STATE OF CALIFORNIA — ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

EGION 2
00 HEINZ AVE., SUITE 200
BERKELEY, CA 94710-2737

(510) 540-3724

May 19, 1994

Commander
Western Division
Naval Facilities Engineering Command
Attn.: Mr. Gary Munekawa, Engineer in Charge
900 Commodore Drive
San Bruno, California 94066-2402

Dear Mr. Munekawa:

SITE 15 REMOVAL ACTION ENGINEERING EVALUATION/COST ANALYSIS REPORT DRAFT, NAVAL AIR STATION, ALAMEDA

The California Environmental Protection Agency, Department of Toxic Substances Control and Regional Water Quality Control Board have reviewed the draft Engineering Evaluation/Cost Analysis (EE/CA) dated March 14, 1994 for the Removal Action at Site 15. Comments of the DTSC are included in this letter. The RWQCB comments are attached to this letter.

The following summarizes critical points of the DTSC comments:

1. The EE/CA should recommend a single preferred alternative. The California EPA prefers Alternative 4: soil excavation, onsite treatment using solvent extraction and acid washing (not stabilization), and disposal on-site. Additionally, because a single preferred alternative was not selected, the Navy's final selection must be public noticed and a 30 day comment period be provided.

2. Alternative 4 is actually two separate alternatives with two very different actions. Please clarify these alternatives.

3. The costs estimates of Alternative 4 do not include incineration of residual solvents, acids, and untreated waste.

4. The schedule shown on page 2-9 requires updating. The schedule must include time for the Navy to respond to comments and make any necessary changes to the Implementation Work Plan.

The following summarizes critical points of the RWQCB comments:

5. Lead contamination in residual soil at site 15 could pose a future threat to the shallow groundwater at this site. A leachability study, preferably a column test, should be performed as part of the interim removal action to assess this threat.

1057

6. Contaminated soil from site 15 should be reused, if possible, instead of disposed of in a Class I landfill. Therefore, Alternative 4 (soil excavation, on-site treatment using solvent extraction and acid washing, and disposal on-site) is the preferred option for this interim removal action.

7. Because of the communication between the groundwater at site 15 and the Oakland land Inner Harbor, ecological receptors should be considered in this removal action. Please state how protective the lead cleanup goal of 130 mg/kg in soil is to potential ecological receptors.

Specific Comments of the DTSC

1. Section 1.0, Introduction

The Introduction should state clearly the reasons why a removal action is being conducted at this site.

2. Section 2.2 Current Use, page 2-2.

Please add that the area is fenced and has signs warning that this is a hazardous and contaminated area. The exact language of the signs should be included.

3. Section 2.5, Nature, Source, and Extent of Contamination, Page 2-5, first paragraph

Please add paint to the list of substances that have had lead as an additive. The Report states that the source of elevated lead at Site 15 is unknown; this is true. However, a potential source of the lead may be the lead paint applied to buildings at the site. The distribution of lead contamination correlates to the footprints of the buildings at Site 15.

4. Section 2.6, Potential or Actual Impacts on Surrounding Populations, page 2-6

Please state the depth to groundwater at Site 15.

5. Section 2.7, Justification of Removal Action

The justifications listed for carrying out a Removal Action as Site 15 should be more site specific. For example: Shallow groundwater at the site; workers in the area; surface transport of PCB contaminated soil off the site; proximity of the Oakland Inner Harbor.

6. Section 2.8, Removal Action Objectives, Page 2-8

Please further define unacceptable human health risk at the proposed PCB soil cleanup level of 1mg/kg.

7. Section 2.8, Removal Action Objectives, Page 2-8

Please explain how the proposed cleanup goal of 130 mg/kg for lead was calculated using the Cal/EPA, Department of Toxic Substances Control Preliminary Endangerment Assessment Guidance Manual (PEA Manual). The final PEA Manual was published January 1994.

8. Section 2.8.2, Determination of Removal Schedule, Page 2-9

This schedule requires updating. Because this EE/CA contains three preferred alternatives the Navy must provide public notice and a 30 day comment period for the chosen alternative. A public notification and 30 day public comment period of the Action Memorandum will satisfy the requirements of the selected alternative.

Also, a CEQA determination is necessary for this project. A Negative Declaration may be in order. If this is the case the public comment period for the Negative Declaration may correspond with the comment period of the Action Memorandum.

The Schedule must include time for the Navy to respond to comments and make any necessary changes to the Implementation Work Plan.

9. Section 3.3.3, Removal and Disposal Actions, Page 3-4

Material with PCB values which exceed the Soluble Threshold Limit Concentration (STLC) of 5.0 mg/l or the Total Threshold Limit Concentration (TTLC) of 50 mg/kg is considered a hazardous waste in accordance to California Code of Regulations, Title 22, Section 66261.24(a)(2)(B).

10. Section 4.2.2.4, Alternate 4: Excavation, On-Site Solvent Extraction and Stabilization or Acid Washing, and On-Site Disposal, Page 4-12, On-Site Solvent Extraction and Stabilization or Acid Washing, Page 4-14, Costs, and Appendix B, Table B-3.

On page 4-12 the EE/CA states that residual solvents, acids, and untreated wastes would generally contain highly concentrated contaminants that require disposal at an off-site incineration facility. Are the costs associated for incineration included in the estimated capital costs for implementing Alternative 4? Table B-3 does not include incineration as an item. Incineration is included in the costs estimates for Alternative 2 Excavation/On-Site Soil Washing/On-Site Disposal. Including

incineration in the costs could increase the Cost of Alternative 4, $836,600

11. Section 4.3, Comparative Analysis of Interim remedial Action Alternatives, Page 4-19

The EE/CA identifies Alternative 4 as one of the preferred alternatives. However, Alternative 4 is actually two alternatives. One with stabilization and the other with acid-washing. These sub-alternatives are very different. The stabilization alternative would require the on-site disposal of stabilized lead. Stabilization is part of Alternative 3 and is discussed in on page 4-10. There the EE/CA states, "However, backfilling the treated soil into the excavation reduces but does no eliminate the potential for any future releases to groundwater" and "Implementation of this alternative may only provide a moderate degree of protection to both human health and the environmental on a long-term basis".

The EE/CA should make a distinction between these two sub-alternative in this concluding section.

12. Section 4.3, Comparative Analysis of Interim remedial Action Alternatives, Page 4-19

The EE/CA should provide one single recommendation for the removal action.

If you have questions regarding these comments, please contact me at (510) 540-3809. If appropriate a conference call may be arranged to discuss our comments. You may contact the RWQCB, but should do so after contacting DTSC to ensure a coordinated approach for all regulatory comments.

Sincerely,

Thomas P. Lanphar
Project Manager
Base Closure Branch

Enclosure

cc. Mr. James Nusrala
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

Lt. Mike Petouhoff
Base Environmental Coordinator
Alameda Naval Air Station
Building 1, Code 52
Alameda, California 94501

Mr. James Ricks
U.S. Environmental Protection Agency
H-92
75 Hawthorne Street
San Francisco, California 94105

STATE OF CALIFORNIA PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION
101 WEBSTER STREET, SUITE 500
OAKLAND, CA 94612
(510) 286-1255

Prepared By: James Nusrala, Phone No.: (510) 286-0301
Remedial Project Manager

Date: May 12, 1994 File No.: 2199.9285 (JBN)

Subject: Naval Air Station Alameda, Draft Site 15 Interim Removal Action, Engineering Evaluation/Cost Analysis Report (EE/CA), March 14, 1994

General Comments:

1. A leachability study, preferably a column test, should be performed on the soils left in place after this removal action to assess the potential for soils with lead concentrations under 130 parts per million (ppm) to leach into the groundwater. The water used in this leachibility study should have the pH of rain water. Leachibility studies should be run on ten confirmatory soil samples. I agree with the report that the lead contamination at site 15 is restricted to the shallow surface soils, and currently not present in the subsurface or the groundwater. However, the Navy shall still assess the potential risk that any remaining soil may pose to the groundwater at site 15. The groundwater is about 4 feet below ground surface, and site 15 is located only 300 feet from the Oakland Estuary. Therefore, contamination leaching into the shallow groundwater could adversely affect San Francisco Bay.

2. The dates shown on the removal schedule showing when the Navy will submit the Final Action Memorandum and Final Implementation Work Plan shall be at least 60 days after the Draft of these two respective reports are submitted. There is only a 30 day spacing between deliverance of Draft and Final documents. Sixty days is needed to give the public and the agencies at least 30 days to comment on the Action Memorandum and the Implementation Work Plan, and some time for the Navy and the regulators to resolve the comments on the respective reports.

3. Please state in the conclusions of this site 15 EE/CA Report that Remedial Action Alternative 4 (soil excavation, on-site treatment using solvent extraction and stabilization or acid

washing, and disposal on-site) is preferred to Alternative 6 (soil excavation and disposal at a Class I facility with or without treatment). The reason is that Alternative 6 is disposing the soil in a landfill, while Alternative 4 is disposing the soil on site. From a water quality standpoint, and from a landfill management standpoint, disposal at a Class I facility is not the preferred option. In addition, one of EPA's items on its checklist for evaluating the effectiveness of a remedial alternative is Alternatives to land disposal. (Review of Revised Draft of Non-Time-Critical Removal Action Guidance, U.S. Environmental Protection Agency, October 22, 1992, page 49)

Specific Comments:

1. Section 2.6 Potential or Actual Impacts on Surrounding Populations, Ecological receptors should be mentioned in this summary. The second paragraph states that "PCB's and lead could affect the Oakland Inner Harbor given that the groundwater level is shallow and PCB's and lead may affect the groundwater." It follows that this section should mention the ecological receptors that inhabit the Oakland Inner Harbor.

2. Section 2.8 Removal Action Objectives, page 2-7 and 2-8, Please add in this introductory section that confirmatory column test will be run for the remaining soil. See General Comment #1. This is necessary as the report says on the bottom of page 2-7, that one of the objectives of this interim removal action is to reduce the potential impacts of soil contaminants on the groundwater.

3. Section 2.8 Removal Action Objectives, page 2-8, Please clarify whether the default cleanup goal of 130 ppm used by the Department of Toxic Substances Control (DTSC) will require further human health or ecological risk evaluation.

4. Section 2.8.2 Determination of Removal Schedule, The Navy shall submit the Final Action Memorandum no less than 60 days after they submit the Draft Action Memorandum, which the agencies and public will review. Please see General Comment #2.

5. Section 2.8.2 Determination of Removal Schedule, The Navy shall submit the Final Implementation Work Plan no less than 60 days after they submit the Draft Implementation Work Plan, which

the agencies and public will review. Please see General Comment #2.

6. Figure 2-1, Site Map for Site 15, Please draw the location of the elevated berm that exists between Site 15 and the Oakland Inner Harbor, on this site map.

7. Figure 2-3, Surface Sample Locations and Results, Total Lead, Site 15, The concentrations of lead observed in the groundwater at wells M-15-01, M-15-02, and M-15-03 shall be identified on this map. The values are in the very low parts per billion, and are fundamental to the argument that the lead contamination at site 15 is restricted to the shallow, vadose zone soils.

8. Section 4.2.1.1, Effectiveness, Alternatives to land disposal should be an item under the objectives of evaluating the effectiveness of a remedial alternative. See General Comment #3.

9. Section 4.2.2.5, Alternative 5: Excavation and Off-Site Incineration, Cost Summary, Please provide some basis for the cost estimate of $11 million for this remedial alternative. The Navy should estimate how much they would have to pay the incinerator per ton of waste.

10. Section 4.3, Comparative Analysis of Interim Remedial Action Alternatives, page 19, In the last paragraph, please state that Alternative 4 is the preferred option as it is an alternative to disposing of the soil in a landfill. See General Comment #3.

Concurred By: Ron Gervase, Ron Gervason, Section Leader