



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

September 30, 1994

Ernesto M. Galang
Western Division - Code T4A2EG
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-2402

Re: Draft Revised Proposed Approach to Establish Background and
Ambient Levels in Soils for Naval Station Treasure Island
dated August 11, 1994

Dear Mr. Galang,

The U. S. Environmental Protection Agency (EPA) has received and
reviewed the subject document. EPA's comments are enclosed.

If you have any questions, please call me at (415) 744-2368.

Sincerely,

Handwritten signature of Rachel D. Simons in cursive.

Rachel D. Simons
Remedial Project Manager
Federal Facilities Cleanup Office

Enclosures

cc: Jim Sullivan, NAVSTA TI
Mary Rose Cassa, DTSC
Michael Bessette, CRWQCB
Sophia Serda, EPA
H-9-2 File

Admin Records (3 copies)

**Draft Revised Proposed Approach to Establish
Background and Ambient Levels in Soils for
Naval Station Treasure Island dated August 11, 1994**

General Comment:

1. As stated in the September 15, 1994 Project Manager (PM)'s meeting, this document will be included in the Draft Phase IIB Remedial Investigation (RI) Workplan Addendum and will be used as a field sampling plan. A section similar to the site-specific "Field Methods and Procedures" sections and a table similar to the site-specific "Samples and Analysis" tables in the Draft Phase IIB RI Workplan Addendum should be prepared for this document. The detection limits for the analytical methods must also be identified.

Specific Comments:

1. **Section 3.2 Background Soil Sampling Location, p-13**

It is recommended that the Environmental Baseline Survey be used as a reference when soil sampling locations are selected.

2. **Section 3.2 Background Soil Sampling Location, p-13**

The 21 soil samples must be collected from 21 random sample locations. The current approach with 7 borings results in only 7 random sample locations. Random samples are required for defensible statistical analysis. Revise this document to include 21 random soil sampling locations.

3. **Table 3-3 Literature Background/Ambient Levels, p-16**

Identify if the chromium presented in Table 3-3 is total chromium or trivalent chromium. Speciation of trivalent chromium and hexavalent chromium is recommended for soil sample analysis.

Expand Table 3-3 to include the number of samples used and the minimum and maximum concentrations for each study.

4. **Section 4.1 Approach, p-18**

In response to the third paragraph on this page, the purpose of this approach is to focus resources on establishing background concentrations for only the inorganic components that present a risk. Screening the samples with the EPA Region IX Preliminary Remediation Goals (PRGs) will automatically eliminate the necessity to establish background for inorganics that are not a human health risk. According to the preliminary screening

results, the PRG screening process has already reduced the number of target inorganics from approximately 17 to 7. Using the PRG screening process, only 7 inorganic compounds will be carried onto the second step of the process which involves identifying sites with potential inorganic sources. Delete or revise this paragraph.

5. Section 4.1 Approach, p-18

Due to the limited nature of the terrestrial habitat at Treasure Island (TI), EPA believes that ER-L screening may not be appropriate for TI. Other ecological soil screening levels that may be more appropriate for TI should be discussed at the ecological scoping meeting on October 26, 1994.

6. Section 4.2 Preliminary Screening Results, p-19

To evaluate the results of the screening and to facilitate risk management decisions, a table summarizing the preliminary screening results should be prepared. The table should include the following for each inorganic above PRGs:

- number of samples collected per site
- minimum and maximum values per site
- analytical methods used and detection limits
- total number of detects
- sample distribution pattern; normal or log normal for each inorganic
- comparison to PRGs

7. Section 4.2 Preliminary Screening Results, p-19

List the inorganics that are below PRGs in the last bullet under PRG screening.

Include the following samples, which are above the PRG for lead (400 mg/kg), in the preliminary screening:

Site 09 09-SB03 Zone A 974 mg/kg

Site 20 PA/SI Sample #2 700 mg/kg
 PA/SI Sample #3 2,000 mg/kg

8. Section 4.3 Interpretation, p-20

PRGs or ER-Ls will not become remediation goals with no consideration of ambient conditions. If there is sufficient evidence that levels of inorganics above PRGs are evenly distributed throughout TI and are not the result of site-specific sources, the Project Team (EPA, DTSC, RWQCB and Navy) can make a risk management decision that these inorganics can be considered "ambient levels" and do not warrant remediation. Please delete

the first paragraph of this section.

9. Section 4.3 Interpretation, p-20

At the next PMS meeting to discuss background, it is recommended that the Navy provide information on potential sources and distribution patterns for inorganics to facilitate the making of timely risk management decisions.