

## DEPARTMENT OF HEALTH SERVICES

2151 BERKELEY WAY  
BERKELEY, CA 94704

August 17, 1988

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

## DHS COMMENTS ON HUNTERS POINT REVISED QAPP

Dear Mr. Tung:

Enclosed are our comments on the revised Quality Assurance Project Plan (QAPP) for Hunter's Point Annex. These items were originally discussed in our comments on the draft QAPP (dated March 31, 1988), but were not incorporated into this latest revision. Final approval of the QAPP will rest on the appropriate addition of the enclosed concerns.

Please revise this document per our comments and submit the final draft by September 16, 1988.

If you have any further questions, please contact William Owen of my staff at (415) 540-2592.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Hatayama".

Howard Hatayama, Chief  
Site Mitigation Unit  
Region 2  
Toxic Substances Control  
Division

Enclosure

cc: attached list

HH:wo

D/N 33

MAILING LIST - HUNTERS POINT

Telephone

Mr. Alex Dong, 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. William Hurley California Regional Water Quality Control Board 1111 Jackson Street, Room 6040 Oakland, CA 94607	(415) 464-0841
Mr. Dave Wells Department of Public Health City and County of San Francisco 101 Grove Street, Room 207 San Francisco, CA 94102	(415) 558-3781
Mr. Scott B. Lutz Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109	(415) 771-6000

COMMENTS ON REVISED QAPP, HUNTERS POINT

I. SECTION 6.5.1

A. Page 6-6:

1. The statement "...auger size will be a minimum 8-inch nominal O.D. [outside diameter]." should be revised to read "...auger size will be a minimum 8-inch nominal I.D. [inside diameter]." This is to ensure that adequate working space will exist inside the stem to properly install a 4-inch well.
2. Screening across the entire thickness of the shallow aquifer is not acceptable. Experience with other sites has shown that long-screen wells, even in unconfined aquifers, can cause flow within the well due to pressure differentials along the screened interval. This leads to either cross-contamination of the aquifer or contaminant dilution. Long-screen wells are a viable alternative only where hydraulic heads are equal across the entire screened interval (e.g. a constant-head boundary). Not only is this condition uncommon, it can only be detected by installing short-screen wells. Thus short-screen wells are clearly the method of choice for ground water monitoring.

Initial discussions with the Navy and its consultant indicated that the Navy intended to use maximum screen lengths of around 20 feet in the shallow aquifer. Screen lengths are site-specific based on hydrogeologic conditions, but ordinarily should not exceed 10 feet. For Hunters Point, deviations from this maximum screen length may be considered where the shallow aquifer is no more than 15 feet thick. In this case, the probability of cross-contamination or dilution is judged to be minimal, and a fully penetrating well is an acceptable alternative to installing a nest of wells.

B. Page 6-7

1. The use of bentonite pellets above static water table for some wells may not assure a competent annular seal. Seals above water table should be constructed in one of two ways: a) use crushed bentonite and saturate with potable water; b) pump bentonite grout over a minimum 6-inch base of bentonite pellets, using a side-discharge tremie pipe (the pellet base and side-discharge pipe

minimizes invasion of the grout into the filter pack). Of these two methods, b) is judged to be the most effective for sealing the annulus.

C. Page 6-8:

1. Marking of the well casing, while seemingly a minor point, provides important insurance against data foul-ups caused by lost or mixed-up casing caps, outside numbers obscured by weathering, etc. Therefore, the casing should be numbered within attainable site (a mirror can be used for well covers with limited access). The only acceptable alternative is to permanently mark the well cover or utility box, either by brazing the well number onto the metal standpipe (for above-grade completions) or stamping the number into the concrete utility box (for below-grade completions).

II. SECTION 7.2

A. Page 7-2

1. The use of flight cuttings to supplement core logs from hollow-stem auger borings should be specifically spelled out in bullet 1 on page 7-2.

III. SECTION 14.0

A. Page 14-1

1. Standard statistical analyses should be identified in this section (e.g. Student's T-test). Specific examples can be referenced to EPA's Data Quality Objectives for Remedial Response Activities. Non-standard tests, if used, can be deferred to the respective Group Sites reports.

IV. SECTION 18.0

A. Page 18-2

1. A description of the qualifier codes and their specific applications for data annotation should be provided. This information may be given in tabular form for ease of presentation.