California Regional Water Quality Control Board
San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

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Gray Davis
Governor

N00217.000412
HUNTERS POINT
SSIC NO. 5090.3

Mr. Richard Mach
Department of the Navy
Naval Facilities Engineering Command
Southwest Division
1220 Pacific Highway
San Diego, Ca 92132-5190

March 5, 2001
File 2169.6032 (LBJ)

Subject: Parcel F Human Health Evaluation Work Plan, Parcel F, Hunters Point Shipyard, San Francisco, CA

Dear Mr. Mach:

Regional Board staff have reviewed the document titled *Hunters Point Shipyard (Parcel F) Human Health Evaluation Work Plan, Parcel F, San Francisco Bay, California* dated January 12, 2001. While we concede that this effort to address the Navy's low-volume footprint (LVF) is appropriate as a triage measure, we reiterate our position that the proposed work does not allow for adequate protection of beneficial uses or allow Regional Board staff to find that the requirements of the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) have been met.

The numeric and narrative requirements contained in the San Francisco Bay Basin Water Quality Control Plan are applicable, relevant and appropriate requirements (ARARs) for surface water, pore water, and groundwater at this site. These ARARs have not been given adequate consideration in this or previous Parcel F documents. The Navy's unwillingness to consider the Regional Board's requirements is further substantiated by the fact that Regional Board staff were excluded from the April 3, 2000 and July 11, 2000 conference calls. Exclusion of the Regional Board, the agency that is primarily responsible for protecting the beneficial uses of San Francisco Bay, when discussing such matters is inexcusable and demonstrates bad faith on the part of all parties involved.

Our other concerns with the document include:

- We believe that limiting the human health risk assessment activities to the low-volume footprint is inconsistent with the requirements of CERCLA, which requires risk assessment boundaries to extend to the limits of pollutant migration.
- The fish consumption rates are not supported by published, peer-reviewed literature. Based on our calculations, the Navy's lower limit approximates slightly more than one fish meal per year.
- The calculated risk-based screening concentrations appear to be incorrect, however, since slope factors were not provided, we could not verify the Navy's calculations.
- We maintain that 28-day Macoma exposures will not reach steady-state and will therefore underestimate the actual risk from shellfish consumption.

- The proposed sampling effort appears to be designed to fail because it is unlikely that sufficient tissue samples can be collected for one species at all locations. We request that sampling efforts be focused collection of shiner surfperch. We also request that all fish samples from all locations be analyzed, including fish larger than 30 cm. We are also concerned about the limited ability to discriminate differences in populations based on sample size. We recommend that where possible, additional samples should be collected and/or individual fish should be analyzed.
- While we appreciate the Navy's desire to present their opinions in their position papers, we consider these to be the discharger's opinions only. Absent peer-reviewed publication, these documents do not provide a reliable basis for the decision making process.

Because this approach does not allow us to meet our regulatory mandate, staff are recommending that the Regional Board seek resource trustee status and seek natural resource damages from the Navy via implementation of the Total Maximum Daily Load/Waste Load Allocation process. As guidance to the Navy, we recommend that the scope of this effort be evaluated to determine if it will provide a suitable baseline against which remedial effectiveness can be measured in the future. We anticipate that this will be the first of several fish tissue monitoring events for Hunters Point.

The proposed approach does not allow staff to adhere to state law and protect beneficial uses. Unless dramatic revisions are made we will not be a party to approval of this document. However, because we believe that significant water quality benefits could result from remediation of the LVF, we are offering our specific comments in an effort to help the Navy improve the work plan. These comments are presented in the attached memo. Therefore, provided that our concerns are adequately addressed, we will not dispute the document.

Should you have any questions on this matter, please contact me at (510)-622-2400.

Sincerely,

Brad Job, P.E.
Water Resources Control Engineer

attach: Naomi Feger Memo dated February 28, 2001
cc:
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TO: Brad Job
FROM: Naomi Feger
DATE: February 28, 2001
SUBJECT: Hunter's Point Shipyard – Human Health Evaluation Work Plan review

I reviewed the Navy's proposal for evaluating the potential human health risks due to offshore-contaminated sediments in areas of the low-volume footprint at Hunter's Point Shipyard. Consumption of fish and shellfish are driving the potential human health risks at the site. The Navy's study has two objectives. One objective is to refine the low-volume contaminated sediment footprint based on evaluating human health risk due to consumption of contaminated shellfish, using data from a 28-day Macoma nasuta bioaccumulation test and the second is to compare fish tissue contaminant concentrations at HPS to those collected at other sites for use in risk communication.

I am concerned that the focus of the Human Health Evaluation is on refining the low volume footprint and providing risk communication information rather than on evaluating the contribution from Hunter's Point sediments to fish tissue contaminant levels. An estimate of risk due to consumption of both shellfish and fish will be required in order to estimate the potential risk reduction achieved by remediating some volume of the contaminated sediments.

A shellfish risk estimate based on collection of site-specific shellfish is preferred to the modeling approach proposed. The 28-day Macoma nasuta bioaccumulation test will most likely underestimate actual shellfish tissue concentrations, in that the Macoma does not achieve equilibrium with the sediment during the course of the study and the sediment grab sample is based on the upper 5 cm.

The Navy is proposing to evaluate only one fish species to support its second objective of providing information for risk communication. Analysis of one species is insufficient for providing risk communication information. All fish collected by the Navy at the Hunter's Point location should be analyzed. Despite the fact that the white croaker is generally more contaminated than the two other identified target species, I think it might be more important to focus on collection of the shiner surfperch for the analysis that the Navy is proposing. I believe that they have more site fidelity than the white croaker.

Specific Comments

1. Section 3.0, Data Collection and Analysis: How will tissue concentrations that fall between the minimum and maximum value be evaluated with respect to data associated with reference locations.

2. Section 2.0, page 5, Table 2-1 and Appendix C – Development of Risk-Based Screening Concentrations state that total PCBs will be based on the sum of the 19 PCB congeners defined in the NOAA Status and Trends Program. NOAA has developed factors for deriving total PCBs based on the NS&T congener list. For risk assessment purposes, the Navy should apply this factor (generally a factor of two) in deriving a concentration term for shellfish tissue for their risk estimates.

3. Appendix B – Position Papers to Support Human Health Evaluation: Please provide an update on the use of ingestion rates for estimating fish consumption risk. Board staff do not consider consumption rates derived from the Santa Monica Bay Study by Wilson et al (1999) to be appropriate for estimating risks due to fish consumption at Hunter's Point. Consumption rates should be based on the results of the SFEI and DHS study which are to be released soon.

4. Appendix C – Development of Risk-Based Screening Concentrations: Table C-2 provides RBSC values for shellfish consumption. It is not transparent from the table whether the values are based on cancer or non-cancer risks. This needs to be clarified. Additionally, chemical specific cancer slope factors and reference doses are not provided. Please explain why the per capita RBSC based on an RME scenario is higher than the value derived for a typical scenario. Additionally, site-specific shellfish consumption data would be preferential to U.S. Food and Drug Administration study rates.

5. Appendix D – Field Sampling Plan: Section D.4.1 Fish Sample Collection states that individuals of the three target fish species will be retained from each location sampled until the minimum whole body weight is achieved for at least one species at all locations. This section of the Field Sampling Plan needs to be amended to allow for analysis of all fish caught and not just the species that is most abundant.