



# California Regional Water Quality Control Board

## San Francisco Bay Region

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HUNTERS POINT  
SSIC NO. 5090.3



Gray Davis  
Governor

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrcb.ca.gov>  
1515 Clay Street, Suite 1400, Oakland, California 94612  
Phone (510) 622-2300 FAX (510) 622-2460

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

June 28, 2000  
File 2169.6032 (LBJ)

**Subject: Comments on Draft Hunters Point Parcel F Validation Study Work Plan, San Francisco Bay, California.**

Dear Mr. Mach:

Regional Board staff have reviewed the document titled *Draft Hunters Point Shipyard Parcel F Validation Study Work Plan, San Francisco Bay, California* date May 15, 2000 (VS). In general, the plan was well written, concise, and fell in line with our expectations. Globally, it appears that portions of the document should be updated to reflect the agreements reached in recent conference calls and meetings. We have also received comment letters on the Plan from DTSC and USEPA; we concur with their comments and will attempt to avoid redundancy.

**1.1. Validation study objectives** – Please revise the last paragraph on page 1 to reflect the recent agreement regarding the extent of the Parcel F VS. Specifically, please state that the results of the VS are applicable to soft sediments extending bayward from the toe of the slope that forms the shoreline or beach. In the event an exposure-response relationship is developed, it may be appropriate to use the relationship to help determine cleanup values for intertidal and shoreline areas not subject to sampling or analysis in the VS. However, cleanup values for shoreline and beach areas must adhere to anti-degradation principles and also be protective of all other pertinent receptors and pathways.

Based on chemical gradients shown by screening and other data, it is apparent that significant upland sources of pollution still exist at Hunter's Point. Regional Board staff asserts that due to our understanding of both wave mechanics and site chemistry, the Navy should prioritize (time critical removal action) cleaning and armoring of beach areas that threaten to pose a continuing source of pollution. We believe that this is a critical path item that must be completed before any meaningful effort to remediate the subtidal portion of the pollution can proceed.

**1.2.2. Previous studies** – Please revise the figure numbering for Figures 1-1 and 3-1. We believe that it would be instructive to lay readers of the document if a figure depicting the high-volume footprint were also included.

**2.2. Feasibility study support** – Please note that while the sediment dynamics evaluation work is important to the performance of a sound feasibility study (FS), we believe that this analysis will be semi-quantitative at best, given the short temporal window proposed for observations. As

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such, Regional Board staff do not believe that areas should be screened out of the feasibility study with sediment “immobility” as the justification. Rather, any such areas should proceed to FS where knowledge about sediment dynamics can guide selection of the appropriate remedial action and where assumptions can be validated by monitoring results. Please state explicitly that sediment dynamics study results will not be used to validate the low-volume footprint.

**3.1.1. Three lines of evidence** – Regional Board staff are concerned that an impacted reference site such as Alcatraz Environs may not actually be indicative of ambient conditions in the Bay. As such, it may prove useful to identify criteria to accept or reject reference results based on chemistry and or toxicity thresholds.

**3.1.1.3. Bioaccumulation and dose assessment** – Although we hope that reference stations will not cause excessively elevated bioaccumulation, we are concerned that a high variance among the reference samples may result in an unacceptably wide tolerance region. Please note that regardless of statistical certainty, there is a numerical tissue concentration threshold where site tissue is clearly in excess of the safe tissue level (STL), beyond which we would assert that further evaluation must be conducted during the FS. We also recall an agreement where site bioaccumulation would be considered elevated if it is greater than 1.4 times the reference versus 1.5 as presented in the plan.

**3.1.3.1. Sediment dynamics** – As noted above, we believe that given the nature of the system and the short temporal window for observations, the results of the sediment dynamics analysis will be semi-quantitative. While the level of effort seems reasonable, it must be emphasized that the Regional Monitoring Program will soon be undertaking multi-year sediment pollutant bioavailability and mass flux studies for all of the San Francisco Bay Region. Please understand that Federal Clean Water Act Section 303(d) is an ARAR for the site, and while we are cautiously optimistic that the VS can adequately address short-term concerns regarding mass loadings into San Francisco Bay, the Regional Board is developing total maximum daily loads (TMDLs) and implementing waste load allocations for PCBs, mercury, DDXs, and other water quality limiting pollutants as required by federal law. If in the future, this site is found to exceed its waste load allocation for these or other pollutants, we will seek to have the discharge abated. Please state explicitly that the Navy is aware of the implications of the TMDL process and that the VS does not contain a component where mass loading into the Bay is evaluated in the context of other sources to the Bay.

**3.2. Integrated sampling design** – Core locations should not be “collected in areas that are expected to be in areas of net accumulation.” Such a biased sampling design negates the purpose of analyzing cores to determine sediment mixing and mobility. Rather, the core locations should be selected so that they accurately characterize the site.

**B.1 – Page B-9 Bioaccumulation potential** – As stated previously, all sediment within the low-volume footprint has already been determined to pose unacceptable risk to San Francisco Bay.

As such, we believe that it is important to consider the hypothesis being tested when justifying the use of methods that appear on the surface to be less rigorous. Sediments in the low-volume footprint are considered “guilty until proven innocent” by the regulatory agencies, and as such, it is unfairly slanted to assert that “There is no available laboratory evidence that demonstrates that contaminants of concern approach steady-state concentrations following longer exposure times” without stating the converse, that there is also little or no available laboratory evidence that steady state concentrations are actually approached within 28 days. In fact, we are aware of studies conducted in Alaska showing that, for petroleum compounds with high  $K_{ow}$ ’s, “steady state” tissue concentrations may not be reached even after many months. Thus, we believe that the inflection point at  $K_{ow}=7$  on Figure 1 (page B-7) is more likely an artifact of “steady state” measurement errors. For organisms with a short lifespan, this issue may not be a concern, but the impact may be substantial when considering effects on higher tropic levels. For this reason, we object to the notion that 28-day concentrations might be adjusted to hypothetical steady state “if necessary.” Rather, the text should read that for purposes of comparison to the STL, 28-day concentrations will be adjusted to reflect hypothetical steady-state concentrations.

**B.6 – Page B-11 Bioaccumulation magnitude** – It is important to note that the data evaluated to support the Navy’s position are for metals only, and therefore, we are unconvinced that this argument will extend to biomagnifiable organic compounds.

We appreciate the efforts of the individuals involved in developing this plan and look forward to resolution of the above concerns. Should you have any questions regarding this matter, please contact me via email at [lbj@rb2.swrcb.ca.gov](mailto:lbj@rb2.swrcb.ca.gov) or at (510)-622-2400.

Sincerely,



Brad Job, P.E.

Assoc. Water Resources Control Engineer

cc:

Ms. Claire Trombadore (SFD-8-2)  
U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105

Ms. Sheryl Lauth (SFD-8-2)  
U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105

Mr. Chein Kao  
Department of Toxic Substances Control  
Northern California Region  
700 Heinz Avenue, Suite 200  
Berkeley, CA 94710

Ms. Amy Brownell / Mr. John Chester  
San Francisco Department of Public Health  
1390 Market Street, Suite 910  
San Francisco, CA 94102

Mr. Michael Pound  
Department of the Navy, Southwest Division  
1220 Pacific Highway  
San Diego, CA 92132-5190