



DEPARTMENT OF THE NAVY
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA 94035

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MOFFETT FIELD
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IN REPLY REFER TO:
5090
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California Regional Water Quality Control Board
San Francisco Bay Region
Attn: Tom Berkins
1111 Jackson Street, Room 6040
Oakland, CA 94607

Gentlemen:

This letter is in response to your letter of December 24, 1986 regarding underground tanks 19 and 20 and tanks 66, 67, and 68 at Naval Air Station, Moffett Field.

Enclosure (1) is the technical report requested on tanks 19 and 20 which were removed in October 1986. Enclosure (2) is the technical report requested on tanks 66, 67, and 68. As indicated in the enclosures, we plan to initiate our investigation at these sites by March 2, 1987 and complete the reports by April 17, 1987.

Please contact ENS Heckmann at (415)966-5346 if additional information is needed.

Sincerely,


H.H. DAVIS JR
Captain, U.S. Navy
Commanding Officer

Encl:

- (1) Technical Report on Tanks 19 and 20
- (2) Technical Report on Tanks 66, 67, and 68

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TECHNICAL REPORT ON TANKS 19 AND 20

1. HISTORY OF TANKS

- a. Tanks 19 and 20 were 5,000 gallon steel tanks installed in the 1940's and used to store gasoline.
- b. Attachments (a) and (b) show the project site and the location of the abandoned tanks and the installation site of the new tanks.
- c. Repairs and spills - daily gauging on tanks 19 and 20 indicated that there were never any leaks and no repairs were made on the tanks. In 1982, some of the plumbing was repaired and this was the only known repairs done on the system. However, prior to installation of a vapor recovery system in 1976, it apparently was common practice to empty hoses in the fill gravel in that area.

2. TANK REMOVAL

- a. The two tanks were removed in October 1986 by the firm of R.S. Eagen and Co. Mr. Charles Nicholson of the County of Santa Clara Health Department was present during the removal. Excavation for the new tanks was also performed at that time. Attachment (a) shows the project site location.

During excavation for the new tanks, contaminated soil was found approximately 8 feet down and a sample was taken. Excavation continued and another sample was taken at 17'6". The excavated soil was kept on the station and work continued.

The old tanks were removed and samples taken at a depth of approximately 13 feet. There did not appear to be evidence of tank leakage.

- b. Soil samples were taken as indicated above and the locations are shown on Attachment (b). No monitoring wells were installed at this time.
- c. Results of soil and groundwater samples are contained in Attachment (c). Results are inconclusive and additional studies are proposed as outlined in paragraph 3. below.

3. METHODOLOGY

- a. Attachment (d) shows the location of the proposed borings and monitoring wells.
- b. Subsurface borings using hollow stem auger will be drilled at a minimum of six locations to be determined in the field and based on clearing the locations of utilities. The depths will be a minimum of 20 feet with a maximum of 35 feet. Soil samples will be collected from each 5-foot interval for subsequent analyses.

Monitoring wells will be installed at a maximum of three locations after completing the six borings. The locations will be selected based on field observations made during drilling and sampling of the bore holes. Monitoring wells will be constructed of 2" diameter PVC.

Soil samples from the six borings, and the three wells will be selected based on field observations of apparent hydrocarbon content. A minimum of one and a maximum of three samples will be selected from each boring. All selected samples will be analyzed by a state certified laboratory for total petroleum hydrocarbons and benzene, toluene and xylene (B,T,X) content.

Fluid samples will be collected from a maximum of three monitoring wells for analyses. If immiscible fluids are collected from a well in sufficient quantities, each fluid will be analyzed by gas chromatographic methods in an attempt to characterize the source of petroleum hydrocarbon. The B,T,X analysis will also be performed on each water sample collected from the wells.

A preliminary report will be prepared documenting the field observations and conditions encountered during the investigation. A summary of analytical results from the independent laboratory will be included along with the preliminary conclusions about the concentrations and occurrence of petroleum hydrocarbons and B,T,X in soils and groundwater at this site.

Recommendations will be presented for additional investigative steps or for addressing remedial measures that may be appropriate for the conditions encountered at this site.

c. We will initiate the study by March 2, 1987 and plan to have results by April 17, 1987.

4. Based on the limited monitoring information, no interim cleanup measures are proposed at this time. Cleanup will be proposed if significant contamination is indicated by the study outlined above.

TECHNICAL REPORT ON TANKS 66, 67, AND 68

1. Tank 66 is actually a concrete sump used by Building 88 (Cleaners/laundry). It has been taken out of service and any residual material will be analyzed and removed. Tanks 67 and 68 are abandoned tanks of unknown capacity, age or construction. There is no evidence that these tanks contained solvents. These tanks will be removed. The results of the study outlined below will determine whether significant cleanup will be required in conjunction with the tank removal.
2. The approximate location of soil boring and monitoring wells are shown in Attachment (a).

3. METHODOLOGY

Subsurface borings will be drilled using a hollow stem auger at seven locations to be determined in the field and based on clearing the locations of utilities. The seven borings will be divided into two groups of borings as follows:

- (a) three borings and possibly one well adjacent to tank 66;
- (b) four borings and possibly two wells adjacent to tanks 67 and 68.

The depths will be a minimum of 20 feet and a maximum of 35 feet. Soil samples will be collected from each 5-foot interval for subsequent analyses.

Monitoring wells will be installed at a maximum of three locations after completing the six borings. The locations will be selected based on field observations made during drilling and sampling of the bore holes. Wells will be constructed of 2" diameter PVC.

Soil samples from the nine borings and three wells will be selected based on field observations of apparent hydrocarbon content. A minimum of two and a maximum of four samples will be selected from each boring. All selected samples will be analyzed by a state certified laboratory for total petroleum hydrocarbons and volatile organic compounds.

Fluid samples will be collected from the three monitoring wells for analyses. If immiscible fluids are collected from a well in sufficient quantities, each fluid will be analyzed by gas chromatographic methods in an attempt to characterize the source of petroleum hydrocarbon or volatile organic compounds. An analysis for volatile organics will also be performed on each water sample collected from the wells.

A preliminary report, will be prepared documenting the field observations and conditions encountered during the investigation. A summary of analytical results will be included along with the preliminary conclusions about the concentrations and occurrence

of petroleum hydrocarbons and volatile organic compounds in soils and groundwater at this site. Recommendations will be presented for additional investigative steps or for addressing remedial measures that may be appropriate for the conditions encountered at this site.

4. SCHEDULE

The proposed plan will be initiated by March 2, 1987. We plan to have a report summarizing the results and recommendations for additional steps or remedial measures by April 17, 1987.