

2.10.3 Modifying Criteria

State Acceptance. State involvement has been solicited throughout the CERCLA process. RIDEM, as the designated state support agency in Rhode Island, concurs with the Selected Remedy. RIDEM's concurrence letter is presented in Appendix A.

Community Acceptance. The public was notified of a formal public comment period, as described in Section 2.3, and was encouraged to participate in the process. No written comments were received during the formal public comment period (May 21 to June 20, 2014) for the Proposed Plan. The questions posed at the public meeting (informal session) on May 21, 2014, were general inquiries for informational purposes and were addressed at the public meeting. The formal public hearing, at which attendees were asked to state their comments for the record, took place immediately after the public meeting on May 21, 2014. These formal comments/questions and the Navy responses are summarized in Section 3.0. The transcript of the public hearing is provided in the Administrative Record for Site 19.

2.11 PRINCIPAL THREAT WASTE

The NCP at 40 CFR §300.430(a)(1)(iii)(A) establishes an expectation that treatment will be used to address the principal threats posed by a site, wherever practicable. Principal threat wastes are those source materials considered to be highly toxic or highly mobile that generally cannot be reliably contained or that would present a significant risk to human health or the environment should exposure occur. A source material is a material that includes or contains hazardous substances, pollutants, or contaminants that act as a reservoir for migration of contamination to groundwater, surface water, or air, or acts as a source for direct exposure. At OU5, the contaminant concentrations are not highly toxic or highly mobile; therefore, principal threat wastes are not present at the site.

2.12 SELECTED REMEDY

2.12.1 Rationale for Selected Remedy

The Selected Remedy for OU5 is Alternative 5, target dredging in open water areas, cap target areas under Pier 2, short-term and permanent LUCs, and monitoring, which was selected because it offers the greatest level of protection while maintaining a balance among the nine evaluation criteria.

Alternative 5 achieves RAOs by dredging target open water areas and installing a cap (engineered barrier) at target areas beneath Pier 2. The open water areas will be dredged in an arrangement and to a depth such that the area-average COC concentrations remaining in sediment at the site will be less than the cleanup levels while not relying on backfill to reduce area average concentrations and while minimizing sediment left in place under covers or caps. PRD Sediment Sampling will be conducted to assess whether there has been any change to contaminated sediment distribution from recent Navy construction projects at the marginal wharf and Pier 2 and within the footprint of the ex-Saratoga. This alternative achieves cleanup levels by removing the most amount of contaminated sediment and only covering contaminated sediment where it cannot be removed.

In accordance with Section 404 of the CWA, the Navy has determined that Alternative 5 is the LEDPA to protect wetland and aquatic resources because it provides the best balance of addressing contaminated sediment within and adjacent to wetlands and waterways with minimizing both temporary and permanent alteration of aquatic habitats on site. Although each of the sediment cleanup options would impact aquatic habitats during cleanup activities, Alternative 5 will permanently remove COCs in sediment and will provide a cap over a limited area of contaminated sediments located under Pier 2 to achieve cleanup goals on a surface-area weighted average basis, which will be a long-term benefit to the aquatic habitat in the bay.

TABLE 2-6. SUMMARY OF REMEDIAL ALTERNATIVES EVALUATED

ALTERNATIVE	COMPONENTS	DETAILS	COST
<p>Target Dredging (open water); Cap, LUCs, and Monitoring (beneath Pier 2) (Alternative 5)</p>	<p>PRD Sediment Sampling</p>	<p>and enforced. The five-year reviews would summarize the results of the monitoring activities.</p> <p>Conduct additional sediment sampling [i.e., PRD Sediment Sampling] prior to implementation of the remedial action to assess the contaminant re-distribution resulting from the disruption of the sea floor by Navy construction projects (Pier 2 fender pile replacement, and marginal wharf upgrade) conducted before finalizing this ROD and within the footprint of the ex-Saratoga. The areas requiring dredging as part of the OU5 remedy may be revised depending on the sampling results and a revised SWAC. Details of the PRD Sediment Sampling will be included in a PRD SAP.</p>	<p>Capital: \$16,980,477</p> <p>Annual Costs O&M/LTM : \$25,388 (annual) O&M/Five-Year Reviews: \$181,025 every 5 years</p> <p>Total 30-Year NPW: \$18,328,150</p>
	<p>Dredging</p>	<p>Dredging would be conducted in target areas to target depths between 1 and 2 feet to achieve SWACs below cleanup levels. Also, three additional target areas will be dredged due to specific concerns associated with past disposal activities by the shipyard and contaminants present in deeper sediment. The total dredging areas are estimated at approximately 251,279 square feet, with an associated dredged volume of approximately 27,646 cubic yards.</p> <p>During dredge operations, silt curtains or other appropriate particulate control systems would be used. Bathymetric surveys would also be completed before and after dredging to confirm that targeted dredging depths were reached. Sediment would be dredged using methods selected based on effectiveness and to minimize water column turbidity. The final determination of the most appropriate technique would be made during the RD.</p> <p>Water from the dewatering process would be treated as necessary prior to discharge into Narragansett Bay or a POTW.</p> <p>Visual inspection(s) would be conducted, as required after completion of the remedy to document recovery of the benthic community.</p>	
	<p>Disposal</p>	<p>Dredged sediments would be dewatered onshore and/or on barges using gravity thickening and then mixed with Portland cement, lime, or another pozzolanic material to reduce the free water content of the sediment. The dredged sediments would require off-base landfill disposal. The dewatered and stabilized sediment samples would be analyzed to verify that the material meets applicable criteria before being transported for disposal. Existing sediment analytical data indicate COC concentrations are low enough that the material would likely meet requirements for disposal in a RCRA Subtitle D landfill without pre-treatment.</p>	
	<p>Confirmation Sampling</p>	<p>Confirmation sampling would be conducted within dredged cells and within cells adjacent to the dredged cells. Details of the confirmation sampling will be included in RD and RAWP documents.</p> <p>These data would be used to recalculate SWACs for the open water area to represent post-dredging conditions. Specifically, confirmation sampling data from dredged cells would be utilized to calculate a SWAC for the dredged area only. If</p>	

RECORD OF DECISION

SITE 19 – FORMER DERECKTOR SHIPYARD MARINE SEDIMENT OPERABLE UNIT 5



NAVAL STATION NEWPORT
MIDDLETOWN/NEWPORT, RHODE ISLAND
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