

**RESPONSE TO COMMENTS  
FROM THE BUREAU OF WATER MANAGEMENT  
PERMITTING, ENFORCEMENT, AND REMEDIATION DIVISION  
FEDERAL REMEDIATION PROGRAM ON DRAFT PROPOSED REMEDIAL ACTION  
PLAN FOR SITE 20 – AREA A WEAPONS CENTER, NAVAL SUBMARINE BASE  
NEW LONDON, GROTON, CONNECTICUT**

**COMMENTOR: Mark Lewis**

**DATED: 26 April 2000**

**GENERAL COMMENTS**

The preferred alternative consists of two elements: (1) Selective excavation of constituents of concern in soil and sediment, and (2) offsite disposal or asphalt batching of excavated soil and sediment. The State supports the proposed alternative.

The purpose of the Proposed Plan is to explain clearly to the non-technical reader the nature of the contamination at the Weapons Center, and to explain how the Navy plans to address the contamination. The Proposed Plan as written does not accomplish that goal. The Proposed Plan uses many technical terms and acronyms without first defining them. In many places, the language of the Proposed Plan is overly technical and confusing. Several technical and regulatory terms are used in places where more simple language could be used without sacrificing the accuracy of the information being conveyed. The Proposed Plan requires substantial revision to make it more understandable to the non-technical reader.

**SPECIFIC COMMENTS**

1. **Page 1-Cleanup Proposal**—In the first check mark, please replace “constituents of concern” with “contaminants.”

**Response**— Constituents of concern (COCs) was used throughout the FS and the ROD, and will remain in the PRAP for consistency. However, to improve readability, the term has been placed in boldface type and will be added to the glossary.

2. **Page 3-Site History**—Despite its title, this section discusses the general layout of the site, but it does not provide any information regarding the history of the site. Please revise the text to include a short history of the Area A Weapons Center site, including past land use and possible sources of the contamination that the Navy is addressing.

**Response**—The following text has been added to the Site History Section.

*“Building 524 was constructed in 1990/1991. Prior to construction, the area was primarily woodlands. Portions of the site were blasted to remove bedrock during construction. The building was historically used for administration, minor torpedo assembly, and storage of simulator torpedoes. Chemicals, including cleaning and lubricating compounds, paints, adhesives, and liquid fuels, were used and stored in relatively small amounts at the site. No impacted soil or sediment were identified at Building 524; therefore, this building was not included in the FS.”*

*The southern bunkers are first evident in aerial photographs from 1969, and the northern area bunker is evident in photographs from 1974 (Brown and Root 1997). The southern bunkers were reconstructed in the mid-1980s, including removal of structurally unsuitable soils (most likely dredge spoils associated with the Area A Wetlands). The bunkers are currently used for the storage of live and simulator torpedoes and missiles. Site 20 also consists of three drainage areas in the southern bunker area, identified as Drainage Areas 1, 2, and 3."*

3. **Findings of the Field Investigations and Summary of Site Risks**—The language in this section is highly technical, and is unlikely to be understood by the non-technical reader who is the intended audience for the proposed plan. This section should be re-written to be more understandable by a non-technical reader. The use of jargon and acronyms should be minimized, and all technical terms should be defined. Please include in the glossary definitions for the following terms: phthalate esters, polycyclic aromatic hydrocarbons, Preliminary Remediation Goal, Central Tendency Exposure, and Reasonable Maximum Exposure. The concept of "Central Tendency Exposure" and "Reasonable Maximum Exposure" should be carefully explained, or the terms should be eliminated from the Proposed Plan. It would be sufficient to say that conservative estimates were made of the risk to human health posed by contaminants in soil and sediment.

**Response**—This section has been rewritten as suggested.

4. **In the last paragraph, and throughout the document, the term "10<sup>5</sup> PRGs" is confusing.** A less confusing term might be "risk-based cleanup goals."

**Response**— All references to 10<sup>5</sup> PRGs will be changed to "risk-based cleanup goals".

5. **Page 4, Figure 2- Drainage Area Boundaries**—What are the red dots on this figure? Most of the dots are near the fences. The electric line which serves Building 524 and Building 393 could be eliminated from the diagram to reduce "clutter" which makes the diagram confusing.

**Response**—The figure will be revised as suggested.

6. **Page 5- Summary of Alternatives Considered for Site 20**—In the paragraph above the table, please define the acronym "FS."

**Response** — The term FS was defined on page one of the PRAP, However, to increase readability of the document, "FS" will be placed in boldface type throughout the document to indicate that it is included in the glossary.

7. Throughout this table, please use the term "contaminants," rather than "COCs."

**Response**— The term COC has been defined previously in the text, however to increase readability, "COC" will be placed in boldface type throughout the document to indicate that it is included in the glossary.

8. **In the Components column, for Item 3b, the first bullet point should read**—"Selective excavation of contaminants in soil and sediment."

*Response*—See comment number 7.

9. *In the Comment column*—The Navy should consider using a more simple term than “chemical specific applicable or relevant and appropriate requirements.” A possible alternative would be “legally required cleanup levels.”

*Response*—The Sentence has been rewritten as follows:

*“Compliance with ARARS – The alternative should meet all federal and state legally required cleanup levels that are applicable and relevant and appropriate.”*

10. *In the Comment Column, for Alternatives 1 and 2*—Replace “for 30- year projection” with “over a projected 30- year period.”

*Response*— The text has been revised as suggested.

11. *Page 5–Alternative Evaluation Criteria*—The Navy proposes to meet the more stringent of either the Remediation Standard Regulation criteria, or cleanup levels based on an excess lifetime carcinogenic risk of  $10^{-5}$ . Please note that Remediation Standard Regulation Criteria are based on an excess lifetime carcinogenic risk of  $10^{-6}$  for individual contaminants, and a risk of  $10^{-5}$  for the cumulative risk posed by multiple contaminants. For this reason, the Remediation Standard Regulation criteria will be more stringent than cleanup goals based on a  $10^{-5}$  carcinogenic risk.

*Response*—The text in question has been removed from the document. Additionally a table has been added under the Proposed Remedy section indicating specific cleanup levels for each COC.

12. *In the first paragraph*—Replace “ $10^{-5}$  risk- based PRGs” with “risk based cleanup goals.”

*Response*— All references to  $10^{-5}$  PRGs will be changed to “risk-based cleanup goals”.

13. *For Criteria 4*—“Reduction of toxicity, mobility, or volume through treatment,” please include “CERCLA” in the Glossary.

*Response*—CERCLA has been changed to boldface type and the definition has been added to the text.

14. *Page 6–The Navy’s Proposed Remedy*—In the first paragraph, replace “Residential  $10^{-5}$  Risk- Based PRG” with “residential risk- based cleanup levels.”

*Response*— All references to  $10^{-5}$  PRGs will be changed to “risk-based cleanup goals”.

15. *Page 6–The Public’s Role in Alternative Selection*—Please check the telephone number for Darlene Ward. I believe her telephone number is (860) 694-4256.

*Response*— The phone number has been corrected.

16. *My title is* “Environmental Analyst 3.”

**Response**— The title has been changed.

17. **Page 7—Glossary of Terms**—The definition for “sediment” is confusing. A more understandable definition, adapted from the Remediation Standard Regulations, would be “soil, sand and minerals occurring in a stream channel, pond, or other body of water.”

**Response**—The definition has been changed as suggested.