ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

R0581

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

February 1, 1993

Richard Hiett
RWQCB, S.F. Bay Region
2101 Webster St., Ste 500
Oakland, CA 94612

STID 3948

Re: Alameda Fire Department, located at 2401 Encinal Avenue, Alameda, California

RECOMMENDATION FOR UST CASE CLOSURE

Dear Mr. Hiett,

On June 4, 1990, one 180-gallon diesel underground storage tank (UST) and one 500-gallon gasoline UST were removed from the above site. According to Environmental Bio-System's report, no holes, rusting, or pitting were observed in either of the USTs.

Soil samples were collected from the tank pit in the presence of Katherine Chesick, Alameda County Hazardous Materials Specialist. One soil sample was collected from beneath each of the tanks at 10 feet below ground surface (bgs) and three sidewall soil samples were collected, one adjacent to the fill end of the 500-gallon UST at 15 feet bgs, and two collected near the non-fill end of the 500-gallon UST at 9.5 and 15 feet bgs. Additionally, one stockpile soil sample was collected.

The soil samples were analyzed for TPHg, and BTEX using method 8020. Additional analysis were conducted for lead and diesel on the stockpile soil sample and one of the tank bottom samples.

Analysis of soil samples identified 3.2 parts per million (ppm) Total Petroleum Hydrocarbons as gasoline (TPHg), 0.3 ppm toluene, and 0.4 ppm xylenes, beneath the UST, and 12 ppm TPHg, 0.2 ppm benzene, 0.6 ppm xylenes, and 0.3 ppm ethylbenzene in one of the sidewall samples. Additionally, 85 ppm TPHg, 37 ppm TPHd, 0.3 ppm benzene, 2.4 ppm toluene, 7.7 ppm xylenes, and 1.6 ppm ethylbenzene was identified in the stockpile soil sample.

According to Ms. Chesick's notes on the sampling, ground water entered the tank pit at approximately 10 feet below ground surface. It appears that the ground water in the tank pit was never sampled.

Prior to the tank removal in 1986, a monitoring well was installed to the east of the former tank in response to AB1362. This well is currently located within 2 feet of the boundary of

the former tank excavation. This office considered having the site collect a sample from this well to determine whether or not the ground water was impacted by the releases from the UST. However, it was determined, by looking at the ground water information for the neighboring ARCO site, that this well is not downgradient (southwest) from the former tank. Even if it were, the well log for this well states that the soil type, down to 20 feet bgs, is all sand with some clayey sand, so it would seem that any ground water contaminants that may have resulted from past releases would probably have migrated southwest beneath the on-site building or off site since June 1990.

This office evaluated the possibility of requesting the placement of a boring and collection of a ground water sample southwest of the former tank. However, according to Robert Pogue at the Alameda Fire Dept., a boring would cause an integrity break-down in a special vapor/soils matting that was installed between the soil and the aggregate base for most of the site. Additionally, a building, located about 16 feet south/southwest from the former tank, limits the amount of room for other optional boring locations. Even though a boring were to be placed within the area between the former tank and the building, what are the odds that any groundwater possibly impacted in the past, would be identified within this distance, considering the sand soil type beneath the site.

Prior to the tank removal in 1986 and during the operation of the tanks, a ground water sample was collected from the on-site monitoring well. This sample was analyzed for diesel (it appears that they used method 8015 with a detection limit of 0.2 ppm). Nothing was detected.

Considering the above information, I am recommending that this site be closed. If you need any additional information or documents for your review, please let me know. Please contact me with the RWQCB's decision as to whether it is in concurrence with our recommendation. If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely

Juliet Shin
Hazardous Materials Specialist

cc: Edgar Howell-File(JS)

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State Water Resources Control Board
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80 Swan Way, Rm 200
Oakland, CA 94621
(510) 271-4530

November 2, 1992

Robert Pogue
City of Alameda
1300 Park Street
Alameda, CA 94501

STID 3948

RE: Required ground water investigations for the site located at 2401 Encinal Avenue, Alameda, California

Dear Mr. Pogue,

On June 4, 1990, one 180-gallon diesel underground storage tank (UST) and one 500-gallon gasoline UST were removed from the above site. One soil sample was collected from underneath each of the USTs. Analysis of these samples identified low concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) from underneath the tank pit and from the sidewalls of the tank pit. Although low concentrations of contaminants were identified in the soil samples, this office is concerned that ground water may have been impacted due to the shallow ground water observed at the site.

Per our conversation on November 2, 1992, there is a monitoring well located within two feet of the former tank pit. Please submit any information you have on the construction of this well. If this office determines that the construction of this well is adequate for monitoring the shallow aquifer beneath the site, you will be required to collect ground water samples from this well and have them analyzed. If this well is determined to be inadequate for monitoring purposes, you will be required to install a boring or well to adequately collect ground water samples. Ground water samples shall be analyzed for TPHg, BTEX, and TPH as diesel.

You are required to submit a work plan to this office **within 60 days** of the receipt of this letter addressing ground water investigations at the site. All reports and proposals must be submitted under seal of a California-Registered Geologist, -Certified Engineering Geologist, or -Registered Civil Engineer. This Department will oversee the assessment of your site. Our oversight will include the review of and comment on work proposals and technical guidance on appropriate investigative approaches and monitoring schedules.

Please be advised that this is a formal request for technical reports pursuant to **California Water Code Section 13267 (b).** Any

extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or RWQCB.

Please be reminded to copy Richard Hiett, San Francisco Bay Region-Water Quality Control Board, on all correspondence and reports.

If you have any questions or comments, please contact me at (510) 271-4530.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

cc: Richard Hiett, RWQCB

Edgar Howell-File(JS)

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
80 Swan Way, Rm. 200
Oakland, CA 94621
(510) 271-4320

R0581

June 10, 1992

Richard Quarante
City of Alameda
1300 Park Street
Alameda, CA 94501

STID 3948

RE: Soil Contamination Associated with Removal of Underground Storage Tank (UST) at 2401 Encinal Ave., Alameda, California

Dear Mr. Quarante,

On June 4, 1990, one 180-gallon diesel UST and one 500-gallon gasoline UST were removed from the above site. One soil sample was collected from underneath each of the USTs. Analysis of these samples identified low concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) from underneath the gasoline tank at 3.2 parts per million (ppm) and low concentrations of TPHg at 1.7 ppm and 12 ppm from the sidewalls of the tank excavation. Although low concentrations of contaminants were identified in the soil samples, this office is concerned that ground water may have been impacted at the site due to the fact that ground water was observed flowing into the tank pit at the same depth at which the above soil samples were collected.

According to the Regional Water Quality Control Board's (RWQCB) Staff Recommedations for the Initial Evaluation and Investigation of Underground Tanks, if detectable concentrations of petroleum hydrocarbons are detected in the soil at ground water level, then further soil and ground water investigations are required. The purpose of this investigation is to determine the lateral and vertical extent, and severity, of latent soil and ground water contamination which may have resulted from the release at the site.

Such an investigation is in the form of a Preliminary Site Assessment (PSA). The information gathered by the PSA will be used to determine an appropriate course of action to remediate the site, if deemed necessary. The PSA must be conducted in accordance with the above RWQCB Recommendations. The major elements of such an investigation are summarized in the attached Appendix A. The guidelines include the requirement that a ground water monitoring well must be installed within ten feet of a former UST oriented in the verified downgradient direction relative to ground water flow.

Ground water gradient determination is required for the site and is usually achieved by installing three monitoring wells at the site.

In order to proceed with a site investigation, you should obtain professional services of a reputable environmental consultant. Your responsibility is to have the consultant submit for review a proposal outlining planned activities pertinent to meeting the criteria broadly outlined in this letter and the attached Appendix A.

This Department will oversee the assessment and remediation of your site. Our oversight will include the review of and comment on work proposals and technical guidance on appropriate investigative approaches and monitoring schedules. The issuance of well drilling permits, however, will be through the Alameda County Flood Control and Water Conservation District, Zone 7, in Pleasanton. The RWQCB may choose to take over as lead agency if it is determined following the completion of the initial assessment that there has been a substantial impact to ground water.

The Preliminary Site Assessment (PSA) proposal is **due within 45 days** of the date of this letter. Once the proposal is approved, field work, should commence within 60 days. A report must be submitted within 45 days after the completion of this phase of work at the site. Subsequent reports are to be submitted **quarterly** until this site qualifies for final RWQCB "sign-off". Such quarterly reports are due the first day of the second month of each subsequent quarter.

The referenced initial and quarterly reports must describe the status of the investigation and must include, among others, the following elements:

- Details and results of all work performed during the designated period of time: records of field observations and data, boring and well construction logs, water level data, chain-of-custody forms, laboratory results for all samples collected and analyzed, tabulations of free product thicknesses and dissolved fractions, etc.

- Status of ground water contamination characterization

- Interpretation of results: water level contour maps showing gradients, free and dissolved product plume definition maps for each target component, geologic cross sections, etc.

- Recommendations or plans for additional investigative work of remediation

All reports and proposals must be submitted under seal of a California-Registered Geologist, -Certified Engineering Geologist, or -Registered Civil Engineer. Please include a statement of qualifications for each lead professional involved with this project.

Please be advised that this is a formal request for technical reports pursuant to California Water Code Section 13267 (b). Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or RWQCB.

If you have any questions or comments, please contact Juliet Shin at (510) 271-4320.

Sincerely,

Scott O. Seery, CHMM
Senior Hazardous Materials Specialist

Attachment

cc: Richard Hiett, RWQCB

Gary Zaccor
Zaccor Corporation
791 Hamilton Avenue
Menlo Park, CA 94025

File (JS)