



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

April 15, 1993

Deborah Stockdale  
Environmental Restoration Branch  
Naval Facilities Engineering Command  
U.S. Department of the Navy  
10 Industrial Way (Mail Stop 82)  
Lester, PA 19113-2090

Re: Amendment to the Draft Phase II Remedial Investigation (RI)  
Work Plan for the Naval Submarine Base - New London (NSBNL)  
Supplemental Step I Investigations - Construction Battalion  
Unit (CBU) Drum Storage Area and Over Bank Disposal Area  
Northeast (OBDANE)

Dear Ms. Stockdale:

Thank you for the opportunity to review and comment on the above referenced document. EPA has completed its evaluation and offers the attached observations and recommendations. The comments are organized in a manner that is consistent with the format of the amended work plan.

In addition, EPA has received and is currently reviewing the March 1993 Draft Final Phase II RI Work Plan. Per our telephone conversation yesterday, EPA anticipates having its final round of comments on this document to you no later than April 28.

Should you have any questions with regard to the attached comment package, please do not hesitate to call me at (617) 573-5764.

Sincerely,

A handwritten signature in cursive script that reads "Carol A. Keating".

Carol A. Keating  
Remedial Project Manager  
Federal Facilities Superfund Section

Attachment

cc: Andy Miniuks, USEPA  
Charles Porfert, USEPA ESD  
Patti Lynne Tyler, USEPA ESD  
Jack Harvanek, USEPA ESD  
Dale Weiss, TRC Environmental Corporation



## ATTACHMENT

### General Comments

- This document was difficult to review since it did not specifically make reference to the particular sampling protocol or any other section(s) of the Phase II RI project plans for sampling procedures, sample preservation, holding times, chain of custody/shipping of samples, frequency of QA/QC sample collections and associated criteria, analytical methods and procedures, data validation, or for distribution of project reports. The text should, at a minimum, reference the applicable sections in the Final Phase II RI Work Plan.
- Air monitoring should be conducted during all invasive investigation procedures to ensure worker protection. In addition, the work plan should include a statement regarding the airborne contaminant concentration action levels at which protective equipment must be donned, i.e., limits beyond which field work ceases until protective equipment can be donned.

The portion of the Phase II Work Plan which discusses issues relating to air monitoring for VOCs, i.e. worker safety and fence-line measurements for migration of contaminants off-site, is also relevant to these two sections.

Consideration should be given to monitoring for semi-volatiles related to fugitive dust during significant invasive procedures. This becomes especially important during the remediation phase.

- As discussed in EPA's May 20, 1992 letter regarding the Navy's responses to EPA's comments on the draft August 1991 Installation Restoration (IR) Report, there is some concern that the scope of the Step I investigations may not be sufficient to completely characterize the nature and extent of contamination at these areas. Given the number of years that have transpired since the time that many of the documented releases occurred, it is possible that contamination has migrated outside the original site boundary. EPA requests, therefore, that the Navy consider the installation of a downgradient monitoring well at each site to ensure that the ground monitoring system adequately assesses ground water quality at the base,
- Regarding the compositing of samples in earlier investigations, EPA Region I ecological risk assessment requires the use of individual analysis. Future soil samples must be analyzed separately to rule out any dilution effects which could occur with compositing.

- § 2.2 - Supplemental Step I Investigations

The text states in the last sentence that the information is summarized from information that is presented in more detail in the Phase I RI report, and from any additional background information obtained during the preparation of this work plan. Please identify the additional background information and indicate by reference notation where they are used in the preparation of this work plan.

- § 2.2.1.1 - Site Background

The last sentence of the first paragraph of this Section states (with reference to Figure 2-6) that runoff does not flow to the nearby catch basin but there is no indication of a catch basin near the storage area depicted in Figure 2-6. Please clarify the location of the catch basin in the figure.

The last paragraph of this section states that the drums noted in the IAS report were removed. Please indicate when the drums were removed. Also, please provide information as to when the two drums noted on October 20, 1988 were placed in the storage area and when they were removed.

The last sentence of the last paragraph states that no drums were observed onsite "nor was there any evidence of recent storage or leakage of drums." Please explain how the "evidence" was determined. For example, was it based on simple visual site inspection(s), or were field surveys made with detection instruments at surface and subsurface locations, or were other approaches used?

- § 2.2.1.3 - Nature and Extent of Contamination

The text describes contamination detected at the site as resulting from previous activities conducted at the site. Please identify references for the data presented in this section.

- § 2.2.2.1 - Site Background

The last paragraph of this section states that Atlantic personnel inspected the site on September 30, 1988 and on February 23, 1993 and verified the presence of several empty drums. Please provide more details as to the type of drums (steel, fiberboard, etc.), and their condition, i.e., intact, ruptured, open, crushed, or other. Also, please clarify how the drums were verified, i.e., by visual inspection, by radar, by unearthing them, or by other means.

- § 2.2.2.2 - Site-Specific Geology and Hydrology

The second and third paragraphs make reference to the "fill material" at the site. Please elaborate on the description of this material.

- § 4.1 - Replacement Paragraph 2

The fifth sentence does not fully address ecological concerns with regard to soil. Because of the lack of soil criteria regarding ecological concerns, exposure calculations will be required so that a comparison can be made to available literature information. It is suggested that the sentence be modified to read:

"The assessment will be based on a comparison of contaminant concentrations to health based ARARs for ground water and soil, site-specific background concentrations for inorganics in soil, exposure calculations based on maximum and mean contaminant concentrations in soil, and professional judgement as to potential risk a contaminant may pose at certain concentrations in a particular medium.

- § 7.1 - Supplemental Step I Storage Area

The installation of a single monitoring well may not be sufficient to completely "assess whether contamination has impacted deeper soils and ground water" at this site. As previously discussed, since earlier studies identified contamination at the site, subsequent investigatory work should be designed to assess the extent, in addition to the nature, of contamination detected.

- Table 7-3 - CBU Drum Storage Area Field Sampling Plan

As a point of clarification, the surface soil (0-2') samples should be analyzed individually, not as composites, for inorganics (TAL), and organics, TCL volatiles, semi-volatiles and pesticides.

- § 7.1.2 - OBDANE

The fourth paragraph states, "There were no other compounds identified at the site above background values." As stated in EPA's May 20, 1992 letter, EPA will not accept published values for background levels of inorganics for comparative risk analyses. Site-specific background soil data for inorganics must be collected from each site. Several sections of the revised field sampling still make reference to "published" background levels. Have background samples been collected from this site? Further clarification of this issue is requested.

- Table 7-6 - OBDANE Field Sampling Plan

As a point of clarification, the surface soil (0-2') samples should be analyzed individually, not as composites, for inorganics (TAL), and organics, TCL volatiles and semi-volatiles.

- § 4.2.1.1 - CBU Drum Storage Area

The section describes the collection of subsurface soil samples from each of three test borings. The section needs to describe or reference the equipment that will be used to make these borings including procedures for sampling soil and for associated equipment decontamination. Also, description, or reference to other sections of the work plan, need to be given for sample preparation, preservation, and for laboratory shipment as well as the type and frequency of QA/QC samples that will be collected.

The second paragraph states that borings 1TB1 and 1TB2 will be advanced to a depth of 15 feet. However, all soil borings should be terminated only after a minimum of 15 feet and after 15 feet of soil which is determined to be uncontaminated, based on field instrument screening. This will ensure that the vertical extent of contaminated soils will be determined.

The last sentence of the third paragraph states, "a sample will be collected from either the elevation of ground water or from any fine-grained soil layer present above the water table." Please clarify: "elevation of ground water" and provide the rationale for collecting a sample from any fine-grained soil layer.

In addition, the section states that one ground water monitoring well will be installed at the site to characterize the quality of ground water at the site. Also, Table 4-3 shows a water sample collected from a well designated as 1GW1S. Please confirm whether this is the ground water monitoring well and also indicate its presence in Figure 4-1. Similarly, ground water sampling well for the ORDANE designated as 14GW1S in Table 4-5, needs to be indicated in Figure 4-2.

- Table 4-2 - CBU Drum Storage Unit

Since drums have been stored at this site and given their persistence and lack of mobility in soil, PCBs should be retained as an analyte of interest.

- § 4.2.1.2 - OBDANE

Two sediment/surface water samples should be obtained from the drainage at the foot of the hill below of the OBDANE. Analytes should include full TCL/TAL.