

**DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

Region 4  
245 West Broadway, Suite 350  
Long Beach, CA 90802-4444  
(310) 590-4868



August 31, 1992

N68311.000253  
NAVSTA LONG BEACH  
SSIC #5090.3

Commander Kleven  
Code 400  
Long Beach Naval Shipyard  
Long Beach, California 90822-5099

Lieutenant Commander J. L. Snyder  
Civil Engineer Corps, U.S. Navy  
Long Beach Naval Station  
Long Beach, California 90822-5000

Dear Commanders Kleven and Snyder:

DRAFT RCRA FACILITY INVESTIGATION (RFI) REPORTS (INSTALLATION RESTORATION PROGRAM DRAFT SITE INSPECTION (SI) REPORTS) AND DRAFT PHASE 1 RFI REPORT FOR TANK FARM AREA NEAR BUILDING 303: LONG BEACH NAVAL SHIPYARD AND LONG BEACH NAVAL STATION (EPA ID NO. CA6170023109)

The California Department of Toxic Substances Control (Department) has completed its review of the Draft Site Inspection (SI) Reports dated May 8, 1992 and the Draft Phase 1 RFI Report for the Tank Farm Area near Building 303 dated April 15, 1992, for the Long Beach Naval Shipyard and Long Beach Naval Station. The SI and RFI Reports were submitted in accordance with RCRA Corrective Action requirements specified in the Hazardous Waste Facility Permit issued to the Long Beach Naval Shipyard. The SI and RFI Reports evaluate sampling analysis results obtained from fieldwork conducted in late 1991. The Department's comments on the SI and RFI Reports appear below.

Please attach a cover letter to the Final SI and RFI Reports which includes a list of revisions from the draft editions. The list of revisions must clearly identify all the changes by both section and page numbers. Please submit two copies of the Final SI and RFI Reports to this office.

**GENERAL COMMENTS:**

1. The executive summaries should provide site-by-site overviews of the investigation results, i.e., the significant contaminants that were detected. The overviews should describe the following for significant contaminants: the category of contaminants (e.g., volatile organic compounds, semi-volatile compounds, metals, etc.), the specific constituents of these categories (e.g., trichloroethene), general constituent concentration or range

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of concentration, the contaminated media (e.g., soil, ground water, or sediments), and depth of contamination.

2. The SI Reports indicate that potential ground water contamination is expected to move to the north-northeast. The SI Reports should indicate that while this may be true for the localized ground water gradient, regional ground water flow may be to the north-northwest despite the Dominguez Gap Barrier Project (see Dominguez Gap Barrier Project, County of Los Angeles Department of Public Works and Dominguez Gap Barrier Project, Hydrologic and Operations Report, May Through October 1991, Los Angeles County of Public Works Hydraulic/ Water Conservation Division).
3. Sections 3.3.3.1 (Hydrogeologic Units) of the SI Reports state that the Gage, Gaspur, Lynwood and Silverado Aquifers may merge in the Long Beach Harbor area. Yet Groundwater Pathway and Potential Targets sections of the SI Reports state that the Silverado Aquifer is separated by aquitards from the Gage, Gaspur, and Lynwood Aquifers and that the Gage and Gaspar Aquifers have no reported beneficial uses on the seaward side of the Dominguez Gap Barrier Project. Please correct these discrepancies. Also see the aforementioned Dominguez Gap Barrier Project documents that indicate that inland from the seaward margin the aquifers merge with the deeper zones which sustain essentially all of the pumpage of fresh water in the area.
4. In reporting ground water analysis data, indicate which results are HydroPunch data (e.g., in Tables 6-9).
5. The SI Reports refer to other site investigations conducted at the Long Beach Naval Shipyard/Naval Station (Naval Complex Long Beach). It is essential that regulatory agencies and other SI Report reviewers obtain a comprehensive profile of each site without having to composite the information from numerous investigation results/reports. The sampling/ analysis results from the other investigations should be integrated into the respective site-specific sections of Section 6 (Site Inspection Results) of the SI Reports (note: this integrated information should be noted as being derived from another investigation). The site-specific sections of Section 6 should be revised to include the following information from other investigations: (1) changes in site boundaries (both in descriptions and figures) based on the discovery of other contaminated or potentially contaminated areas, (2) soil

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boring and ground water sampling locations and depths in applicable descriptions and figures, (3) analytical results for both soil and ground water in applicable descriptions, figures (e.g., figures indicating the organic compound concentrations in soil borings and ground water) and tables (e.g., summary of metals and indicator parameters in soil and ground water), and (4) any changes in pathway and potential target evaluations/conclusions.

Moreover, Section 7 (Conclusions and Recommendations) of the SI Reports should address the findings of the other investigations in addition to the SI investigation.

Other investigation results that should be integrated into the SI Reports in accordance with the above comment include:

- (1) the newly identified contaminated area, that based on information submitted by the Navy to the Department, appears to be east of the road that is approximately 600 feet east of the Mole Storage Tank Facility (integrate into Site 3 (Industrial Waste Disposal Pits), including revising the boundaries of Site 3);
  - (2) the Original ServMart Site with total recoverable petroleum hydrocarbon concentrations in soil of up to 32,500 mg/kg and elevated heavy metal concentrations (integrate into Site 4 (Mole Extension Operations), including revising the boundaries of Site 4);
  - (3) the ServMart Alternative Site 1 which was abandoned because of problems associated with underlying contamination, including total recoverable petroleum hydrocarbon concentrations in soil of up to 58,200 ug/kg [or mg/kg?] (integrate into Site 4, including revising the boundaries of Site 4);
  - (4) the newly identified area west of Site 6 (Boat Disposal Location) which is apparently an area designated as the Old Scrap Yard (integrate into Site 6, including revising the boundaries of Site 6); and
  - (5) the previous Lot X report (integrate into Site 12 (Lot X Toxic Sandblast Disposal)).
6. The Department would like to arrange a meeting to review historical aerial photographs of Site 1 (Mole Solid Waste Operations), Site 2 (Chemical Material and Waste Storage

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Area), and Site 3 (Industrial Waste Disposal Pits). We are particularly interested in the reported four waste disposal trenches at Site 1 and waste disposal trenches at Site 3.

SPECIFIC COMMENTS:

1. Site 1: Mole Solid Waste Operations and Site 2: Chemical Material and Waste Storage Area

- a) The concentration units for soil contaminants in the third paragraph of Section 6.2.3.2.1 (Soil) of the Naval Station SI Report should be "mg/kg" instead of "ug/kg".
- b) Section 6.2.5 (Soil Exposure Pathway and Potential Targets) of the Naval Station SI Report should evaluate potential contaminant exposure to receptors using the recreational areas at Sites 1 and 2, including the ball fields and a park. If, as is stated in the SI Report, the amount of cover [soil] placed over the disposal areas is unknown at Sites 1 and 2, the Navy should take appropriate steps to determine if there is a potential threat to human health (e.g., if significant contamination is present in surficial soil layers).
- c) Clearly identify the boundaries of the "burning area" of Site 1 (in the area of MW-2) in a figure of Section 6.2 (Sites 1 and 2) in the Naval Station SI Report.

2. Site 3: Industrial Waste Disposal Pits

Was a soils investigation conducted in the area of the Mole Storage Tank Facility prior to construction? If so, please integrate this information into the Naval Station SI Report in accordance with General Comment #5 above. Did any disposal of wastes occur in the area that is now the Mole Storage Tank Facility?

3. Site 4: Mole Extension Operations

- a) Further investigation should include additional characterization of the Original ServMart and ServMart Alternative Site 1 areas of Site 4 (the latter pending the Department's review of the complete analytical data).

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b) The shaded area designating Site 4 in Figures 4-1, 6-6, and 6-7 do not encompass the two soil borings, B-9 and B-10. Please revise the shaded area in these and all applicable figures to indicate that the boring locations are within Site 4 and to include the Original ServMart area and ServMart Alternative Site 1 as specified in General Comment #5.

4. Site 5: Skeet Range Solid Waste Fill Area

Further investigation should include additional characterization of the extent of the total recoverable petroleum hydrocarbon contamination in ground water (present at 8,000 ug/L).

5. Site 6: Boat Disposal Location

Table 6-9 of the Naval Station SI Report indicates a Highest Measured Value for Aroclor-1260 of 1,110 ug/kg in soil at B-18. Yet Figure 6-12 indicates an Aroclor concentration of 110 ug/kg in soil at B-18. Please make the necessary correction.

6. Sites 7A and 7B: Harbor Sediments Around the Naval Station/Naval Shipyard

The National Oceanic and Atmospheric Administration (NOAA) should be provided with the harbor sediment results and included as a responsible agency.

7. Site 8: Building 210 Trichloroethene (TCE) Disposal Site

The SI Report indicates that neither TCE or its breakdown products were found in soil or ground water at concentrations above detection limits. While the estimated volume of TCE, i.e. approximately 200 gallons, may be difficult to characterize especially considering the elapsed time since disposal between 1974 and 1980, the Department is uncertain concerning the accuracy of the estimated volume. Moreover, the SI Report states that "because of obstructions, sampling locations were moved just south of the fence where disposal is reported to have occurred"; the sampling locations may actually have been upgradient based on the ground water gradient. Collection of additional ground water samples, as recommended in the SI Report, should perhaps be located north of the fence and to the east within a deeper monitoring well, based on contaminant transport and ground water gradient considerations.

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8. Site 10: Lot H Past Operations

Further investigation should include additional attempts to locate the area where past battery acid disposal occurred.

9. Site 11: Hillside East of Drydock 1

Section 6.6.2 (Waste/Source Information) of the SI Report states that during a 1989 site visit "there was no obvious evidence of used sandblast grit on the natural hillside" and that "apparently, over the years, the sandblast grit has eroded from the natural hillside". While the Department does not necessarily agree with these statements, especially since sandblast grit was observed during both the RCRA Facility Assessment (RFA) site visit in 1989 and a recent site visit by the Department, the Department does concur that further investigation/action is warranted. The Department may request a removal action for this site (note: the soluble lead concentration in B-42 exceeds the Soluble Threshold Limit Concentration (STLC) by approximately nine times).

10. Site 12: Lot X Toxic Sandblast Disposal

- a) Was the disposal of sandblast grit limited to the 100 foot by 120 foot area enclosed by a chain link fence or the suspected asphalt-paved parking lot area? There is visible evidence of sandblast grit to the east of Site 12 along the eastern fenceline of the Long Beach Shipyard. Identify suspected sandblast grit disposal areas in applicable figures of Section 6.7 (Site 12) in the Naval Shipyard SI Report.
- b) Additional ground water monitoring wells may be required to determine the vertical and lateral extent of contamination at Site 12; the shallow depth and location of MW-44 may preclude the detection of downward migrating contaminants (DNAPLs) from this site.

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If you have any questions concerning this matter, please  
contact Mr. Craig O'Rourke of my staff at (310) 590-4875.

Sincerely,

  
For Joe J. Zarnoch  
Acting Unit Chief  
Facility Permitting Branch

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