STATE OF CALIFORNIA - ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, Governor

DEPARTMENT OF TOXIC SUBSTANCES CONTROL
700 HEINZ AVE., SUITE 200
BERKELEY, CA 94710
(415) 540-3724

August 29, 1991

Commanding Officer
Attn: Mr. Eddie Sarmiento
Naval Station Treasure Island
Building 1 (Code 84)
San Francisco, California 94130-5000

Dear Mr. Sarmiento:

DTSC COMMENTS ON THE DRAFT FINAL ENVIRONMENTAL SAMPLING AND ANALYSIS PLAN (ESAP), ESAP QUALITY ASSURANCE PROJECT PLAN AND ESAP HEALTH AND SAFETY PLAN FOR HUNTERS POINT ANNEX

On July 31, 1991, the Department of Toxic Substances Control (DTSC) received a copy of the Draft Final Environmental Sampling and Analysis Plan (ESAP), ESAP Quality Assurance Project Plan and ESAP Health and Safety Plan for Naval Station, Treasure Island, Hunters Point Annex, for review and comment.

The DTSC has reviewed these submittals and the resulting comments are enclosed.

If you have any questions regarding this letter, please contact me at (415) 540-3816.

Sincerely,

William L. Brown
Hazardous Materials Specialist
Site Mitigation Branch
Region 2

Enclosures

cc: See next page

cc: Ms. Louise T. Lew (Code 1811)
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-0720

Ms. Roberta Blank (H-7-5)
Remediation Project Manager
U.S. EPA, Region IX
75 Hawthorne Street
San Francisco, California 94105

Mr. Tom Gandesbery
Regional Water Quality Control Board
2101 Webster Street, Suite 500
Oakland, California 94612

DTSC COMMENTS ON THE DRAFT FINAL ESAP HEALTH AND SAFETY PLAN

All of our comments on the draft ESAP Health and Safety Plan were adequately addressed, except for comment #1.

1. The medical surveillance program summary provided in section 3.3, on page 11, does not provide enough detail for us to assess the adequacy of the program. Please outline the elements of the medical program so that we know what tests are performed, and how they are performed (e.g. how are employees tested for their ability to wear personal protective equipment?).

State of California

Department of Toxic Substances Control

Memorandum

To : William Brown
Region 2, Site Mitigation
2151 Berkeley Way, Annex 9
Berkeley, California 94704

Date : August 23, 1991

From : Technical Services Branch
400 P Street, Fourth Floor
Mail: P.O. Box 806
Sacramento, California 95812-0806
ATSS 8-485-7410

Subject : Review of Environmental Sampling and Analysis Plan (ESAP) for Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California

Background

We have reviewed the document titled Environmental Sampling and Analysis Plan for Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California, dated July 31, 1991 in response to your written request. The Environmental Sampling and Analysis Plan was prepared by Aqua Terra Technologies.

Hunters Point Annex (HPA) covers 965 acres and is located in southeastern San Francisco on a peninsula extending into San Francisco Bay. Ship repair and berthing facilities are located on the northern and eastern boundary of HPA. Approximately 70 to 80 percent of HPA is level lowland area created by placing fill along the bay margin.

This Environmental Sampling and Analysis (ESAP) plan is intended to provide data to address specific environmental concerns at the Naval Station, Treasure Island, Hunters Point Annex (HPA), in San Francisco. Specific environmental effects addressed by the ESAP are:

Potential environmental effects associated with the release of sediments;
Sediment toxicity to organisms in contact with the sediments;
Toxicity of storm water runoff from HPA to San Francisco Bay, and;
Potential accumulation of contaminants in surface waters of San Francisco Bay.

This is a review of the contractor's response to regulatory agency comments on a previous version of the ESAP. Comments are contingent on the judgement of Region 2 Department of Toxic Substances Control staff that the proposed analytical procedures accurately measure the contamination at the site.

Response to Comments

General Comments

Comment #1: We are pleased that a preliminary wetland identification has been completed by Navy biologists and a formal wetland delineation will be performed at a later date as part of a complete ecological risk assessment.

Comment #2: The benthic enumerations suggested as part of the sediment sampling were intended to be a rapid, fairly simple determination of the biological similarity or differences among the HPA sites and the control and reference stations. We are willing to accept the stipulation that such studies will be undertaken if contaminants are present in the sediments at concentrations which may impact benthic organisms.

Comment #3: The first sentence of Section 11.2.1.3 of the EPA/COE Greenbook states that: "The test system described by Swartz et al. (1985) for the phoxocephalid amphipod Rhepoxynius abronius is recommended for bioassays with this and other amphipod species. Some amphipods do not survive well under static conditions and, therefore, should be tested using only a continuous-flow or static-renewal test design". Our interpretation of this statement is that the static bioassay test system of Swartz et al. is the preferred method and that static-renewal methods should be used only when the static bioassay method of Swartz et al. is not possible.

Comment #4: We appreciate release of the summary results of the storm water investigation. Storm water runoff tests proposed in the ESAP appear adequate to evaluate the suite of organic and inorganic contaminants detailed in the summary.

Specific Comments

Comment #1: We accept the description of the use of Total Threshold Limit Concentrations (TTLC) as presentation of previous studies and not indicative of the use of TTLCs to evaluate ecological risk.

Comment #2: We accept the description of the use of the Environmental Impact Statement (EIS) as presentation of previous studies as background information.

Comment #6: A one-hour reburial phase is included in the Swartz et al. (1985) amphipod bioassay procedure in addition to the ASTM protocol (E1367) cited in our original comment. We are willing to forgo the reburial test in view of the investigative nature of the studies proposed at HPA, if static amphipod bioassays are performed.

Comment #10: We would feel more confident of test reliability if some standard on allowable mortality during holding were stated. That standard would not necessarily be the ASTM standard of 5 percent in the preceding 48 hours, but should be stated.

Comment #13: Press sieving is the method detailed in the EPA/COE Greenbook. If agreement was achieved in the January 10, 1991 TRC meeting to utilize these protocols then they should be followed as closely as possible. We would agree to wet sieving in the event press sieving is unsuccessful or produces deleterious effects on the amphipods.
Comment #18a: Press-sieving is not the alternate, but the preferred sieving method according to the EPA/COE Greenbook (see #13 above).

Comment #18b: We interpret the EPA/COE Greenbook statement to stipulate static amphipod tests unless organisms cannot tolerate static test conditions. Any toxic effects due to elevated metabolite levels in a static test will be accounted for by similar effects in the control and reference chambers.

Comment #18c: No response required.

Comment #18d: We view the reburial test at the end of an amphipod bioassay as an integral part of the test, but will defer to the January 10, 1991 TRC decision.

Comment #18e: Use of the EPA/COE Greenbook test container cleaning procedure does not address potential cross-contamination by organic contaminants, but we will defer to the January 10, 1991 TRC decision.

Comment #18f: Section 11.2.2 of the EPA/COE Greenbook clearly indicates that "Reference-toxicant tests are performed in the absence of sediment, even for animals to be used in benthic bioassays." The response to comment which introduces the interferences associated with reference toxicant tests in the presence of sediments is not applicable. If agreement was achieved in the January 10, 1991 TRC meeting to utilize these protocols then they should be followed as closely as possible.

Comment #20: We appreciate the more detailed restatement of the statistical testing procedure as well as the implied null hypothesis that :There is no significant difference in exposure chamber mortality between the Hunters Point Annex stations and the control station.

Comment #22: We believe reference-toxicant testing necessary and required by the EPA/COE Greenbook protocols (Section 11.2.2). These reference toxicant tests are described to eliminate the confounding influence of sediment (See 18f above).

Comment #23: The correction of the sediment-water ratio is noted.

Comment #24: Inclusion of the t-test reference and correction of the description of testing is noted.

Comment #25: The change in detection limit for PCB, DDT, DDE, DDD and antimony should make the sediment chemical concentration data more easily interpretable. The Department of Fish and Game Trace Organics Laboratory at the University of California Santa Cruz believes they are able to reach the 0.02 ppb quantitation limit in sediments. The Director, Dr. Michael Mart, can be reached at (408) 459-3357.

Comment #26: Revision of the listing of quantitation limits (now in Table 5) is noted as more easily interpreted.

Comment #27: We would prefer to duplicate exactly the mussel transplant procedure of the California State Mussel Watch (CSMW), but will defer to the transplant procedure outlined in the ESAP in view of the investigatory nature of the study at HPA.

Comment #29: This appears to be mainly a semantic difference between the CSMW Program and the mussel transplant study planned at HPA. The CSMW Program does, in fact, position samples in areas where contamination above normal background is expected.

Comment #30: See comment #27.

Comment #31: The description of the bay water and storm water sampling locations clarifies the sampling strategy developed to address the potential for dilution prior to sampling.

Comment #33: Monitoring effects in algal bioassays by cell count instead of biomass, chlorophyll content or absorbance is noted.

Conclusions

If agreement was achieved in the January 10, 1991 TRC meeting to utilize the EPA/COE Greenbook, these protocols should be followed as closely as possible. Specifically:

1. Pressure-sieving should be used instead of wet sieving;
2. Amphipod sediment bioassays should be static bioassays;
3. Reference-toxicant bioassays should be performed.

Once the comments detailed above are addressed, the studies outlined in this Environmental Sampling and Analysis Plan should provide a preliminary survey of the potential impacts associated with HPA to the soft-bottom benthic species and some near-shore species in San Francisco Bay.

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Reviewed by: Michael J. Wade, Ph.D., DABT
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cc: (See next page.)

State of California — Department of Toxic Substances Control

Memorandum

To : William Brown
Site Mitigation, Region 2
2151 Berkeley Way, Annex 9
Berkeley, California 94704

Date : August 23, 1991

From : Technical Services Branch
400 P Street, Fourth Floor
Mail: P.O. Box 806
Sacramento, California 95812-0806
ATSS 8-485-7410

Subject : Review of Quality Assurance Project Plan (QAPjP) for Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California

Background

We have reviewed the document titled Quality Assurance Project Plan for Environmental Sampling and Analysis Plan for Naval Station, Treasure Island, Hunters Point Annex, San Francisco, California, dated July 31, 1991 in response to your written request. The Quality Assurance Project Plan was prepared by Aqua Terra Technologies.

Hunters Point Annex (HPA) covers 965 acres and is located in southeastern San Francisco on a peninsula extending into San Francisco Bay. Ship repair and berthing facilities are located on the northern and eastern boundary of HPA. Approximately 70 to 80 percent of HPA is level lowland area created by placing fill along the bay margin.

This Quality Assurance Project Plan (QAPjP) identifies the quality assurance/quality control (QA/QC) protocols, organization, objectives, functional activities and policy for sample collection, sample analysis and data evaluation for the Environmental Sampling and Analysis Plan (ESAP) for Hunters Point Annex, in San Francisco.

This review is of the contractor's response to regulatory agency comments on a previous version of the QAPjP. Comments are contingent on the judgement of Region 2 Department of Toxic Substances Control staff that the proposed analytical procedures accurately measure the contamination at the site.

Response to Comments

General Comments

Comment #1: The change in detection limit for PCB, DDT, DDE, DDD and antimony should make the sediment chemical concentration data more easily interpretable. The Department of Fish and Game Trace Organics Laboratory at the University of California

Santa Cruz believes they are able to reach the 0.02 ppb quantitation limit for Endrin in sediments. The Director, Dr. Michael Martin, can be reached at (408) 459-3357.

Specific Comments

Comment #8: Use of the EPA/COE Greenbook procedure for decontamination of sampling equipment between sampling stations is accepted.

Comment #11: The change in detection limit for PCB, DDT, DDE, DDD and antimony should make the sediment chemical concentration data more easily interpretable. The Department of Fish and Game Trace Organics Laboratory at the University of California Santa Cruz believes they are able to reach the 0.02 ppb quantitation limit in sediments. The Director, Dr. Michael Martin, can be reached at (408) 459-3357.

Comment #12: Inclusion of all of the analyte detection limits for mussel tissue in Table 4 of the QAPjP is noted.

Conclusions

With the exception of the detection limit for endrin in sediment, all comments made on the previous version of the QAPjP have been adequately addressed with changes in either the ESAP or the QAPjP itself. This version of the QAPjP appears to accurately address the QA/QC concerns associated with the planned environmental sampling at Hunters Point Annex.

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