STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY

DEPARTMENT OF HEALTH SERVICES
TOXIC SUBSTANCES CONTROL DIVISION
2151 BERKELEY WAY, ANNEX 7
BERKELEY, CA 94704

May 4, 1989

Commanding Officer
Naval Station Treasure Island
Building 1 (Code 70)
San Francisco, CA 94130-5000
ATTN: Mr. Kam Tung

FINAL APPROVAL OF PUBLIC HEALTH AND ENVIRONMENTAL EVALUATION PLAN, HUNTERS POINT

Dear Mr. Tung:

We have reviewed the revised Public Health and Environmental Evaluation Plan (PHEEP) for Hunters Point Annex, dated March 1989. Based on our review and discussions with you and your consultants, we hereby approve the PHEEP.

Attachment B in the PHEEP contains copies of the Department's comments on previous drafts of the PHEEP. We have voiced concerns in these comments regarding what we perceive as information gaps in the work plan. However, you have clarified to us that this document only presents preliminary information on the health and environmental risks associated with this site, and that a more detailed Public Health and Environmental Evaluation (PHEE) will be prepared as the Remedial Investigation progresses. To this end, we have prepared comments addressing the deficiencies in the PHEEP that should be corrected in the final PHEE. These comments are enclosed. Please insert a copy of these comments in Attachment B of the PHEEP.

Thank you for your cooperation in following our suggestions. If you have any further questions, please contact Chein Kao of my staff at (415) 540-2593.

Sincerely,

for Ric Notini, Chief
Site Mitigation Unit
Region 2
Toxic Substances Control Division

Enclosure

cc: attached list

RN:wo

DIN 60

MAILING LIST - HUNTERS POINT

	Telephone
Ms. Louise Lew, Head West Central Environment Section Department of the Navy Western Division Naval Facilities Engineering Command P.O. Box 727 San Bruno, CA 94066-0720	(415) 877-7502
Mr. Nicholas Morgan Remedial Project Manager U.S. Environmental Protection Agency 215 Fremont Street (T-4-3) San Francisco, CA 94105	(415) 974-8603
Mr. Lester Feldman California Regional Water Quality Control Board 1111 Jackson Street, Room 6040 Oakland, CA 94607	(415) 464-1332
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Rev: November 1988

Review of Revised Public Health And
Environmental Evaluation Plan, Dated March 1989

We have reviewed the revised Public Health and Environmental Evaluation Plan (PHEEP) for Hunter's Point, dated March 1989. Our comments are as follows:

General Comments

We are pleased to note that many of our previous comments have been incorporated into the revised document. Others have not been incorporated. However, the Responsible Party (RP) has responded that this document is a preliminary Public Health and Environmental Evaluation (PHEE) and the site has not been fully characterized and data was not available to carry out a PHEE in complete accordance with Environmental Protection Agency (EPA) guidelines. They did indicate that the full PHEE prepared after completion of the Remedial Investigation (RI) will conform to EPA guidelines. We look forward to completion of the RI, and review of the full PHEE which will incorporate the items discussed in our earlier memos.

Specific Comments

Section I, page 1-6. The Toxicology and Risk Assessment Group (TRAG) would like to review the supplemental Environmental Sampling plan when it is prepared.

In the next to last paragraph, the preparation of an overall assessment is discussed. This overall assessment should include those elements included on pages 1 and 2 of our memo of August 26, 1988 where we discussed evaluation of the site as a whole.

Section 3.0

In our previous comments, we have stressed the importance of selecting a sufficient number of indicator chemical to accurately assess the risk posed by chemicals at the site. The RP has in part responded by stating that when the RI has been completed, and the site has been more fully characterized then a more complete set of indicator chemicals will be chosen. Our comments in an previous memo of August 28, 1988 should be referred to when the final PHEE is prepared.

Appendix A, page ES-3. The document describes five-year exposure to chemicals on site. As noted in our earlier memo, if the base is converted to other uses, such as housing, then a five-year exposure period may be too short. Additionally civilian workers such as security guards, or maintenance personnel may be employed on site longer than five years. If at the time the final PHEE is written the future uses of the base are still unclear, than we

would strongly suggest both a 5-year and 70-year exposure scenarios be used to estimate potential risk.

Page ES-3 continued. Please note that ingestion of soil is a major component of the soil contact exposure pathway.

Page 3-7, first paragraph, fifth sentence: Please note that the methylated arsenic compounds are volatile.

Page 3-16, second paragraph: In the full PHEE, please note that a higher percentage of ingested lead (figures of up to 50 percent have been cited) is absorbed in children, the most sensitive receptor, and the unborn fetus may even be more sensitive.

Page 3-16, last paragraph: Please note the phrase "...slight effects on connective tissue excitability...." appears to be in error.

Page 3-17: In the full PHEE, please mention the latest conclusions reached by ATSDR on blood lead levels in children.

Page 3-18: In the full PHEE, please include recent findings on nickel toxicity to pulmonary macrophages and alveolar macrophages as a result of chronic inhalation in rats, we can supply literature citations if necessary.

Page 3-36: For the full PHEE, please include the latest findings on the carcinogenicity of dichlorobenzenes. The National Toxicology Program could be consultated for details or the Toxicology and Risk Assessment Group at Toxic Substances Control Division Headquarters can be contacted.

Page 3-51: For the full PHEE, please include recent findings on chromium with regard to immunotoxicity and recent findings on zinc with regard to interactions with copper.

Page 4-14: As we have stated in a previous memo, our impression from our site visit to the industrial landfill was that fugitive inhalation is not unlikely. The site was not heavily vegetated as indicated in the PPHEE.

Page 4-21. Please note in the full PHEE that chromium and arsenic are potential skin irritants from dermal exposure via direct contact or fugitive dust emissions.

Page 4-22: Please note that there are reports of toxicity in family members who wash clothes of occupationally exposed workers.

Page 4-28. Currently, we have no reliable estimate of dilution of chemicals from Hunter's Point once they enter the Bay. We would expect materials entering the Bay to be diluted over time and with increasing distance from the entry point. Toxicity or

bioconcentration could occur near the entry point. Thus, the 1/1,000 dilution factor seems to be arbitrary, and should not be used to draw any conclusions. Once the RI is completed, it may be possible to speculate regarding effects of releases from the site on the ecology of the Bay.

Page 4-31: In the full PHEE, please include California State Applied Action Levels for chemicals for which promulgated ARARS are not available. These may be especially useful for air levels for which few promulgated standards are available.

Page 4.33. Please note TLV's are <u>not</u> suitable for non-occupationally exposed populations. Persons such as tenants may be on site longer than 40 hours, may not be a healthy as workers and are exposed <u>involuntarily</u>. Thus, TLV's are not appropriate as ARARS even though exposure may be approximately 40 hours per week.

Page 5.8: Nearby off-site residents and workers should be included as potential receptors when the full PHEE is prepared.

Analysis prepared by:

Michael J. Wade

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Analysis reviewed by:

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