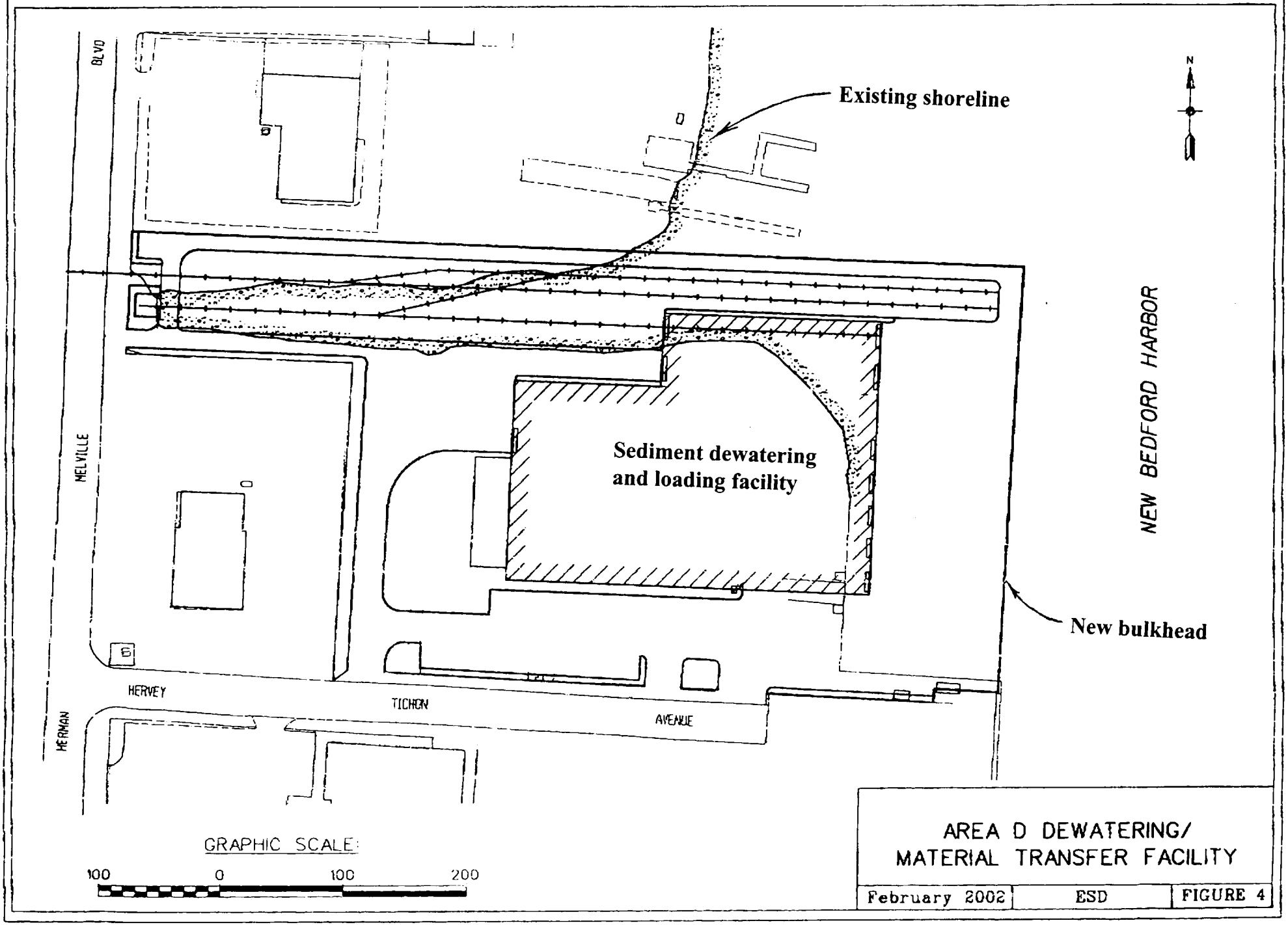

Existing shoreline
Sediment dewatering and loading facility
New bulkhead
NEW BEDFORD HARBOR
MELVILLE BLVD
HERVEY TICHON AVENUE
HERMAN
N
GRAPHIC SCALE
100 0 100 200
AREA D DEWATERING/ MATERIAL TRANSFER FACILITY
February 2002
ESD
FIGURE 4

Table 1

PROJECT CURRENT COST & BUDGET: TRANSPORT & DISPOSE by RAIL			
T&D 387k tons@ Area D; Dredge/Excav. 507,100 CY Contaminated			
COST SUMMARY			
Restricted Funding--PRELIMINARY ESTIMATE			
14-Feb-02			
		Cost	Percent of Total
Debris Disposal Area (Surcharge & Cap)	$	574,000	0.2%
Combined Sewer Overflow @ CDF C (CSO C) w/ Mods & Mark-ups		2,614,900	1%
Build Water Treatment Plant & Water Treatment		2,589,000	1%
Area D: De-Watering Bldg, Transport Facility, RR Spur & Remove Vessels		21,972,200	7%
Combined Sewer Overflow for Area "D" (CSO D) w/mark-ups		2,736,380	1%
Harbor Dredging & Excavation (w/ Early Action & Confirm. Smpg & Channel)		33,969,100	11%
De-Water Harbor Sediments		24,500,000	8%
Transport & Dispose Harbor Sediments Off-Site (T&D)		43,459,000	14%
Wetland / Habitat Restoration		4,370,000	1%
Relocate Commonwealth Electric Power Cables w/ Ctg & Air Monitoring Mod		6,855,113	2%
Air/Water Quality, and Ecological Sampling & Monitoring thru 2022		9,194,710	3%
Soccer Field w/ Parking Area and Fence		415,000	0.1%
Site/Home Ofc. Mgt, Eng. During Construction, SS&H,QC, Admin., Overhead, Site Operations (15% on Construc. Costs + USACE Construction Oversight)		36,107,600	11%
Contingency on RA Dredging, De-Watering & T&D		41,071,066	13%
Contract Fee on Future TERC RA Costs		9,091,521	3%
Real Estate Acquisition		1,043,000	0.3%
USACE & Contract Remedial Design & Investigations w/Ctg		39,090,130	12%
Inflation @ 3%/Year Over Design/Construction/RA Monitoring Period		37,169,356	12%
Total (Not Rounded)	$	316,822,076	
Total Project Fully Funded Cost	**$**	**317,000,000**	100%
Total Fully Funded O&M through 2030	$	2,000,000	

Appendix A - Draft TSCA 761.61(c) Determination

Consistent with Section 761.61(c) of the Toxic Substances Control Act (TSCA) I have reviewed the Administrative Record for the site and considered the proposal for offsite disposal of PCB contaminated sediment set out in the Explanation of Significant Differences (ESD) dated _____ for the first operable unit of the New Bedford Harbor Superfund Site. As required by this section of TSCA, I have determined that the ESD proposal to transport dredged PCB contaminated sediment offsite for disposal instead of containing the sediment in Confined Disposal Facility D does not pose an unreasonable risk to health or the environment as long as the following conditions are met:

1. All dredged sediment is disposed of in accordance with TSCA based on in situ PCB levels and not subject to dilution.

2. Protocols, developed in accordance with TSCA, will be developed and maintained for the following activities:

A. Sampling of all dredged material (including separated sand and gravel) before it is transported offsite; and

B. Best efforts are used to rinse desanding and dewatering equipment when handling TSCA and non-TSCA material to avoid mixing.

3. Stockpiled material shall be bermed while awaiting transport to capture runoff. Runoff shall be collected and treated to applicable water quality standards.

4. Groundwater and air monitoring and dust suppression measures as described in the ESD are maintained until the desanding, dewatering and transporting of PCB-contaminated sediment ceases.

(EPA will consider all public comments received during the public comment period prior to issuing a final determination.)

_____ _____

Robert W. Varney, Regional Administrator Date
EPA New England

Appendix B - Reference Cited

1. USEPA, 1999. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents. USEPA Office of Solid Waste and Emergency Response. EPA 540-R-98-031, OSWER 9200.1-23P, PB98-963241. July 1999. (Note: this guidance document is available at the EPA New England Records Center at the location listed in Section I.E above.)