



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105
SFD 8-3

N00236.001915
ALAMEDA POINT
SSIC NO. 5090.3

December 12, 2002

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

RE: Draft Feasibility Study Report for Site 14, Alameda Point

Dear Ms. Clark:

EPA has reviewed the above referenced document, prepared by Tetra Tech Inc and submitted by the Navy to the agencies and the public on October 15, 2002. The Draft FS Report summarizes the results of the RI Report and provides a short, focused evaluation of remedial alternatives to address groundwater contamination at Site 14. The report is well written and contains most of the information necessary to make an informed evaluation of the preferred remedial alternative. The screening and the comparison of the proposed alternatives was concise and easily comprehensible.

EPA's has two primary concerns with the document. 1) EPA strongly recommends that the Navy evaluate an additional remedial alternative to the three that are listed in the Draft FS Report. Active hot spot remediation followed by Monitored Natural Attenuation would meet EPA's preference for reduction of toxicity and volume of contaminants through treatment and would likely release the Navy from such an extended time period (i.e 100+ years) of enforcing land use controls. 2) The FS should summarize the results of the risk assessment for soils from the RI Report, including providing risk numbers for total risk, risk due to background inorganics and risk due to site related sources. In addition, the results from the expanded ecological risk assessment that the BCT has agreed will be part of the Draft Final RI Report should be summarized in the Draft Final FS Report. Please include any pertinent federal and State surface water quality criteria as ARARs in evaluating the need for any action based on ecological risk, since groundwater from Site 14 discharges to the Oakland Inner Harbor.

In addition, EPA has a few other specific comments, including some from our Office of Regional Counsel, that are provided in the enclosure. Please call me at (415) 972-3029 if you have any questions.

Sincerely,

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

Anna-Marie Cook
Remedial Project Manager

enclosure

cc: Michael McClelland, SWDiv
Andrew Dick, SWDiv
Marcia Liao, DTSC
Judy Huang, DTSC
Suzette Leith, EPA ORC
Lea Loizos, Arc Ecology
Karla Brasaemle, TechLaw Inc

EPA Comments on the Draft Feasibility Study Report for Site 14, Alameda Point

General Comments:

1. EPA strongly recommends that the Navy evaluate an additional remedial alternative to the three that are listed in the Draft FS Report. Active hot spot remediation followed by Monitored Natural Attenuation would meet EPA's preference for reduction of toxicity and volume of contaminants through treatment and would likely release the Navy from such an extended time period (i.e 100+ years) of enforcing land use controls.
2. The FS should summarize the results of the risk assessment for soils from the RI Report, including providing risk numbers for total risk, risk due to background inorganics and risk due to site related sources. In addition, the results from the expanded ecological risk assessment that the BCT has agreed will be part of the Draft Final RI Report should be summarized in the Draft Final FS Report. Please include any pertinent federal and State surface water quality criteria as ARARs in evaluating the need for any action based on ecological risk since groundwater from Site 14 discharges to the Oakland Inner Harbor.

Specific Comments:

3. Page ES-2, last paragraph: Define LUC since this is the first of many times in the document that the acronym is used.
4. Page ES-3, first paragraph: Please include in the Draft Final FS an alternative that addresses hot spot remediation with and without Monitored Natural Attenuation.
5. Page ES-3, Alternative 2 Key Components: Monitoring for effectiveness and enforceability for a period of 100 years is also a key component, since it impacts cost and implementability.
6. Page 1, third paragraph: Please revise/update this paragraph in the Draft Final FS to include the results of the expanded ecological risk assessment and the risk associated with the ingestion of groundwater.
7. Page 4, second and third paragraphs: Since the RI and the FS are separate documents for these sites, the FS should contain a sufficiently detailed summary of the results and recommendations from the RI to stand alone. The total risk levels associated with soils, the risk attributable to background inorganics and the remaining site risk should be presented in the second paragraph so that the reader can arrive at the same conclusion as that stated in the last sentence of this paragraph. In addition, it would be beneficial to state the removal action clean up number used for the dioxin removal action (ecologically

driven clean up number) because it provides the reader and the public with assurances that the removal action was performed according to a very stringent clean up criterion.

8. Page 5, Section 2.1: For Figures 2-1 through 2-3, it would be helpful to have the concentrations of the VOCs at each sampling point as well as the contours. Having to go back to the RI to find this information, which forms much of the basis of the FS, is time consuming and again makes the FS unable to stand alone. Also, please include a TCE concentration and contour map. It is only partly helpful to read that the maximum concentration of TCE was detected at S14-7-4 and M-101-A-Old.
9. Page 16: What are the costs associated with HRC and ORC compared to ISCO? Will these technologies be retained for hot spot remediation?
10. Page 16 and 17, Monitored Natural Attenuation: EPA agrees that implementation of MNA as a single remediation approach is not very practical from an effectiveness standpoint, but please consider using MNA in conjunction with hot spot remediation. The time for attenuation to MCLs will be much shorter with the active hot spot remediation and its possible to craft the Record of Decision so that all institutional controls will be lifted after the MNA results show the plume to have attenuated to MCLs. This option would release the Navy and the City from having to monitor and verify the effectiveness of LUCs for 100 years.
11. Page 18, Compliance with ARARs: It would be appropriate to state here that this criterion is a threshold criterion that must be met.
12. Page 18, Reduction in Toxicity, Mobility and Volume Through Treatment: Please note that the NCP states that EPA has a preference for any alternative that meets this criterion. This preference is one of the reasons why hot spot remediation would be preferred by EPA over the LUC Alternative which does nothing to reduce the toxicity, mobility of volume of the groundwater contamination.
13. Page 19, last paragraph: This paragraph would be better if placed at the beginning of Section 4.1 so that the reader is aware of how the criteria weigh against each other prior to reading the details of what each criterion involves.
14. Page 24, last paragraph: ISCO (and any other active remediation) will reduce not only the toxicity, but also the volume of the contaminants at Site 14.
15. Page 25, Short-term Effectiveness: Please include a discussion regarding whether metals should be mobilized under the low pH conditions and the impacts on the Oakland Inner Harbor as well as any chemical specific ARARs that would apply.

Comments from EPA's Office of Regional Counsel:

1. LUCs (p. ES-3, 11-13, 21-22)
 - The Navy needs to make clear that one layer in the LUCs is environmental restrictions in the deed from the Navy transferring the property, and that these restrictions would be enforceable by the Navy, as in the Marsh Crust RAP and Navy's 2000 MOA with DTSC. References to deed restrictions in various parts of the FS suggest that this is the Navy's intent, although other references to a deed notice, rather than a deed restriction, make this unclear.
2.
 - It is unclear whether the restriction would be to prohibit wells and extraction of groundwater altogether, or to prohibit extraction of groundwater without a permit (See Sec. 4.3, p. 21). Additionally, it does not seem consistent to say that "wells will be prohibited" but also that the "City and State would enforce well construction standards," which implies that some wells could be constructed.
3.
 - The LUCIP needs to be a primary document under the FFA, as indicated in Paul Yaroschak's Nov. 14, 2002, email. This appears to be the Navy's intent, based on the statement on page 26 that the LUCIP would be reviewed and approved by all FFA signatories. (The FFA has "agree to disagree and resolve later" language regarding whether LUCIPs are primary documents.)
4.
 - The Navy will need to commit that the LUC monitoring reports will be provided to the regulators. This appears to be the Navy's intent, based on cost information which includes preparation of reports. The Navy will also need to commit that it will be responsible for enforcing LUCs (e.g., through the deed restrictions), and that it will notify EPA in writing within 72 hours of discovering any activity which is inconsistent with the LUC objectives or the use restrictions. EPA's preference is that these commitments be in the ROD, with details in the LUCIP.
5.
 - EPA questions whether drive-by inspections are sufficient for these LUCs. It may be that periodic review of deeds should also be performed to ensure that subsequent transfers included the deed restrictions and covenants established as LUCs. Additionally, it is probably necessary to inspect on foot to ensure that no wells are being operated.
6.
 - ARAR s for LUCs (p. 8, Table 2-2, and page A-6). EPA does not agree that California Civil Code 1471 and Health and Safety Code 25202.5 are ARARs, because they are administrative and not substantive requirements, and they establish a discretionary way to implement LUCs. Although EPA does not consider these statutes to be ARARs, EPA supports including a land use covenant with DTSC as part of the tiered LUC approach.

ARARs (p. 5-9, Appendix A, Tables 2-1 and 2-2)

7. - See comment above regarding ARARs for the LUCs.
8. - Page A-7 identifies 22 CCR 66268.7 as an ARAR, but it is not included in the ARARs tables.
9. - The Navy should consider whether the container requirements beginning at 22 CCR 66264.171 could be ARARs for Alternative 3.
10. - The Navy should indicate whether any Bay Area Air Quality Management District requirements are ARARs for Alternative 3.
11. - Page A-2. State ARARs do not have to be State laws, as indicated by the bullets on page A-2. Rather, they can be regulations or other requirements promulgated under State environmental or facility siting laws.