

5090
Ser 6225EG/L8254-1
11 Sep 1998

From: Commanding Officer, Engineering Field Activity, West, Naval Facilities Engineering Command

Subj: REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) FOR
NAVAL STATION TREASURE ISLAND (NAVSTA TI)

Encl: (1) Response to regulatory and Restoration Advisory Board Comments on Sites 01 and 03,
Draft Final Remedial Investigation Report

1. Enclosure (1) is provided for your use and information.
2. Thank you for your guidance and involvement in this project. For further information, please call me at (650) 244-2560.

Original signed by:

ERNESTO M. GALANG
Remedial Project Manager
By direction

Distribution:

California Department of Toxic Substances Control (Attn: Mr. David Rist)
California Regional Water Quality Control Board (Attn: Mr. David Leland)
California Department of Fish and Game (Attn: Ms. Susan Ellis)
U.S. Environmental Protection Agency, Region IX (Attn: Mr. James Ricks, Jr.)
U.S. Fish & Wildlife Services (Attn: Mr. Steve Schwarzbach)
Bay Area Air Quality Management District (Attn: Mr. Julian Elliot)
Bay Conservation and Development Commission (Attn: Mr. Steve McAdam)
National Oceanic & Atmospheric Administration (Attn: Ms. Laurie Sullivan)
San Francisco Redevelopment Agency (Attn: Ms. Martha Walters)
Tetra Tech EM Inc. (Attn: Mr. Richard Knapp) (w/o encl)

Community RAB Members:

Mr. Joseph Alcedo	Mr. Paul Hehn	Mr. Carlos Penafiel
Mr. James Aldrich	Ms. Alice LaPierre	Mr. James Rodriguez
Mr. John Allman (Alt Co-Chair)	Mr. Clinton Loftman	Mr. Jack Savage
ARC Ecology (Mr. Saul Bloom)	Mr. Daniel McDonald	Ms. Dale Smith
Mr. Nathan Brennan	Mr. Brandon McMillan	Mr. Thomas Thompson
Ms. Peggy Chiang	Ms. Karen Mendelow	Ms. Usha Vedagiri
Ms. Carolyn Froeberg	Mr. Ernest Michelsen	Mr. Harlan Van Wye
Mr. Michael Gross	Ms. Patricia Nelson	Mr. Brad Wong
Mr. Richard Hansen (Co-Chair)	Mr. Henry Ongerth	

Blind copies to:
622A, 6221RP, 6225EG, Admin Record (3 copies)
Writer: E. Galang, 6225EG, X-2560
Chron, RF
File: NS Treasure Island

**RESPONSE TO REGULATORY AND RESTORATION ADVISORY BOARD
COMMENTS ON SITES 01 AND 03
DRAFT FINAL ONSHORE REMEDIAL INVESTIGATION REPORT,
NAVAL STATION TREASURE ISLAND**

This document presents the Navy's responses to comments from the Department of Toxic Substances Control (DTSC) and the Restoration Advisory Board (RAB) on Sites 01 and 03 as discussed in the "Draft Final Onshore Remedial Investigation Report, Naval Station Treasure Island" (NAVSTA TI). The DTSC comments are dated November 21, 1997 (from Calvin Willhite) and December 19, 1997 (from Mary Rose Cassa). Comments from the RAB that specifically address Sites 01 and 03 were received from Paul Hehn (dated November 30, 1997) and Dale Smith (dated December 12, 1997). No comments specifically addressing Sites 01 and 03 were received from the Regional Water Quality Control Board (RWQCB) or the U.S. Environmental Protection Agency (EPA).

RESPONSES TO DTSC COMMENTS

From Calvin Willhite

50. Comment: Pages 5-2, 5-3. Cite the Kodak MSDS in the bibliography. Please clarify the discussion of wind and surface water transport of silver from the X-ray developer; is not this area overlain by Building 257, effectively reducing substantially (perhaps to negligible amounts or levels) any such hypothetical transport?

Response: The material safety data sheet (MSDS) will be cited in the bibliography. The ground floor of Building 257 is elevated approximately 3 feet above the ground surface by concrete footings; therefore, wind and surface water transport are potential transport mechanisms.

51. Comment: Page 5-4. Groundwater metals and ambient water quality criteria: just as mean ambient soil arsenic concentrations at NAVSTA TI are greater than the U.S. EPA Region IX PRG values, so are groundwater zinc and nickel concentrations greater than AWQC. Please add a section to 2.5.1.4 and 2.5.2 to establish ambient/background pH and metals concentrations in NAVSTA TI groundwater.

Response: Ambient concentrations for metals in groundwater at Treasure Island (TI) have not been determined. Conservative groundwater modeling of zinc and nickel for Site 01 was not performed because the concentrations of these metals in combination with the distance of Site 01 from the bay (over 1,500 feet) indicate they would not reach the bay at concentrations greater than their respective ambient water quality criteria (AWQC) values.

52. Comment: Page 5-6. Please indicate whether remaining silver concentrations at Bldg. 257 are greater than, less than or about the same as the applicable U.S. EPA soil PRG for projected land use (e.g., Table 3-3).

Response: The remaining silver concentrations are less than the residential soil PRG for silver of 380 mg/kg. This information will be added to the text.

53. Comment: Pages 6-1, 6-2. Please compare wipe sampling PCB results to ARAR for surfaces (Toxic Substances Control Act 40 CFR 761, <10ug/100cm non-porous surface, should such be relevant in this situation).

Response: EPA Polychlorinated Biphenyl (PCB) Spill Cleanup Policy in 40 CFR Part 761.120 provides criteria for determining action levels. 40 CFR Part 761.125(c) states that "low-contact, indoor, nonimpervious solid surfaces will be cleaned...to 10 µg/100cm²; low contact, [nonrestricted] outdoor surfaces (both impervious and nonimpervious) shall be cleaned to 10 µg/100 cm² (as measured by standard wipe tests)." This information will be added to the text.

54. Comment: Page 6-4. The DTSC project manager is notified to inquire whether two soil/asphalt sampling locations are adequate to characterize a 100 square foot PCB transformer storage area, how those two locations were selected and where various spills had been documented in the past.

Response: The two shallow borings were drilled in the only areas of the site where surface staining was observed on the asphalt. There are no records of previous spills at the site. No source is cited in the preliminary assessment/site inspection (PA/SI) relating to potential contamination at Site 03. However, Section 1.4.2 of the PA/SI states that interviews were conducted for the PA/SI with long-term employees and retirees. This section also states that "information obtained from interviews [was] verified by data from other sources or corroborating interviews. If information for certain sites [was] conflicting or inadequate, the team collect[ed] samples for clarification." The fact that samples were collected for the PA/SI at Site 03 may be an indication of "conflicting or inadequate" information regarding use of PCBs at the site.

From Mary Rose Cassa

- 4. Comment:** Section 6.8, Conclusions and Recommendations (IR Site 03):
- a. The text states, "low concentrations of PCBs were detected in wipe samples collected in 1987 from stained asphalt areas." Please provide the data to support this statement.
 - b. The text states, "Two soil borings were drilled during the remedial investigation...to delineate potential soil contamination beneath the wipe sample locations." The soil sample location map (Figure 6-1) does not show borings collocated with wipe sample. Please clarify the relationship between wipe samples and boring samples.

- Response:**
- a. Table 6-1 of the draft final remedial investigation (RI) report presents information on the wipe samples collected in 1987 by Naval Energy and Environmental Support Activity (NEESA) personnel and described in the PA/SI. Table 6-2 presents the detected Aroclor-1260 concentrations at sample locations 03PASI-2 and 03PASI-5. PCBs were not detected in the remaining six samples.
 - b. This information is incorrect and will be revised. The correct information is contained in Section 6.4, Remedial Investigation Field Activities, where it states the two soil boring locations were selected based on observed staining in the asphalt-paved areas.

From Paul Hehn

Comment: **In the introduction, it mentions the contaminated soil was removed from the site. Where did it go? Please fill me in.**

Response: As indicated in Section 5.5, the contaminated soil was disposed of at Chemical Waste Management's Class I landfill in Kettleman Hills, California.

Comment: **Section 5.2 - The conceptual model looked at the site workers as potential receptors for exposure to contaminated soil. It should be updated to assess all future potential uses of the site. What about residential, groundwater, all other receptors or possible impacts from future development at the site it may be much different than its current use. Need to reevaluate the site and the results of the past work and investigation.**

Response: As presented in Section 5.5, the human health risk assessment conducted for Site 01 conservatively assumed that future land use would be unrestricted, and residences would be constructed at the site. Noncarcinogenic risks to future residents (both children and adults) from exposure to silver was evaluated by calculating a hazard index (HI). For the future residential land-use scenario, an HI of 0.47 was calculated, which is less than the noncancer point of departure of 1. The conceptual model reference in Section 5.2 will be expanded to incorporate this information. As discussed in Section 3.7.3.2, Exposure Assessment, direct contact with groundwater was not evaluated in the human health risk assessment for NAVSTA TI. Historically, groundwater at NAVSTA TI has not been used for any purpose, and no complete exposure pathways exist for direct human contact (ingestion or dermal) with groundwater.

Comment: Section 5.6 - The section and past work concludes that no additional remedial action is necessary to protect human health or the environment. Does this apply no matter what the future use is? What will be discovered below the concrete slab identified here? Are there potential impacts below? Has it even been tested? If not how do we know? May require additional sampling and analysis?

Response: As indicated in the previous comment, the human health risk assessment assumed that future land use would be unrestricted. Samples were not collected below the concrete slab, as it is considered to be an effective barrier to the potential migration of silver in the soil and leaching of silver to groundwater. As evidence of this, five groundwater samples were analyzed from monitoring well 01-MW01 from September 1992 to November 1995. Silver was not detected in any of the groundwater samples, and the pH of groundwater was neutral. Based on these results, additional sampling is not warranted.

Comment: Table 5-5 - Is the concentration of silver left in the soil at this site protective of all future uses of the site, even residential? If not, more work may be needed.

Response: The remaining silver concentrations are less than the residential soil PRG for silver of 380 mg/kg. This information will be added to the text.

Comment: Section 6.1 - Expand on the methods on how PCB can migrate through asphaltic materials to further explain the process.

Response: PCBs have very low solubility in water and strongly sorb to soil, thus they would not be expected to migrate through unbroken asphalt. However, crevices in the asphalt, if present, can serve as a potential migration pathway for PCBs.

From Dale Smith

Comment: Site 1. A boring through the concrete pad should have been performed to determine if the acid and silver had migrated through the pad.

Response: Samples were not collected below the concrete slab as it is considered to be an effective barrier to the potential migration of silver in the soil and leaching of silver to groundwater. As evidence of this, five groundwater samples were analyzed from monitoring well 01-MW01 from September 1992 to November 1995. Silver was not detected in any of the groundwater samples, and the pH of groundwater was neutral.

Comment: Site 3. Only two borings were developed and they were sampled before the groundwater discharge and flow direction had been established. The findings may be inaccurate.

Response: The two borings were drilled to a depth of 2.5 feet and did not encounter groundwater. The purpose of the borings was to delineate potential soil contamination. PCBs were not detected in soil samples collected at the site.