



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

March 5, 2001

Glenna Clark, Code 5090
Department of the Navy
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

**RE: Engineering Evaluation and Cost Analysis for Installation Restoration Site 14,
Dioxin Removal Action and Engineering Evaluation and Cost Analysis for
Installation Site 5, Cadmium Removal Action, Alameda Point, Alameda.**

Dear Ms. Clark:

EPA has reviewed the above referenced documents prepared by Tetra Tech EM Inc. and submitted by the Navy to EPA on January 5, 2001. The proposed soil removal actions for IR 5 and 14 are intended to be the final actions with regards to remediation of soils at both sites. If the removal actions are fully successful in meeting this goal, then Sites 5 and 14 soils will not be carried into the subsequent Feasibility Study for remedial actions, and ARARs for soil clean up at these sites will not be discussed in the FS. Therefore, EPA has performed a thorough review of the EE/CAs to ensure that ARARs have been adequately addressed for these final actions. The comments from EPA's Office of Regional Counsel refer to sections in the Site 14 dioxin removal. Since the Site 5 EE/CA is very similar to the Site 14 EE/CA from an ARARs standpoint, EPA's ORC did not generate a separate set of comments for the Site 5 cadmium removal, but has requested that the Site 14 comments apply to both EE/CAs.

In addition to comments provided by EPA legal staff, we are providing a few comments on other aspects of the EE/CAs. We appreciate the opportunity to review these documents. If you have any questions, please call me at (415) 744-2367.

Sincerely,

A handwritten signature in cursive script that reads "Anna-Marie Cook".

Anna-Marie Cook
Remedial Project Manager

enclosure

cc list next page

cc: Michael McClelland, SWDiv
Andrew Dick, SWDiv
Mary Rose Cassa, DTSC
Brad Job, RWQCB
Dina Tasini, City of Alameda
Michael John Torrey, RAB Co-Chair
Suzette Leith, EPA

**EPA Comments on
Site 14 Engineering Evaluation/Cost Analysis, Alameda Point, Alameda**

EPA Office of Regional Counsel Comments:

1. Page 3-3, second paragraph. Paragraph quotes NCP that TBCs “should not be required as cleanup standards.” Nevertheless, if the Navy decides to adopt specific TBCs as performance standards, that should be stated in the Action Memorandum.
2. Page 3-3, third paragraph:
 - (a) Paragraph incorrectly states that for a State requirement to be ARAR, it must be “a state law.” A State regulation or other requirement can also be ARAR if it is a “promulgated standard, requirement, criteria, or limitation under a State environmental or facility siting law.”
 - (b) Paragraph indicates that State ARARs are being solicited concurrently with issuance of the draft EE/CA to the regulatory agencies. EPA strongly recommends solicitation of State ARARs earlier in the process so that the draft EE/CA would include all ARARs and so that review of the draft EE/CA would be more meaningful.
3. Page 3-4, second paragraph. Paragraph discusses when RCRA requirements are applicable. Paragraph should also discuss the possibility of RCRA requirements being relevant and appropriate. As written, the discussion implies that if, for example, a waste was disposed of prior to the effective date of the particular RCRA requirement, that RCRA requirement would not be ARAR. The better analysis is that such requirements may not be applicable, but they very well may be relevant and appropriate.
4. Page 3-5 Location Specific ARARs. There was no discussion of CWA 404 as a potential ARAR. Are there any wetlands that could be affected by any of the alternatives?
5. Page 3-6, Action Specific ARARs. Text states that since action-specific ARARs depend on the action selected, they are identified after an alternative has been selected. EPA does not agree with this procedure in this situation, in which the removal action is contemplated as the final remedy (as stated on page 3-1). In selecting a remedy, the Navy needs to analyze whether ARARs will be met. This cannot be done if the ARARs have not been identified. Also, the ARARs for different alternatives could influence the cost of implementing those remedies. In this type of removal, where the action is intended to be the final remedy, ARARs for all the alternatives should be analyzed in the EE/CA.
6. Page 3-7, first full paragraph, discussion of action-specific ARARs. Text states that “as long as the excavated material remains inside the area of contamination, it is not newly generated and will not be subject to RCRA...requirements. Therefore, there are not federal action-specific ARARs...” This analysis is not correct. If material is disposed of

within an AOC, then it is not considered “placement,” and this it is not necessary to comply with LDRs. However, depending on the action being taken, other RCRA requirements may still be ARAR, e.g. regulations regarding containers. Also, as discussed above, RCRA requirements may be relevant and appropriate even if they are not applicable.

7. Section 3.4, General ARARs discussion. EPA is unable to comment in a meaningful way on the ARARs analysis without knowing the State ARARs and the action-specific ARARs. We expect that in the Action Memorandum, the Navy will include a complete ARARs analysis which we can review; therefore, we have not at this time conducted a thorough review of what State and federal action-specific ARARs should be included. Following, however, are some requirements that the Navy should consider as potential action-specific ARARs:
 - (a) BAAQMD requirements regarding particulate emissions at excavation sites. (Page 4-9 of the draft EE/CA mentions dust suppression measures. These should be discussed as ARARs.)
 - (b) RCRA and State Water Requirements from both Title 22 and Title 27 CCR regarding LDRs, CAMUs (if this is being considered), and/or landfill requirements for the on-site disposal alternative. If the Navy’s position is that any of these requirements would not be ARAR because disposal would be within the AOC, there needs to be a discussion of how the AOC is delineated and why it meets the definition of an AOC.
 - (c) RCRA regulations regarding containers and other requirements regarding the solidification and stabilization processes. For example, page 4-7 of the draft EE/CA indicates that for on-site disposal options, there will be a staging area and waterproof containers. That could trigger container and other RCRA requirements. Page 4-9 discusses engineering controls to limit the mobility of dioxins. Again, there may be ARARs that would have to be complied with, e.g. landfill ARARs or Water ARARs. Section 4.4 states that the alternative of ex situ solidification and stabilization would be managed in accord with action-specific ARARs; however, these ARARs are not identified.
 - (d) If any of the alternatives have the potential for causing a discharge to surface waters, there may be CWA or State Water ARARs.
8. Page 4-20 and 4-22. Text states that treatment would be in the AOC, so RCRA requirements would not apply. That analysis is not correct; see discussion above regarding page 3-7.
9. Table 3-2, Location Specific ARARs. The table should indicate the specific elements of the Bay Plan which are ARARs.
10. Page 5-2 and Table 5-1. Text states that there are no action-specific ARARs. That is not correct. At the very least, there are dust-suppression ARARs, and there may also be RCRA or Water ARARs; see comment above on ARAR discussion in general.

11. Page 5-2 and 5-4, discussion of overall protection of human health and the environment factor. This is a threshold criterion. The document needs to indicate whether each alternative meets, or does not meet, this requirement. It is not clear whether an alternative scoring a "1" or a "5" meets or does not meet this requirement. The standard way of doing this is to indicate whether each alternative either satisfies or does not satisfy this requirement. If an alternative meets this criterion but there are some concerns, that should be indicated under some of the other factors, e.g. short-term or long-term effectiveness.
12. Page 5-4 and Table 5-2. It is not possible to analyze whether each alternative complies with ARARs without first identifying and analyzing State ARARs and action-specific ARARs. Additionally, compliance with ARARs is also a threshold criterion (unless, in a removal, there is a showing that compliance with ARARs was not practicable considering the exigencies of the situation), and the table and discussion should clearly indicate whether a specific alternative does or does not comply with ARARs.

EPA General Comments on Site 14 Dioxin Removal EE/CA:

1. Page 2-3, Section 2.3: The sediment at the storm drain outfalls has not been sampled for dioxins. EPA recommends that additional sampling under the OU 1 and 2 FSP include samples of sediment at these locations.
2. Page 2-7, Section 2.4.1, second paragraph: What is meant by the sentence "Table 2-5 summarizes the total carcinogenic risk calculated during the HHRA due to dioxins **after risk management considerations**"? Risk levels are not changed by risk management considerations. Rather risk management comes into play during the Feasibility Study when all factors used to calculate total risk are taken into account.
3. Page 2-9, second paragraph: Please bear in mind that if soils are remediated to an industrial PRG, the site will need to have institutional controls placed on it restricting its future use to industrial. If the ecological risk screening level is used and the level is at or below residential PRGs, ICs restricting use will not be necessary.

**EPA Comments on
Site 5 Engineering Evaluation/Cost Analysis Cadmium Removal EE/CA**

1. All comments generated by EPA's ORC with regard to Site 14 EE/CA above apply to the Site 5 EE/CA as well.
2. Pg 2-5, Section 2.4.1: Comments generated by EPA regarding the human health risk assessment for Site 5 in the OU 2 Remedial Investigation Report apply to the risk assessment for this removal action.
3. Page 3-2, Section 2.1.3: Site Geology and Hydrogeology, page 2-2, indicates that groundwater at IR Site 5 is between 4 and 7 feet below ground surface. Section 2.3, page 2-5, states that the removal area is estimated to be 5 feet in depth, which may include the upper saturated zone of the uppermost aquifer. Thus groundwater in the vicinity of the metals contamination may have been impacted by the releases present at the site. Please revise Section 3.4 to address the potential for cadmium to be present in the groundwater in the proximity of the soil removal area. Consider all ARARs that may apply to groundwater contamination, including any related to disposal of groundwater from dewatering activities.
4. Page 4-7, first paragraph: It is stated that soil samples will not be collected from the excavation floor if groundwater is encountered. Section 2.3, page 2-5, states that the removal area is estimated to be 5 feet in depth, which may include the upper saturated zone of the uppermost aquifer. Table A-1 shows cadmium at depths exceeding 5 feet with concentrations greater than the RAO (Cal-EPA residential PRG of 9 mg/kg). Please explain how these samples were collected since they seem to be below the water table, and also describe how the contamination at these depths will be addressed by this removal action.