



Terry Tamminen  
Agency Secretary  
Cal/EPA



## Department of Toxic Substances Control

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Arnold  
Schwarzenegger  
Governor

2005  
~~January 27, 2004~~

T.L.M.

Mr. Thomas L. Macchiarella  
Southwest Division Naval Facilities Engineering Command  
Attn: Code 06CA.TM  
1220 Pacific Highway  
San Diego, CA 92132-5190

### **DRAFT OFFSHORE SEDIMENT CORE STUDY WORKPLAN AT OAKLAND INNER HARBOR, PIER AREA, TODD SHIPYARD, AND WESTERN BAYSIDE, ALAMEDA POINT, ALAMEDA, CALIFORNIA**

Dear Mr. Macchiarella:

The Department of Toxic Substances Control (DTSC) has reviewed the above referenced document dated September 29, 2004. Attached are our comments and the comments from Department of Health Services (DHS). Please contact me at 510-540-3767 or [mliao@dtsc.ca.gov](mailto:mliao@dtsc.ca.gov) if you have any questions.

Sincerely,

Marcia Liao  
Remedial Project Manager  
Office of Military Facilities

Enclosure

Mr. Thomas Macchiarella

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January 27, 2004

cc:

Greg Lorton, SWDiv  
Darren Newton, SWDiv  
Mark Ripperda, EPA  
Judy Huang, RWQCB  
Penny Leinwander, DHS  
Charlie Huang, DFG  
Elizabeth Johnson, City of Alameda  
Peter Russell, Russell Resources  
Jean Sweeney, RAB Co-Chair  
Lea Loizos, Arc Ecology

**DTSC COMMENTS**  
**DRAFT OFFSHORE SEDIMENT CORE STUDY WORKPLAN**  
**OAKLAND INNER HARBOR, TODD SHIPWARD, PIER AREA, AND**  
**WESTERN BAYSIDE**  
**ALAMEDA POINT, CALIFORNIA**

**PART I: COMMENTS FROM THE OFFICE OF MILITARY FACILITIES  
(OMF)**

Basis for Data Gap Identification

1. This workplan bases its premise on the conclusions and recommendations of various previous studies but presents little data to collaborate with the conclusions and recommendations it references. Also not presented is the status of agency concurrence on the conclusions and recommendations referenced. This makes it difficult to agree, or not to agree, with the data gaps identified in this workplan.

It is our opinion that the workplan should indicate the agency concurrence status of previous documents, articulate any prior difference with the regulators, account for all potential sources of concern, and plot all useable data from historical studies on maps to facilitate the determination of data gaps.

For the purpose of this review, DTSC will be silent on Navy statements such as:

- Page 4, “In the central portion of IR Site 20 .... Concentrations for a majority of the constituents were consistent with San Francisco Bay ambient levels ... it was concluded that an immediate investigation of these areas was not required”.
- Page 5, “However, no additional bioassay data are recommended at this time since it is believed that confounding factors may have impacted the amphipod testing results...”.

Our silence should not be taken as DTSC concurrence on the data gap determination.

Potential Sources

*Point Source or Storm Sewer Outfalls*

2. The storm sewer layout shown in the historical sampling maps (i.e. Figures 2-4, 2-5a and 2-6) is not consistent with that depicted in Figure 2-3 and is believed to be incorrect. Please review.

3. Please consider to superimpose the footprint of the storm sewers on proposed sampling maps, i.e. Figures 3-4, 3-5, and 3-6. Please make sure the outfalls are clearly marked.

#### *Non-Point Surface Run-off*

4. This workplan does not appear to have addressed the impact of non-point surface runoff. Please clarify.

#### *Groundwater Discharges*

5. DTSC Geological Service Unit (GSU) will review this issue in conjunction with the 2004 Annual groundwater monitoring report. Any comments will be forwarded under a separate cover.

#### *Other Potential On-shore Sources*

6. Aside from surface run-off and groundwater discharges, various on-shore structures and/or historical activities could have also caused impacts. Examples include, but may not be limited to, the release of creosote from wood pilings at the Pier Area, historical open burning at the northwestern tip of IR Site 1, and potential residual lead shots and clay targets at the shoreline/beach area at IR Site 1.

This Workplan does not seem to have adequately addressed potential on-shore sources. Please clarify.

#### Study Boundary

7. Please clarify where the on-shore study ends, where the offshore begins and where the proposed sampling stations are located relative to the on-shore or off-shore study boundary.
8. It appears that all samples proposed in this study will be taken beneath the water and the shoreline and beach area, if exist, will not be investigated. DTSC considers this a data gap and strongly recommends that all shoreline/beach areas be identified, characterized and evaluated for human health risk unless an institutional control (IC) restricting access is to be imposed.

#### Data Quality/Data Usability

9. It appears that data from the previous studies may not be entirely useable. The last paragraph of Page 44, for example, states, "Although the Sediment Screening Survey collected over eighty samples....., only seven .... Were analyzed following EPA methods and considered useable for the RI". Table 3-3, Step 1

seems to suggest that high detection limits for organic constituents are a problem for some historical data.

It is our opinion that all historical data must be evaluated for data usability *before* data gaps can be fully identified. Please confirm if such evaluation has taken place.

10. It is unclear if the new data to be collected at Western Bayside and Seaplane Lagoon Debris Pile will be of RI quality. Please clarify.

DTSC recognizes that Western Bayside is not currently identified as an IR site. But by being adjacent immediately to the 1943-1956 Disposal Area (IR Site 1) and the West Beach Landfill (IR Site 2), it is plausible that Western Bayside may have been adversely impacted. It is advisable that all data to be collected at Western Bayside are of RI quality and are useable toward RI/FS decision making should the need arise.

As to the debris pile, it is noted that Seaplane Lagoon is an IR site (IR Site 17) and the pile is situated within the boundary of the lagoon, it is our opinion that the data to be collected at the debris pile should be up to the RI standard.

11. This workplan has stated at a number of places (e.g. Step 3 of the various DQO tables) that screening level data from previous studies will be used as inputs to the decision. Please explain what these screening level data are. It is our opinion that screening level data are usually of lesser quality and not suited for RI/FS type of decision making. They should be used only judiciously.

#### Data Quality Objectives (Tables 3-2 through 3-5)

##### *Terms*

12. For clarity, please define or specify the following terms or phrases:
  - “Conservative ecological or human health screening thresholds”
  - “Significantly higher”, “significantly lower”, or “significantly different”
  - “Ambient”
  - “Consistent” (this is in reference to statements such as that seen in Table 3-2, Step 5, Rule 2: “If the distribution of contaminants... is consistent...with ambient distributions....”)
  - “Acceptable” (this is in reference to statements such as that seen in Table 3-2, Step 5, Rule 3: “If the .... risk is acceptable based on realistic exposure assumptions, then recommend ...no further action”)
  - “Realistic exposure assumptions”.

### *Subsurface Sediments*

13. It is not entirely clear if studies will be performed on the subsurface sediments. Throughout the text and the data quality objective (DQO) tables, references are often made only to the surface sediments. This is confusing. Please clarify.

### *Pore Water*

14. The workplan makes no mention of pore water investigation. Please explain why such study is not needed.

### *Decision Rules*

15. The decision rule for Oakland Inner Harbor/Todd Shipyard (Table 3-2 Step 5, Rule 3) states, "If the human health or ecological risk... is acceptable based on realistic exposure assumptions, then recommend ... no further action....". It then continues to state, "If risks ... are deemed unacceptable (concentrations are significantly higher than ambient), then potential remedial actions will be (taken)".

The first sentence seems to indicate that human health and ecological risk assessments based on exposures will be performed and the decision will be risk-based. But the second sentence seems to suggest that the decision will depend on the concentration levels and it will not be risk-based. This is confusing. Please explain.

16. Similarly confusing decision rules are also provided for Western Bayside (Table 3-3, Step 5, Rules 3 and 4) and Pier Area 9 (Table 3-4, Step 5, Rule 3). Please explain.
17. For decision rules for the seaplane lagoon debris pile, please explain what the screening level risk assessment will entail (Step 5, Rule 3).

### *Lateral Extent of Contamination*

18. The proposed sampling stations at Oakland Inner Harbor/Todd Shipyard and Western Bayside are lined up linearly suggesting that the sampling design does not consider that the lateral extent of contamination might expand in two dimensions. For completeness, please explain if the Navy plans to conduct step-out sampling to bind the contamination laterally in both dimensions should need arise.
19. Table 3-3, Step 4 states that there is a "zone" (not a line) at Western Bayside which is most likely to be impacted by onshore sources and this zone is situated 75-150 ft *offshore*. But it also indicates that in order to assess the impact from contaminated groundwater, samples will be located adjacent to five groundwater

wells which are, presumably, located *onshore*. This is confusing, at least to readers less familiar with sediment studies. Please explain.

In addition, the proposed sampling map (i.e. Figure 3-5) seems to suggest that the sampling stations are still lined up linearly. It is unclear how such a linear sample pattern is expected to address contamination that is estimated to be in a “zone” that could measure up to 75 ft wide. Please explain.

*Western Bayside (Table 3-3)*

20. DTSC disagree with the statement in Step 1 that there are no known onshore sources at the Western Bayside. It is our opinion that IR Site 1 and IR site 2 contain a number of potential onshore sources and their impacts on Western Bayside must be sufficiently investigated (also see Comment # 6).
21. The statement in Step 4, “No attempt to represent sediment in rip-rap or other hard matrices will be attempted” seems to say that the rip-rap and the beach areas will not be sampled. Given that a number of former Naval operations -- such as open burning and shooting -- took place along the shorelines at IR Site 1 and that future land use at these areas include trails, parks and wildlife refuges, potential human exposure is a warranted concern. It is our opinion that the following issues should be addressed:
  - Define the boundary for the subject sediment study (see Comments #7 and 8).
  - Clarify if there will be any investigation at the former Site 1 open burn area. Historical records have indicated that for a period of five years all wastes generated at the Base were burned at the northwest corner of IR Site 1 and pushed into the Bay. It is probable that parts of Western Bayside could be composed of waste debris and investigation is warranted.
  - Clarify if there will be any investigation at the shoreline/beach area bordering IR Site 1 and IR Site 29. It is our understanding that two skeet range launch platforms were situated within IR Site 1 and there has been no evaluation done to date concerning the residual lead shots and clay targets in the onshore soil. Investigation is warranted.

*Pier Area (Table 3-4)*

22. Please confirm if sediments from the north side of Pier 1 will be sampled. The sampling design described in Table 3-4, Step 7 appears to be consistent with Figure 3-6 which shows no such sampling is proposed. But the text (page 46, first line) states, “Two samples are proposed along the northern side of Pier 1 near Seaplane lagoon breakwall”. Please reconcile the difference.

COPCs (Tables 3-7 and 3-8)

23. Table 3-7: Please explain why volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and total petroleum hydrocarbons (TPHs) are not considered chemicals of potential concerns (COPCs).
24. Please include radionuclides in the analyte group (see the DHS comment attached)

Minor Comments/Inconsistencies

25. Some inconsistencies exist in the previous studies cited. For example, Section 2.1.2 states that over 50 screening samples were collected along Oakland Inner/Todd Shipyard (OIH/TS). Section 3.3.1. indicates that over 80 samples were collected at OIH/TS. None of these sampling stations is, however, shown in Figure 2-4 which happen to have depicted only 11 historical sampling locations. Please reconcile the discrepancies.
26. The COPCs listed in Table 3-8 are not consistent with the text (page 51, Section 3.3.2, first paragraph).

**PART II: COMMENTS FROM THE HUMAN AND ECOLOGICAL RISK DIVISION (HERD)**

Please refer to the attached memorandum prepared by Dr. Jim Polisini of HERD dated December 1, 2004.

**PART III: COMMENTS FROM DEPARTMENT OF HEALTH SERVICES (DHS)**

Please refer to the attached memorandum prepared by Ms. Penny Leinwander of DHS, dated November 30, 2004.



Terry Tamminen  
Agency Secretary  
Cal/EPA



## Department of Toxic Substances Control

1011 N. Grandview Avenue  
Glendale, California 91201



Arnold Schwarzenegger  
Governor

**TO:** Marcia Liao, DTSC Project Manager  
OMF Berkeley Office  
700 Heinz Street, Second Floor  
Berkeley, CA 94704

**FROM:** James M. Polisini, Ph.D.  
Staff Toxicologist, HERD  
1011 North Grandview Avenue  
Glendale, CA 91201

**DATE:** December 1, 2004

**SUBJECT:** NAVAL AIR STATION ALAMEDA (ALAMEDA POINT) DRAFT  
OFFSHORE SEDIMENT CORE STUDY WORK PLAN  
[SITE 201209-18 PCA 18040 H:36]



### BACKGROUND

HERD reviewed the document titled *Draft Offshore Sediment Core Study Work Plan at Oakland Inner Harbor, Pier Area, Todd Shipyard, and Western Bayside, Alameda Point, California*, dated September 29, 2004. This draft Work Plan (WP) Report was prepared by Batelle of Duxbury, Massachusetts, Blasland, Bouck, and Lee, Inc. of Carpinteria, California and Neptune and Company of Los Alamos, New Mexico.

NAS Alameda was an active naval facility from 1940 to 1997. Operations included aircraft, engine, gun and avionics maintenance; fueling activities; and metal plating, stripping and painting. Linked storm water and industrial wastewater lines discharged to the Seaplane Lagoon in the Northwest and Northeast corners, as well as the Oakland Inner Harbor Channel side of NAS Alameda.

This WP proposes collection of sediment at 46 stations in support of the ecological and human health evaluation of the Oakland Inner Harbor (OIH) and Todd Shipyard (TS) along the northern boundary of Naval Air Station (NAS) Alameda, the Western Bayside (WBS) along the western San Francisco Bay boundary and the Pier Area (PA) along the eastern shore inside the breakwater to the south of NAS Alameda.

### **GENERAL COMMENTS**

The U.S. EPA coordinated the regulatory agencies and natural resource trustee discussion to arrive at a unified outline of the subsampling required within each core sample. The coordinated subsampling plan was subsequently transmitted by Ned Black, or the U.S. EPA Region 9, to the Navy. This revised core subsampling outline should be followed during this data gaps study, rather than the core subsampling description contained in this draft document.

The draft work plan makes several mentions of 'ambient' concentrations. The location of the sediment reference locations for 'ambient' or unimpacted locations is clear. However, there are references to terrestrial 'ambient' concentrations. Please identify the study, chemical group and data set proposed to represent terrestrial 'ambient' concentrations at NAS Alameda.

### **SPECIFIC COMMENTS**

1. Sediment investigations of the sediment associated with the single stormwater outfall for the Alameda Annex indicated an undredged 'shelf' approximately 50 feet to 60 feet in width. Please provide the citation for the 246 foot width of undredged 'shelf' sediment (Section 2.1.1, page 3) or correct the text if this statement is incorrect.
2. Please explain in the text whether or not the currently incomplete plans of the Alameda Reuse and Redevelopment Authority (ARRA) to move the existing ferry terminal (Section 2.1.2, page 5 and Section 3.1.1.1, page 17) would result in dredging which would expose sediments currently at depth.
3. Several pages (Section 2.3, pages 12 and 13) are missing from the copy of the WP forwarded for HERD review.
4. Please explain how there can be a down gradient direction in the semi-enclosed Seaplane Lagoon (SPL) such that samples of the construction debris pile could have be collected 'down gradient' (Section 2.4.1, page 14). Down gradient is commonly used to indicate a movement with the flow of a water current or movement in a direction of decreasing chemical concentration. As the chemical concentration of sediments in the construction debris pile is unknown, a down gradient direction cannot be established on chemical concentration.
5. Please include the Department of Toxic Substances (DTSC) or the California EPA (CalEPA) in the list of guidelines to be followed for the Human Health Risk Assessment (HHRA) (Section 3.1.1, page 16). Office of Environmental Health Hazard Assessment (OEHHA) cancer slope factors (CSFs) or Reference Doses (RfDs) must be used to assess human health risk or hazard if more protective of human health than U.S. EPA toxicity values.

6. HERD does not agree that it is possible to collect shellfish without exposure to surface water (Section 3.1.1.1, page 17), but does agree that incidental oral and dermal exposure to sediments and consumption of shellfish would pose exposure pathways of much greater significance in this exposure scenario. Exposure to surface waters should be indicated as a potentially complete, but minor pathway that is not evaluated in the shellfish consumption scenario rather than an incomplete pathway (Figure 3-1, page 19).
7. The Fraction Ingestion (FI) component included in the intake calculation (Section 3.1.1.1, page 18) seems unnecessary as the Ingestion Rate (IR) is listed as a separate IR for sediment ( $IR_{sed}$ ) and IR for shellfish ( $IR_{tissue}$ ). FI would only seem necessary if the ingestion rate used was the total food ingestion rate. Please explain why this factor is required in the intake calculation.
8. HERD considers an incremental cancer risk in excess of  $1 \times 10^{-6}$  as the point of departure at which risk management evaluation of remedial alternatives must take place, not a 'risk range' of  $1 \times 10^{-4}$  to  $1 \times 10^{-6}$  (Section 3.1.1.3, page 21). Please amend the text to indicate that risk management evaluation will occur for sites with incremental cancer risk in excess of  $1 \times 10^{-6}$ .
9. HERD agrees that the proposed comparison of maximum detected sediment concentrations or maximum detection limits to conservative sediment screening concentrations such as the Effects Range-Low (ER-L) are appropriate for a screening-level ERA (Section 3.1.2, page 27). This comment is intended for the DTSC Project Manager and no response is required from the Navy or Navy contractors.
10. HERD does not agree that Hazard Quotients (HQs) for each Contaminant of Potential Ecological Concern (COPECs) should be considered separately for vertebrate species, and not be summed (Section 3.1.3.1, page 29). A Hazard Index (HI) should be developed based on similar organ system or toxic effects and included in the screening-level ERA.
11. Please provide the criterion or criteria which will be used to determine 'if adequate data are present at both the site and ambient stations..' (Section 3.1.2.2, page 30).
12. The effects-based critical body residue concentrations developed to assess hazard to fish in the Pearl Harbor baseline ERA (Section 3.1.1.2, page 31) should not be used in the NAS Alameda offshore baseline ERA unless and until approved by the U.S. EPA Region 9 for use in Region 9. Other sources of sediment screening concentrations exist for some COPECs at NAS Alameda. The National Oceanic and Atmospheric Administration (NOAA) has developed a sediment concentration of polycyclic aromatic hydrocarbons (PAHs) which place estuarine fish populations at risk (Johnson, 2000) at 1000  $\mu\text{g}/\text{kg}$  (ppb) "We recommend the 1000 ppb threshold as a practical value for making management

decisions, which would be protective of estuarine fish populations, but not unworkable from the perspective of sediment remediation and management. Above the threshold effects concentration of 1000 ppb, the proportion of animals affected and the number of adverse effects observed increases." NOAA evaluation criteria and other similar sources of sediment screening concentrations should be utilized for the offshore sediments at NAS Alameda in addition to any Pearl Harbor sediment screening concentrations.

13. The methodology for the baseline ERA proposes to use the tissue concentration from depurated laboratory-exposed *Macoma nasuta* bioassays as the tissue concentration in evaluation of ecological hazard to vertebrate receptors exposed through food web transfers (Section 3.1.2.2, page 31). Comparison of tissue concentrations in depurated *M. nasuta*, non-depurated *M. nasuta* exposed in the laboratory and field collected soft-bodied invertebrate (SBI) and hard-bodied invertebrate (HBI) for Hunters Point Shipyard Parcel F indicated that SBI tissue concentrations exceeded other measures of tissue concentration for some COPECs. Use of depurated *M. nasuta* would underestimate the intake and ecological hazard for these COPECs. This comment is intended for the DTSC Project Manager and no response is required from the Navy or Navy contractors.
14. HERD requests, for review, the specific reference prey tissue concentrations and data set which will be used to assess intake from 'ambient' locations in San Francisco Bay (Section 3.1.1.2, page 32). Please provide the proposed reference tissue concentrations for HERD review prior to calculating the intake for vertebrate receptors. Electronic mail transfer of the proposed tissue concentrations to [jpolisin@dtsc.ca.gov](mailto:jpolisin@dtsc.ca.gov) is adequate.
15. Determination of the ecological significance is a risk assessment task. However, the 'acceptability' of risk (Section 3.1.2.2, page 32, second bulleted item) is a risk management decision based on consideration of the uncertainty in the ERA and the nine risk management balancing criteria. This portion of the second bulleted item should be removed or folded into the current third bulleted item.
16. Please define the benzo(a)pyrene (BaP) soil screening level criteria associated with U.S. EPA Region 9 ecological protection (Section 3.1.3, page 32). HERD is unaware of any such BaP ecological soil criteria proposed by Region 9.
17. The 620 µg/kg benzo(a)pyrene concentration referred to as an initial screen for the construction debris pile (Section 3.1.3, page 32) should be amended to indicate that this concentration is for the summed BaP-equivalent concentration. This concentration is a NAS Alameda risk-management derived criterion associated with a  $1 \times 10^{-5}$  incremental cancer risk in a residential (unrestricted use) scenario.
18. Please explain in the text outlining the refined Conceptual Site Model (CSM) (Section 3.1.2.2, page 29 and page 30) the lack of marine mammal effects, listed

later in the document (tertiary consumers in Figure 3-3), as an Assessment Endpoint (AE) or Measurement Endpoint (ME).

19. Please explain what appears to be a discrepancy in the descriptions contained in the Data Quality Objectives (DQOs) for the OIH/TS (Table 3-2, page 35). In Step 1 the statement is made that 'few areas of slightly elevated chemistry along the western edge of IR Site 20.'. Step 4 indicates that '...the western part of IR Site 20 are areas where historical measurements indicated relatively high sediment concentrations.'
20. The number and depth of the subsamples to be collected from each core sample have not yet to be completely finalized in the EPA-coordinated discussions among regulatory agencies and resource trustees. Once finalized the description of core subsamples should be incorporated into the DQOs outlined in the work plan (Table 3-2 through Table 3-5 and Section 3.3.1, page 47).
21. Lack of samples from the sediment in the rip-rap matrix (Table 3-3, page 37, Step 4) at the WBS is a data gap. It would require a significantly elevated concentration and a transport mechanism to move this sediment offshore for this data gap to present a significant ecological hazard given the amount of the sediment contained in the rip-rap matrix compared to the amount of sediment offshore. This comment is intended for the DTSC Project Manager and no response is required from the Navy or Navy contractors.
22. Screening of the potential ecological hazard associated with material in the Debris Pile (Table 3-5, page 43) requires comparison to terrestrial screening criteria for material above Mean Sea Level (MSL) and comparison to sediment criteria for material below MSL. More detailed assessment of ecological hazard to intertidal receptors may also be necessary after screening procedures.
23. Please identify the values proposed as 'ambient' for comparison to Debris Pile concentrations (Table 3-5, page 43, Step 5).
24. Photographs should be made of each core after extrusion from the vibracore corer (Section 3.3.1, page 47), prior to capping.
25. Contaminants detected in the WBS perimeter groundwater monitoring wells since 1996, which include volatile organic compounds (VOCs) (Section 3.3.1, page 45), should be included in the list of COPECs (Table 3-7, page 50) for the WBS cores.
26. The 'main objective' (Section 3.3.2, page 51) of collecting samples in the Debris Pile is assessing the impact on sediment quality in the Seaplane Lagoon. Given that objective, please explain the purpose of comparison to strictly terrestrial ecological screening criteria listed earlier (i.e., Table 3-5).

Marcia Liao  
December 1, 2004  
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27. Material removed from the test pits into the Debris Pile should be stockpiled covered and fenced until return of the chemical testing to determine the final disposition of the material (Section 3.3.2, page 51).

## **CONCLUSIONS**

HERD has several requirements for this work plan which must be completed or discussed prior to implementation of the sampling plan outlined. The principal item is the modified description of the coring procedure which was agreed upon among regulatory agencies and natural resource trustees and forwarded in draft form to the Navy by the U.S. EPA Region 9. Once finalized, the modified agency/trustee description of subsampling should be incorporated into this work plan.

## **REFERENCES**

Johnson, Lyndal. 2000. An analysis in support of sediment quality thresholds for polycyclic aromatic hydrocarbons (PAHs) to protect estuarine fish. National Oceanic and Atmospheric Administration, Environmental Conservation Division, Northwest Fisheries Science Center (NOAA/NMFS), 2725 Montlake Blvd E., Seattle, WA 98112.

HERD Internal Review: Michael Anderson, Ph.D.  
Staff Toxicologist

cc: Ned Black, Ph.D., BTAG Member  
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Laurie Sullivan, M.S., BTAG Member  
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Judy Huang

Marcia Liao  
December 1, 2004  
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San Francisco Regional Water Quality Control Board  
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# Memorandum

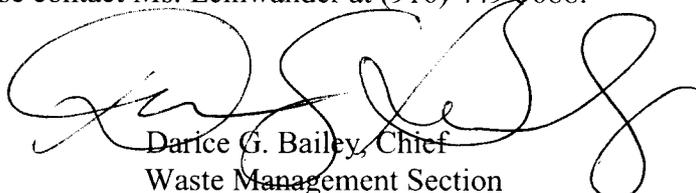
Date: November 30, 2004

To: Marcia Laio  
Office of Military Facilities  
Department of Toxic Substances Control (DTSC), Region 2  
700 Heinz Avenue, Suite 200  
Berkeley, California 94710

From: Environmental Management Branch  
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Sacramento, California 95899-7413  
(916) 449-5661

Subject: Review of the Draft Offshore Sediment core Study Work Plan at Oakland Inner Harbor, Pier Area, Todd Shipyard, and Western Bayside, Alameda Point, California, dated September 29, 2004

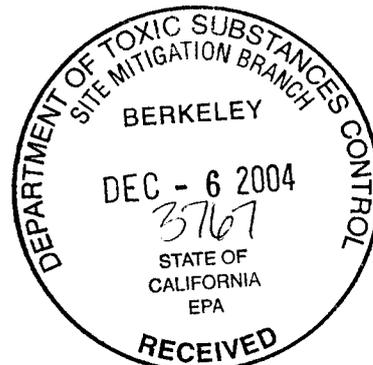
Attached are the Department of Health Services (DHS) comments on the subeject report. This review was performed by Ms. Penny Leinwander, Associate Health Physicist, in support of the Interagency Agreement between DTSC and DHS. If you have any questions concerning this review, or if you need additional information, please contact Ms. Leinwander at (916) 449-5688.

  
Darice G. Bailey, Chief  
Waste Management Section

Attachment

cc: Ms. Claudia Domingo  
Dept. of the Navy  
Naval Facilities Engineering Command  
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San Diego, CA 92132-5190

Mr. Matt Slack  
Officer In Charge (Attn Matthew Slack)  
NAVSEADET RASO  
Building 1971 NWS Yorktown  
Yorktown VA 23691-0260



## Department of Health Services Review

Activity: Review of the Draft Offshore Sediment core Study Work Plan at Oakland Inner Harbor, Pier Area, Todd Shipyard, and Western Bayside, Alameda Point, California, dated September 29, 2004

November 30, 2004

Page 1 of 1

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### **General Comment:**

1. This work plan does not address radioactive materials as a potential contaminant of concern. Radiological contamination has been identified in IR Sites 1 and 2, which border portions of the Western Bayside and the Oakland Inner Harbor. DHS recommends that the Navy evaluate what would be the appropriate sampling methods and strategies for determining the presence of discrete sources of radium and radium concentrations in sediment.