

C. Disposal into an LHCC is estimated to significantly reduce the time and cost to complete the harbor cleanup

Because of the large scope and magnitude of the ROD 2 remedy, both the time and total cost to complete the remedy is dependent on the level of annual funding. Nevertheless, as summarized in Table 1 below, EPA's updated evaluation (Jacobs, 2010b) concludes that use of an LHCC would take significantly less time and money to complete the harbor cleanup compared to the existing ROD 2 remedy as modified by the three previous ESDs. This is due to the fact that the sediments going to the LHCC would be mechanically dredged and placed into it, thereby avoiding the desanding, dewatering and offsite transportation and disposal costs that would otherwise be associated with the hydraulic dredging of these sediments. Note that O&M costs are not included in Table 1, but are included in Jacobs, 2010b, and are included in the administrative record file.

To facilitate the cost comparison of the two cleanup approaches and the three annual funding levels evaluated (\$15, \$30 and \$80 million per year) the estimated costs in Table 1 include both the Net Present Value (NPV) cost and the "actual" cost. The NPV cost represents the sum of money that, if invested at the start of a project, could fund the project - taking into consideration both the annual funding outlays and interest earned on the unused balance. The NPV cost was calculated by having all forecasts of future costs made in 2010 dollars, and then discounting by the appropriate discount rate to reflect the year of implementation of each cost. These NPV values do not account for inflation. The "actual" cost is the sum of all annual costs, assuming 3.5% inflation per year. Also note that the time and cost to complete estimates in Table 1 are for 2010 forward.

Funding level	Current Remedy (3 CDFs and Offsite T&D)			ESD #4 Remedy (3 CDFs, interim T&D, LHCC)		
	Time to complete	Cost to complete (NPV)	Cost to complete (actual)	Time to complete	Cost to complete (NPV)	Cost to complete (actual)
\$15m/year	46	\$413m	\$1.7B	40	\$362m	\$1.2B
\$30m/year	40	\$477m	\$1.2B	26	\$401m	\$767m
\$80m/year	7	\$464m	\$536m	6	\$393m	\$422m

Table 1 - Comparison of the Current ROD 2 Remedy to the ESD #4 Remedy

**March 2011 FINAL - FOURTH EXPLANATION OF SIGNIFICANT DIFFERENCES
FOR USE OF A LOWER HARBOR CAD CELL (LHCC)
NEW BEDFORD HARBOR SUPERFUND SITE
OPERABLE UNIT #1
NEW BEDFORD, MASSACHUSETTS**

I. Introduction

A. Site Name and Location

Site Name: New Bedford Harbor, Upper and Lower Harbor Operable Unit #1 (OU1)
Site Location: Bristol County, Massachusetts

B. Lead and Support Agencies

Lead Agency: United States Environmental Protection Agency (EPA) - Region I
Contacts: Elaine Stanley, Co Remedial Project Manager (617) 918-1332
David Dickerson (617) 918-1329

Support Agency: Massachusetts Department of Environmental Protection (MassDEP)
Contact: Joseph Coyne, Project Manager (617) 348-4066

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 held a public comment period on this proposal from June 25 to September 24, 2010 to ensure that all interested parties had an opportunity to provide input to EPA before its final decision on this modification to the remedy.

D. Summary of ESD

The Record of Decision (ROD or ROD 2) for OU1 was issued on September 25, 1998. The ROD's cleanup plan called for approximately 450,000 cubic yards (cy) of PCB-laden *in situ* sediment to be dredged from the harbor bottom and surrounding wetlands, and to be disposed in perpetuity in four shoreline confined disposal facilities (CDFs). The CDFs were to be located in contaminated areas to avoid the need for dredging an additional approximately 126,000 cy of PCB-contaminated sediment; thus the total volume of sediments above the ROD 2 action levels was estimated in 1996 to be 576,000 cy. See ROD 2, Figure 12 (available at

