



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

VIA FACSIMILE

19 December 1997

Commanding Officer
Engineering and Field Activity, West
Naval Facilities Engineering Command
Attn: Mr. Ernesto Galang
900 Commodore Drive
San Bruno, California 94066-2402

Re: U.S. Environmental Protection Agency (EPA) Review Comments - Onshore Remedial Investigation Report, Naval Station Treasure Island, San Francisco, California, dated September 1997.

Dear Ernie:

The U.S. EPA has completed its review of the subject draft final of the subject document. The Agency's general comments will be discussed below and our specific technical and legal review comments are discussed in the attachment. In brief, our review determined that the Navy has addressed the Agency's concerns, save those discussed in the aforementioned attachment. Overall, we find the subject document to be very thorough and comprehensive in terms of the site characterization data and activities presented. EPA's commends the Navy and its contractor for their diligent efforts in producing the subject draft final RI.

EPA's review involved two phases. Initially, we reviewed *Appendix O "Responses to Regulatory Comments on the Draft Remedial Investigation Report,"* to determine whether our previously submitted review comments had been addressed. This phase was followed by a thorough technical and site/issue-specific review of the five volumes by EPA's technical and legal staff. With respect to overall general comments, EPA has two concerns which will be discussed below: 1) organization of the document, and in particular, the executive summary; and 2) ambient or background for metals, specifically, the selection of "10%" relative to the human health risk assessment. The Agency's specific review comments discussed in the attachment focus primarily on the ARARs section and related issues, specifically addressing the Basin Plan and the issue of designation of groundwater at the Naval Station Treasure Island (NSTI). In this regard, EPA's attorney summarized the current status of this issue and recommends language for incorporation into the final RI that acknowledges both the position of the Navy as well as the State of California, Environmental Protection Agency (CAL-EPA).

GENERAL COMMENTS

A. Overall Organization of the Document

It is very clear from reviewing the subject document that the Navy has invested a significant expenditure of human and financial resources in the investigation and characterization of the facility. Unfortunately, what is not consistently clear is the presentation of tables and other supporting data relative to specific discussions in the text. In general, EPA found it particularly difficult, at times, to locate the supporting data for activities discussed in the text. This was particularly the case in our review of the executive summary. The executive summary must be comprehensive and lucid. Moreover, it should be organized in a way that introduces the public to the purpose and issues, conclusion and recommendations that are discussed in greater detail in the text. In this regard, EPA has generated a few comments and developed specific recommendations that we believe will enhance the overall organization of the document relative to more lucid integration of text and tables. Given that these comments are more editorial than technical in content, EPA recommends a brief teleconference between the Navy, EPA and CAL-EPA to expeditiously address and obtain closure regarding these concerns.

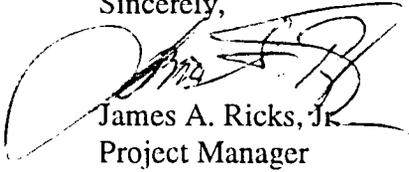
B. Ambient or Background for Metals

As a result of EPA's review of Appendix O and F "*Estimation of Background and Ambient Metals Concentrations in Soils*," and recent Base Realignment and Closure (BRAC) Cleanup Team (BCT) discussions, clarification is warranted regarding the issue of calculating background for metals, particularly in circumstances where metals are to be eliminated as chemicals of concern if 10% or fewer of the site concentrations exceed the background concentrations. It is the Agency's understanding based upon a review of BCT minutes and other documentation that the NSTI BCT at an April 1997 meeting specifically agreed to use the "10%" level as an acceptable screening tool for risk assessment. In order to ensure consistency relative to previous agreements and to preclude confusion of this issue for NSTI Restoration Advisory Board (RAB) as well as the general public, EPA recommends that this issue be discussed at the January 1998 BCT in order to clarify and reaffirm the previous agreement. Towards this end, we have attached a document from the April 1997 BCT meeting which discusses this issue and confirms the agreement.

Finally, EPA notes that the NSTI RAB has generated a significant number of very salient comments regarding the draft final RI. After reviewing the most recent RAB comments, the Agency's is willing to meet with interested RAB members, in conjunction with the Navy and CAL-EPA, to discuss their concerns in detail. It is our contention that the draft RI contains considerable site characterization data that addresses the RAB's concerns.

Thank you for the opportunity to review the subject draft final RI. Should you have any questions or require further information, please contact me at (415) 744-2402.

Sincerely,



James A. Ricks, Jr.
Project Manager

cc/w enclosures: D. Rist (CAL-EPA/DTSC)
D. Leland (CAL-EPA/RWQCB)
J. Sullivan (CSO/NSTI)
M. Walters (San Francisco Redevelopment Agency)

Pat Nelson
Paul Hehn
ARC Ecology
John Allman
Usha Vedagiri
Dale Smith

} RAB

Richard Knapp (Tetra Tech EMI)
Admin Record (3 copies)

**U.S. Environmental Protection Agency
Review Comments
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Attachment I Specific Comments

1. It currently appears that the Basin Plan does designate the groundwater at TI as a potential domestic/municipal source. While the committee report does recommend a change of designation, I assume that the State will hold to the fact that the groundwater is still a potential drinking water source. The Navy needs to state that it disagrees with the State's current designation and that it considers the groundwater not to be a drinking water source, or else MCLs will apply. Chemical specific ARARs applicable to groundwater such as the Water Board's Resolutions 88-63, 92-49 and 68-16 and the Basin Plan must be discussed, and the Navy and the State need to come to "agree to disagree language" with the State. I am attaching relevant portions of language from the Hunters Point Parcel B ROD in which this same issue was addressed.

2. There appears to two identical Table 4-1 and Table 4-2 in the ARARs discussion. One set of the Tables should be deleted.

3. Citation to the Coastal Zone Management Act in the ARARs Table should also cite to the California Public Resources Code, section 1451 et seq. which is the State Coastal Management Plan. The approved coastal zone management program for the San Francisco Bay includes the McAteer Petris Act and the San Francisco Bay Plan and is administered by the San Francisco Bay Conservation and Development Commission. The goals of the Bay Plan are to reduce fill and disposal of dredged materials and to maintaining the water quality and ecological integrity of the Bay. The Navy should coordinate with BCDC to make its consistency determination.

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Attachment I Specific Comments (Continued)

Recommended language for Chemical Specific ARARs applicable to Groundwater viz., Water Board Resolutions 88-63, 92-94 and 68-16 and the Basin Plan (from the Hunter's Point Parcel B ROD).

Groundwater

The State asserts that SWRCB Resolutions 88-63, 92-49, and 68-16 and the Basin Plan are chemical-specific ARARs for groundwater at HPS Parcel B. Each of these documents is discussed below.

Resolution No. 88-63: As explained in Section 2.1, SWRCB Resolution No. 88-63 defines potential sources of drinking water, and this definition is relevant in determining appropriate cleanup goals. The Navy and the State do not agree on whether A-aquifer and bedrock water-bearing zone groundwater meet the criteria for classification as a potential drinking water source. For the reasons set forth in Section 2.1, the Navy has determined that neither the A-aquifer nor the bedrock water-bearing zone meet the criteria in Resolution No. 88-63. While the State believes that the groundwater in both the A-aquifer and the bedrock water-bearing zone technically is potentially suitable for drinking water use, the State also recognizes that use is not likely to be realized. Many extreme conditions of water availability within the San Francisco Bay region would have to change dramatically before the potential use of the water for drinking would be realized. For this reason, the State concurs that, regardless of whether Resolution 88-63 applies to Parcel B groundwater, cleanup of the water to drinking water standards is neither applicable nor relevant and appropriate at HPS Parcel B.

Resolution No. 92-49: SWRCB Resolution No. 92-49, adopted pursuant to the Porter-Cologne Water Quality Act, California Water Code Sections 13304 and 13307, was promulgated by the SWRCB as policies and procedures to be followed by the RWQCB's for oversight of investigations and cleanup and abatement decisions. Most of Resolution No. 92-49 contains procedural rather than substantive requirements and is therefore not an ARAR. Nevertheless, the Navy agrees with the State that Section III.G, which states that dischargers must abate the effects of the discharges "in a manner that promotes attainment of either background water quality, or the best water quality that is reasonable," is relevant and appropriate for groundwater.

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Resolution No. 68-16: SWRCB Resolution No. 68-16, adopted pursuant to the Porter-Cologne Water Quality Act, Water Code Section 13140, is the State's "Statement of Policy with Respect to Maintaining High Quality Waters in California." The State and the Navy disagree on whether Resolution No. 68-16 is an ARAR. The State asserts that Resolution No. 68-16 is a potential ARAR that governs the further migration of contaminated groundwater and requires cleanup of groundwater to background levels. The Navy asserts that Resolution No. 68-16 is prospective in intent, applying to new discharges in order to maintain existing high-quality waters.

Basin Plan: The Basin Plan, adopted pursuant to the Porter-Cologne Water Quality Act, Water Code Section 13240, identifies beneficial uses for surface water and groundwater and establishes numerical and narrative standards to protect those beneficial uses. As described in Section 2.1, the beneficial use of the groundwater underlying HPS does not include municipal supply for the following reasons: groundwater has never been used for such purposes, high TDS values in the A-aquifer, likely saltwater intrusion if pumping should occur, and limited groundwater availability in the bedrock water-bearing zone. For these same reasons, the Navy and State agree that the groundwater's beneficial uses do not include industrial service or process supply or agricultural supply. The only possible beneficial use of the groundwater is freshwater replenishment. The narrative water quality objectives for groundwater as they relate to freshwater replenishment are applicable; in addition, although not applicable because they apply to surface water, the numerical water quality objectives in Table 3-3 of the 1995 Basin Plan are relevant and appropriate to the extent that groundwater migrates into surface water.

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Attachment II

**Ambient or Background Metals
NSTI BCT Meeting
April 1997**

Ambient or Background Metals

Note: I used "background" to mean both "ambient" and "background".

At each Site in the RI Report, metals were eliminated as a chemicals of potential concern if 10% or fewer of the site concentrations exceeded the background concentrations. The following outlines the rationale for using the "10%" as a tool to distinguish site-related metals, metals attributable to site-specific activities, from background metals.

In Appendix F, background concentrations were determined for each metal by calculating a threshold concentration (either the 80% lower confidence limit on the 95th percentile or the 95th percentile dependant on the size of the background data set). Using this method, the number calculated for background is always lower than the maximum number from the background data set. Therefore, it would be expected that some metals concentrations attributable to background would exceed the calculated background number.

Also, based on the known variation in naturally occurring metals in soil, it is possible that a metal concentration could exceed background or the maximum concentration of the background data set and still be attributable to background. We wanted to avoid carrying these metals through the risk assessment as site-related.

The "10%" level was chosen only after all of the metals data at all Sites were reviewed. The review revealed that each Site had at least one metal where 10% or fewer of the site concentrations exceeded the background concentrations and that this usually corresponded to only one or two samples exceeding background out of data sets ranging from 13 to 60 samples.

Using the data set where 10% or fewer of the site concentrations exceeded the background concentrations, the following criteria was then used to check that the "10%" was applicable and that it would not screen out site-related metals from the risk assessment:

- The samples that exceeded background were compared to the range of background data and for the majority of metals the concentrations did not exceed the background range.
- The spatial distribution of the metals was evaluated for evidence of potential hot spots.
- Co-occurrence with organic chemicals was evaluated to determine if the metals could be site-related.

- Regional information was evaluated to provide a prospective of what can occur naturally in the Region.
- The site history was evaluated for any known sources of metals due to historical base operations.

Based on the above criteria, the U.S. EPA, DTSC, RWQCB and Navy agreed that the "10%" level was an acceptable screening tool for the risk assessment.

Note: We recommend calculating the risk due to background at each Site to provide the project managers for comparison purposes information on the total risk at the site.