

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



6 October, 1989

Commander Western Division
Naval Facilities Engineering Command
Attn: Louise Lew, Code 1811
P.O. Box 727
San Bruno, CA 94066-0720

Dear Ms. Lew:

DHS COMMENTS ON UNDERGROUND TANK INVESTIGATION, HUNTERS POINT
ANNEX

Enclosed are the Departments comments on the Draft Technical
Report: Underground Tank Investigation for Hunters Point Annex.
Please revise the draft technical report, in accordance with our
comments.

The Department agrees with the contractor recommendation for
immediate removal of all tank contents, and would like the Navy
to act upon that recommendation as soon as possible.

If you have any questions regarding these comments, please
contact me at (415) 540-3591.

Sincerely,

A handwritten signature in cursive script that reads "Mark Malinowski".

Mark Malinowski
Engineering Geologist
Region 2
Toxic Substances Control Program

Enclosure

cc: attached list

D/N 65

COMMENTS ON HUNTERS POINT ANNEX
DRAFT TECHNICAL REPORT
UNDERGROUND TANK INVESTIGATION
August 7, 1989

Comments and questions should be addressed in the final revision of the Work Plan.

Pg	Sec	Pgph	Comments/Questions
2-6	2.3	2	Lines 1-6. <u>Storage Tanks</u> - Clarify the first six lines. List the 13 tanks that have been removed since 1975. Were the 8 tanks at the Robinson Street Tank Farm part of the 13? Was there contamination (visible staining, strong odors, etc) at the 13 tanks which were removed?
3-2	3.3.2	3	Line 10. Is there any documentation on prior removal of the tanks near buildings 116, 118 and 251? Were vent pipes observed near suspected UST locations? Lack of geophysical evidence does not justify deleting suspected tank locations from further investigation. What other methods will be used to assist in locating tanks not found by geophysical methods?
3-3	3.4.1		Sampling Methodology - The title suggests that the methods used to collect samples will be described in detail so someone reading this report could go into the field and duplicate the sampling procedures. Please rewrite this section.
3-3	3.4.1	1	Line 2. Existing product levels and estimated product volumes should be presented for each tank. How was the amount of product and depth to the bottom of the tank measured? The report should also include depth to the bottom of each tank and the depth of the tank below surface level (BSL). This information should be summarized in a table format.

Pg	Sec	Pgph	Comments/Questions
3-3	3.4.1	1	Line 5. How were liquid contents identified as being "similar" prior to making a composite sample, color, odor?
3-3	3.4.1	1	Line 8. <u>Table 3.1 shows tank capacities and indicated use.</u>
3-3	3.4.2	1	Identify the EPA methods used for sample analysis.
3-6 4-10	Table 3-3 Table 4-2		The LUFT Manual was revised in May, 1988 and Section II was updated in April, 1989. The DHS method which is referenced is found in Appendix C, not Appendix B. The San Francisco Bay Regional Water Quality Control Board has their own staff recommendations for evaluation and investigation of UST's (revised 18 May 1989) which should also be consulted and referenced.
4-13	Table 4-4		Footnotes a and b of this table indicate soil sample collection was attempted but not collected. The respective boring logs in Appendix C do not identify where sample collection was attempted or that there was no recovery. Explain the discrepancy and correct as necessary.
5-1		3	Line 6. The Department agrees that the data indicates possible separate sources other than the USTs. However, it is also possible that the tanks were used to improperly dispose/store mixed wastes. Characterization analysis was based on intended or described tank use. The Department recommends that tank content analysis also be based on the soil gas survey gas chromatograph results.

Pg	Sec	Pgph	Comments/Questions
5-1	5.1.1	1	Line 3. All laboratory results should be reported in a consistent format. Since all the other sections define tank content concentrations in ppm, change mg/l to ppm.
5-1	5.1.1		Soil gas samples also revealed very high concentrations of DCA, DCE, TCA and TCE. Please include in the conclusions.
5-2	5.1.2.1		This section should include the free floating product description which is described in section 6.3.2.1.
5-2	5.1.2.3		What is meant by "treated water?" Which building/process is suspected of generating the waste water?
5-4	5.1.6	1	Line 3. Should read 66 ppm, not 66 ppm/l. Soil gas samples also revealed very high concentrations of DCA, DCE, TCA and TCE. Please include in the conclusions.
5-4	5.1.8	1	Line 2. Should read 46,000 ppm, not 46,000 ppm/l.
5-5	5.1.9		Soil gas samples also revealed very high concentrations of DCA, DCE, TCA and TCE. Please include in the conclusions.
6-2	6.2	3	Line 5. Sampling will be determined by the RWQCB and/or DHS, not the Navy, based on results of initial sampling.
6-2	6.2	4	Line 10. Monitor well screen intervals should not exceed ten (10) feet unless prior approval from the DHS project manager is obtained.

Pg	Sec	Pgph	Comments/Questions
6-4	6.3.1		Based on the soil gas chromatograph results, product samples from the tanks should be analyzed for volatile and semi-volatile organic compounds to help determine if the tanks were a source of solvent contamination.
6-6	6.3.4	2	Soil gas survey points should also be placed to the south and southwest of the standpipe. See attached Figure 6-5 for general location.
6-7	6.3.6	2	Since groundwater direction at the site is not known, soil gas points should extend further west of the fuel island. See attached Figure 6-7 for general locations. Why are proposed soil gas points located so far northeast of the tanks?
6-8	6.3.7	2	The locations of the proposed soil gas points (east of the tanks) seem unusual based on the initial soil gas survey results. Please reevaluate the placement of soil gas points and explain the rationale for soil gas sampling locations.
6-9	6.3.9	2	The proposed placement of soil gas points indicates that IT believes contamination has/is migrating south. What evidence exists to support the placement of soil gas points shown in Figure 6-10.
6-10	6.3.10		If the proposed soil borings are meant to define the extent of contamination and direction of migration, why place only two borings around the tank and on the same side where no contamination was previously found? Please reevaluate boring placement and/or explain the rationale for the proposed soil borings.

Pg	Sec	Pgph	Comments/Questions
6-10	6.3.11		The conclusion that little or no contamination is anticipated appears to be based only on the assumption that because the tank has cathodic protection, the protection must have worked. Only one sample was analyzed for Total Petroleum Hydrocarbons, and that sample was taken at 3.5 feet bsl. The Department does not consider this tank site to be adequately characterized to draw any conclusion.
Appendix D			CLP is the protocol followed, not the analysis method. Which EPA methods were used for sample analysis?
Figure 6-2			This is a good map to show the generalized relationship of tanks S209, S212 and S213, but all three tanks should have separate figures (not just S212 - Figure 6-3) to show more detail.

COMMENTS ON HUNTERS POINT ANNEX
DRAFT TECHNICAL REPORT
UNDERGROUND TANK INVESTIGATION
August 7, 1989

GENERAL COMMENTS. The Technical Report on the Underground Tank Investigation at the Hunters Point Annex is in need of several modifications. The Department concurs with the comments made by the EPA and will not restate similar comments.

1) Since the site headings and figure titles are identified by building number (ie. section 6.3.1 is Building 253, section 6.3.2 is Building 203, etc.) the sections should be organized by ascending building number not by tank number.

2) The term "define local gradient and contamination effects on ground water" is used throughout the document. The Department does not believe that the statement accurately represents the intent of installing soil borings and monitor wells. The phrase define local groundwater gradient and determine the vertical and horizontal extent of contamination in the ground water is a more accurate statement.

3) The report does not discuss how sampling depths will be determined for the tank sites. The Department recommends that the contractor use the depth to the bottom of the tank as a reference for each site so samples can be taken at or below the middle line of the tank. The report states in several places that only one soil sample will be collected per boring. How will sampling depth be determined when there is visible contamination over the entire depth of a boring?

4) Was an OVA or PID used during the investigation? If not, why not? Were OVA or PID readings taken and recorded in any of the boreholes? Ensure that when drilling the next set of wells/borings, an OVA, PID or similar device is present and instrument readings recorded on the drilling logs.

5) The report often (Sections 5.1.1, 5.1.2.2, 5.1.3, etc.) describes tank content identification based on "field observations". What type of "field observations" are being referred to; color, odor, colorimetric tubes? Please explain. Just because a product smells like gasoline or diesel does not mean that solvents or other materials were not introduced into the tanks. If odor was used for "field observation" determinations, how was personnel exposure potential monitored?

6) When the soil gas survey results indicate that solvents are present, soil samples and product in the tank(s) should be analyzed for VOCs. The source for the solvent contamination could be the tank(s) under investigation.

7) The report should include, when available; dates tanks were installed, dates of tanks last recorded use, physical dimensions of the tanks, depth of tanks below surface level and depth to the bottom of the tank. The information would be very helpful in developing the sampling program.

8) Soil gas points should also be placed near the associated tank vent tubes since overflow through vent tubes is possible. Soil gas points should also be placed in suspected/known pipeline areas.

9) The report should have a basewide map identifying all possible tank locations. It is very difficult to view the figures in this report without a full size site map to assist in locating tank positions. The map scale should be 1":300' or 1":400'.

10) The figures in the report should have scales to help in determining soil gas points, borings and monitor well locations.

11) The figure titles indicate that soil gas sample locations are for buildings, not tanks. Titles should read: Soil Gas Sample Location Map for Building #709 Underground Storage Tanks.

12) The Department agrees with the recommendation that the tanks should be pumped out as soon as possible after tank content evaluations are completed.

13) All work and reports which require geologic or engineering evaluation (i.e. borehole and monitor well installation and assessments) must be performed under the direction of a registered or certified professional. The work/report which has been presented does not appear to meet this criteria.

14) The Department would like to review the Health and Safety Plan for the next phase of the UST investigation.

15) Monitor well screen lengths should not exceed 10 (ten) feet in length unless prior approval from the DHS project manager is obtained.

16) Each section under recommendations should contain a paragraph describing the type/method of soil analysis to be done.

