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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 14, 2006

Mr. Bahram Sazegar
California Department of Transportation
Office of Environmental Engineering
111 Grand Avenue
Oakland, CA 94612

Subject: Fuel Leak Case Num[redacted] Cal Trans, 6th Street and Castro Street, Oakland, CA

Dear Mr. Sazegar:

Alameda County Environmental Health (ACEH) staff has reviewed the case file and the documents entitled, "1st Quarter 2001 Groundwater Monitoring Report", and "Site Investigation Work Plan", dated January 2001 and August 2001, respectively. The most recent groundwater analytical data from March 2001 detected elevated concentrations of 65,000 µg/L TPHg, 6,500 TPHd, 730 µg/L Benzene, 4,100 Toluene µg/L, 3,100 µg/L ethylbenzene, 18,400 µg/L xylenes in on site in monitoring well MW-2. The work plan proposed the installation of several offsite soil borings to delineate the extent of dissolved phase petroleum hydrocarbon contamination, followed by the installation of additional groundwater monitoring wells. However the proposed Work Plan was never implemented. ACEH agrees with the need for additional offsite investigation to define the extent of the dissolved hydrocarbon plume immediately downgradient of your site.

In order to facilitate the regulatory closure process, ACEH requests that an additional investigation be conducted downgradient of MW-2. Our request is based on the conclusion that data collected during the Port of Oakland investigation is inadequate to define the vertical and horizontal components of soil and groundwater contamination immediately downgradient of the site. Considering the length of time that has passed since the previous work plan was submitted, ACEH request that you prepare a work plan detailing your plan to characterize the extent of soil and groundwater contamination immediately downgradient of your site. In addition, groundwater monitoring and sampling was discontinued in 2001 without the concent of ACEH. Consequently, we request that your initiate a program of groundwater monitoring and sampling according to the schedule outlined below.

Based on ACEH staff review of the documents referenced above, we request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Preferential Pathway Study**

   The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of the NAPL and/or plume encountering preferential pathways or conduits that could spread contamination. Of particular concern is the identification of manmade conduits for shallow contamination migration. No preferential pathway study has been conducted to determine if underground utilities may be acting as a migration pathway intercepting contaminated groundwater, leading to contamination plume migration downgradient of your site.

   We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for horizontal and vertical migration that may be present in the vicinity of the site. Discuss your analysis and interpretation of the results of the preferential pathway study and report your results in the Preferential Pathway Study requested below. Include an evaluation of the probability of the dissolved phase and NAPL plumes for all constituents of concern encountering preferential pathways and conduits that could spread the contamination. The results of your study shall contain all information required by 23 CCR, Section 2654(b).

   a) **Utility Survey**

      An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Submittal of map(s) and cross-sections showing the location and depth of all utility lines and trenches within and near the site and plume area(s) is required as part of your study.

2. **Off Site Soil and Groundwater Characterization.** Based on the occurrence of petroleum hydrocarbon contamination in onsite monitoring well MW-2 and soil borings OAK-1, OAK-2 and B1-11, ACEH as concluded that the three dimensional extent of soil and groundwater contamination downgradient of your site is undefined. The investigation performed by the Port of Oakland at the Interstate Block A and the 6th and Castro Block parcels does not satisfy the request by ACEH to conduct an additional investigation downgradient of your site. Of particular concern is the linear distance between soil boring, OAK-IBA-1 and OAK-IBA-2 and OAK-IBA-3, a minimum of 100 feet between borings, which is inadequate to constrain the lateral distribution of the contamination plume. Review of historical soil data from previous investigations indicate that up to 1,100 mg/kg of TPHg was detected in soil at 11 feet bgs., demonstrating that petroleum hydrocarbon contamination is deeper then the total depth of soil sampling conducted during the Port of Oakland investigation. Furthermore, the lack of offsite soil analytical data below 10.5 feet bgs is a data gap that must be evaluated. Therefore, you are required to prepare a work plan to conduct an additional off-site investigation to determine the extent of plume migration, combined with groundwater monitoring to help facilitate the closure process.

   The Work Plan requested below is to include plans to characterize petroleum hydrocarbon contamination in groundwater within the shallow groundwater zone and possible deeper

water-bearing zones. We request that you use detailed hydrogeologic cross sections to determine the appropriate location and design for monitoring wells that are needed to appropriately characterize the three-dimensional extent of groundwater contamination down gradient of the site. To appropriately evaluate your site, the monitoring wells will need to be screened in the permeable zones with screen lengths that match the stratigraphic sequence. Please include the above information in the Work Plan requested below.

3. **Contamination Plume Delineation.** ACEH has determined that characterization of the dissolved petroleum hydrocarbon plume is undefined downgradient of your site. Results from the most recent groundwater monitoring conducted in March 2001 indicate that residual TPH and TPH constituents remaining in soil and groundwater beneath your site may be migrating off site. The concentrations of TPH and TPH constituents detected in MW-2 -65,000 µg/L TPHg, 6,500 TPHd, 4,100 Toluene µg/L, 3,100 µg/L ethylbenzene, 18,400 µg/L xylenes- are the highest recorded for onsite monitoring wells. Which may indicate that residual petroleum hydrocarbon contamination in the source area is continuing to add mass to the dissolved plume. Additional soil and groundwater analytical data will provide an improved understanding of dissolved phase petroleum hydrocarbon contamination immediately downgradient of the site.

   Furthermore, the Port of Oakland investigation conducted in November 2001 including the OAK-6C soil borings, which are upgradient from the source area and contain data that is not relevant to characterize downgradient soil and groundwater contamination or define plume geometry. According to quarterly groundwater elevation data collected from onsite monitoring wells in 2001, the hydraulic gradient is toward the southeast, in the general downgradient direction of Parcel A and the OAK-IBA soil borings. ACEH does not agree with the conclusion that the Port of Oakland investigation indicates that concentration of petroleum hydrocarbons have decreased significantly. As stated earlier, the concentrations of up to 65,000 µg/L TPHg, 6,500 TPHd, 4,100 Toluene µg/L, 3,100 µg/L ethylbenzene, 18,400 µg/L xylenes are the highest recorded onsite. Also, the assumption that the lack of benzene concentration above 5 µg/L in Parcel A does not conclusively demonstrate dissipation in concentrations from MW-2. More likely, the spatial relationship between the soil borings in parcel A was inadequate to detect benzene contamination. Additionally, the limited depth of the OAK-IBA soil borings coupled with the linear distance between the soil borings may not have encountered the dissolved hydrocarbon plume. Moreover, the current monitoring well network cannot adequately define the hydraulic gradient downgradient of the site. It is possible that more permeable material associated with underground utilities is deflecting the hydraulic gradient, resulting in conveyance of contaminated groundwater offsite. Furthermore, no microcosm study has been conducted to conclude that bio-attenuation is occurring on site. ACEH request you present the results from the investigation in the Soil and Groundwater Investigation Report (SWI) requested below.

4. **Soil Sampling and Analysis.** During the soil boring installation, soil samples shall be screened with a PID and examined for visible staining and hydrocarbon odor. Any interval where stating, odor, or elevated PID readings occur a soil sample is to be collected and submitted for laboratory analysis. If no staining, odor, or elevated PID readings are observed, soil sample are to be collected from each boring at the capillary fringe, where groundwater is first encountered, changes in lithology, and at ten foot intervals until total depth of the boring is reached.

ACEH requests that all samples soil samples collected below 5 feet bgs be analyzed for the following constituents; TPHg and TPHd by EPA Method 8015M or 8260, BTEX, EDB, EDC, MtBE, TAME, ETBE, DIPE, TBA and EtOH by EPA Method 8260. Please include analytical results from the investigaton (in a tabular format) in the Soil and Groundwater Investigation Report requested below.

5. **Monitoring Well Redevelopment and Monitoring Well Installation.** ACEH requests that prior to monitoring well sampling, all onsite monitoring wells should be rehabilitated and/or redeveloped; thus allowing the collection of a representative sample of formation groundwater. Note that well redevelopment may require additional well volumes to be purged to assure that water quality parameters are satisfied.

   ACEH request the installation of monitoring wells designed with sand pack intervals of 2' to 5' or less, as these wells will likely be representative of depth discrete groundwater conditions. Upon completion of the monitoring well installation, ACEH request that you submit all well construction details, technical specifications and well logs in the report requested below. In addition, we request that a licensed professional surveyor survey the monitoring well location. ACEH requests that a site map be prepared showing the location of the former UST, all onsite buildings, proposed monitoring location and any other site feature that may be pertinent. Please present your rational for well design, monitoring well locations and results from well redevelopment in the SWI Report requested below.

6. **Groundwater Sampling and Analysis.** During soil boring installation groundwater samples are to be collected at the capillary fringe and at depth discrete intervals as determined by the soil boring data. ACEH requests that all groundwater samples collected are to be analyzed for the following constituents; TPHg and TPHd by EPA Method 8015M or 8260, BTEX, EDB, EDC, MtBE, TAME, ETBE, DIPE, TBA and EtOH by EPA Method 8260. Please present results from well sampling and the offsite investigation in the SWI report requested below.

7. **Request for Information.** In a July 2002 correspondence, Caltrans references the investigation conducted by the Port of Oakland, ACEH does not have the referenced report in our files. Therefore, we request Caltrans provide us the report. Our request is based on the fact that Caltrans uses data from the report to present conclusion regarding the subject parcel at Sixth and Castro.

8. **Geotracker EDF Submittals** – A review of the case file and the State Water Resources Control Board's (SWRCB) Geotracker website indicate you have not claimed your site and that electronic copies of analytical data have not been submitted for your site. Pursuant to CCR Sections 2729 and 2729.1, beginning September 1, 2001, all analytical data, including monitoring well samples, submitted in a report to a regulatory agency as part of the LUFT program, must be transmitted electronically to the SWRCB Geotracker website via the internet. Additionally, beginning January 1, 2002, all permanent monitoring points utilized to collected groundwater samples (i.e. monitoring wells) and submitted in a report to a regulatory agency, must be surveyed (top of casing) to mean sea level and latitude and longitude accurate to within 1-meter accuracy, using NAD 83, and transmitted electronically to the SWRCB Geotracker website. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). In order to remain in regulatory compliance, please upload all analytical data (collected on or after September 1,

2001), to the SWRCB's Geotracker database website in accordance with the above-cited regulation. Please perform the electronic submittals for applicable data and submit verification to this Agency by **January 15, 2007**.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Steven Plunkett), according to the following schedule:

- **January 15, 2007** – Preferential Pathway Study with Work Plan for Additional Soil and Groundwater Investigation
- **March 15, 2007** – Soil and Groundwater Investigation Report
- **March 30, 2007** – 1st Quarter 2007 Groundwater Monitoring Report
- **June 30, 2007** – 2nd Quarter 2007 Groundwater Monitoring Report
- **September 30, 2007** – 3rd Quarter 2007 Groundwater Monitoring Report
- **December 30, 2007** –4th Quarter2007 Groundwater Monitoring Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006,** the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

In order to facilitate electronic correspondence, we request that you provide up to date electronic mail addresses for all responsible and interested parties. Please provide current electronic mail addresses and notify us of future changes to electronic mail addresses by sending an electronic mail message to me at steven.plunkett@acgov.org.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 383-1767.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

cc: John Love
Geocon Consultants, Inc.
2356 Research Drive.
Livermore, CA 94550-3848

Donna Drogos, ACEH, Steven Plunkett, ACEH, File

DEPARTMENT OF TRANSPORTATION
P.O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-4444
TTY (510) 286-4454

Flex your power!
Be energy efficient!

Alameda County
JUN 16 2003
Environmental Health

June 10, 2003

Mr. Barney Chan
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Vacant Parcel, located at the intersection of 6th and Castro Streets in Oakland, CA

Dear Mr. Chan:

This letter is response to your letter dated April 29, 2003.

Comment 1: Caltrans never has never stated that the Port of Oakland investigation was a replacement for the previously approved work plan. In our April 1, 2003 letter, we had asked Don Hwang, the previous ACEHD case worker, for further requirements for the subject site since we did not receive any reply to our July 18, 2002 letter. As stated in our July 18, 2002 letter, the Port of Oakland (PO) conducted their own investigation for property acquisition purposes during the same time period Mr. Hwang asked for further studies of the site. Our July 18, 2002 letter discussed Caltrans' interpretation of the PO results relative to the results of our quarterly monitoring data in order to request what further studies ACEHD will require and a clarification of clean up levels and goals.

Comment 2: The PO is a separate entity and not under the control of Caltrans. If you wish for a full report, please contact the PO directly. As far as we are able to ascertain, the PO did not request their consultant, IRIS Environmental, to write a report based on the data they obtained. We do not have the authority to order the PO's consultant to do any work without the PO's cooperation.

Comment 3: The statistical analysis mentioned in our July 18, 2002 letter is not a product of the PO report. It is simply part of our analysis of their data since we did not receive any data discussion from the PO; we only received the raw data with a sketch of the boring locations.

Comment 4: Yes, as we stated in our conclusions in our July 18, 2002 letter, the petroleum hydrocarbon plume exists around monitoring well MW2. Due to the State's budget crisis, Caltrans has not been allowed to contract out work to our hazardous waste consultants until after the end of the State's fiscal year ending June 30, 2003. Therefore, we are unable to provide any type of reporting at all until the State budget crisis has been resolved sometime after July 1, 2003. Once Caltrans has been given the allocation to fund our hazardous waste consultants and provided we have not sold the property, we will obtain the services of a hazardous waste consultant to continue groundwater monitoring.

Comment 5: This comment seems to imply that the clean up levels are somewhat negotiable and will depend on who will be the future owner. As we stated to Mr. Hwang, Caltrans will be selling this property as excess land. Caltrans is required to sell excess land that is not needed for any transportation project. Since the PO has decided to not pursue acquisition of the site, Caltrans will sell this excess land to the next interested buyer. Therefore, we need further specific guidance on what ACEHD will deem as the

appropriate and relevant regulatory standards for clean up. We will also need the ACEHD's study and clean up requirements stated in deed restriction language.

Comment 6: As we stated under Comment 4, due to the State's budget crisis, Caltrans has not been allowed to contract out work to our hazardous waste consultants until after the end of the State's fiscal year ending June 30, 2003. Therefore, we are unable to provide any type of reporting at all until the State budget crisis has been resolved sometime after July 1, 2003. Once Caltrans has been given the allocation to fund our hazardous waste consultants and provided we have not sold the property, we will obtain the services of a hazardous waste consultant to continue groundwater monitoring.

Please direct any questions you may have regarding this site to me at (510) 286-5659.

Sincerely,

Celia McCuaig

CELIA McCUAIG
District Branch Chief
Office of Environmental Engineering

c: CM/file, GCrisostomo

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

April 29, 2003

Ms. Jill Pollock
Department of Transportation
P.O. Box 23660
Oakland, CA 94623-0660

Dear Ms. Pollock:

Subject: Fuel Leak Case RO0000250, Vacant Parcel, 6th and Castro St., Oakland, CA 94607

Alameda County Environmental Health, Local Oversight Program (LOP) staff, has reviewed the case file for the subject site including the July 18, 2002 letter report from Ms. Celia McCuaig of your office. In this letter, Cal Trans questions whether groundwater monitoring should continue at this site and if so, if our office could provide more relevant regulatory standards as opposed to drinking water standards. In addition to responding to these questions, we request that you address the following technical comments and submit the reports requested below.

Technical Comments

1. We are aware that the Port of Oakland performed subsurface investigations on this and the two adjacent parcels, which Cal Trans considers as replacement for the previously approved August 6, 2001 ERM work plan. However, there are significant differences in the number and locations of the borings ERM proposed and actual borings advanced for the Port of Oakland. The primary goal of the ERM work plan was to determine the appropriate location(s) for down-gradient well(s) relative to the source area (MW-2). Also, groundwater gradient could be further confirmed with the additional well(s). It appears the Port of Oakland investigation was a general survey of soil and groundwater conditions on three prospective sites being considered for purchase.
2. The Port of Oakland report is incomplete and cannot be reviewed by our office. The report is only a partial summary of analytical data and tables. It lacks necessary items including the stamp and signature of a registered professional, boring logs, signed analytical data sheets from a certified laboratory, figures to scale, cross sectional diagrams, prior boring and monitoring well locations and recommendations and conclusions. The only conclusions made were that of Ms. McCuaig of Cal Trans.
3. The statistical analysis presented in the Port of Oakland report is not appropriate for characterizing the 6th and Castro St. site. Although 25 data points are evaluated, they represent only five discrete locations sampled for the entire block. A better statistical evaluation should include all prior analytical data. In addition, data from the known hot spots should be evaluated separately, since remediation may be an alternative for those areas.
4. The absence of elevated contamination down-gradient of the 6th & Castro block on Parcel A is stated as evidence that bio-remediation has occurred, however, the petroleum concentration in MW-2 has not shown attenuation, therefore, bio-remediation cannot be assumed to be occurring elsewhere. In addition, the locations of the samples taken on Block A have not been shown to be appropriately down-gradient. Additional samples are necessary to verify the extent of contamination and an additional well is desirable to confirm gradient.

Ms. Jill Pollock
RO0000250
6th and Castro St. Parcel, Oakland, CA 94607
April 29, 2003

5. Appropriate cleanup levels for soil and groundwater can be obtained using guidance documents such as the San Francisco Bay Region Water Quality Control Board Guidance Document (12/01), the City of Oakland Urban Land Redevelopment Program Guidance Document and EPA Preliminary Remediation Goals (PRGs). Cleanup levels should be consistent with the most conservative potential future use of the site, although it is recognized that some areas in Oakland are not considered as sources for drinking water.
6. Continued groundwater monitoring is necessary to demonstrate plume stability, define the extent of the plume and confirm the absence of halogenated volatile organic compounds.

Technical Report Request

- May 30, 2003- Copy of complete Port of Oakland investigation report (please address items in #2) and a work plan to complete off-site evaluation of soil and groundwater. Please also include soil and groundwater iso-concentration contours for TPHg and BTEX constituents and an evaluation of potential remediation alternatives.
- June 30, 2003- groundwater monitoring report.

If you have any questions, please contact me at (510) 567-6765.

Sincerely,

Barney M. Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos

6th&Castro 1

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

ENVIRONMENTAL HEALTH SERVICES
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1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 5, 2001

Jill Pollock
State of California-Business, Transportation, Housing Agency
Dept. of Transportation
Office of Environmental Engineering
Box 23660
Oakland, CA 94623-0660

Dear Ms. Pollock:

Subject: Vacant Parcel, 6th St. and Castro St., Oakland, CA
RO0000250

"1st Quarter 2001, 7th Quarterly Groundwater Monitoring Report" by PSI dated July 26, 2001 and "Site Investigation Workplan" by Environmental Resources Management dated August 6, 2001 were reviewed. The contaminant concentrations found in the groundwater samples collected on March 5, 2001 increased compared to prior sampling results. Monitoring well MW-2's concentrations were 65,000 ug/l Total Petroleum Hydrocarbons-Gasoline (TPH-G), 6,500 ug/l TPH-Diesel (TPH-D), <400 ug/l Total Petroleum Hydrocarbons-Motor Oil (TPH-MO), 730 ug/l Benzene, 4,100 ug/l Toluene, 3,100 ug/l Ethylbenzene, and 18,400 ug/l Xylene (BTEX), <50 ug/l Methyl Tertiary-Butyl Ether (MTBE), 4,720 ug/l Volatile Organic Compounds (VOCs), and <20 ug/l lead. Monitoring well MW-2's VOC concentrations were 200 ug/l n-Butylbenzene, <13 ug/l 1,2-Dichloroethane, <13 ug/l 1,2- Dichloropropane, 100 ug/l Isopropylbenzene, 34 ug/l p- Isopropyltoluene, 1,200 ug/l Naphthalene, 370 ug/l n-Propylbenzene, <13 ug/l Trichloroethene, 2,300 ug/l 1,2,4-Trimethylbenzene, and 700 ug/l 1,3,5 Trimethylbenzene. TPH-D was not found previously. No samples were analyzed for Oil & Grease. Previous quarters found Oil & Grease concentrations at a minimum of 4,400 ug/l. Therefore, resume analyses for Oil & Grease. Concentrations found in monitoring wells MW-1 and MW-3 were below detection limits for all contaminants.

The workplan proposes grab groundwater sampling on the 6th St. side of the parcel to determine where to locate additional monitoring wells. For soil and groundwater samples from the monitoring wells, include analyses for BTEX. Additionally, for the groundwater samples include VOCs and Oil & Grease. If Oil & Grease analyses cannot be performed, then explain. Please state whether you agree with these changes. If you have any questions, you may call me at 510/567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: John Cavanaugh, Michael Blanchard, Environmental Resources Management, 1777 Botelho Dr., Walnut Creek, CA 94596

file

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
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May 8, 2001

Celia McCuaig, District Branch Chief
State of California-Business, Transportation, Housing Agency
Dept. of Transportation
Office of Environmental Engineering
Box 23660
Oakland, CA 94623-0660

Subject: Vacant Parcel, 6th St. and Castro St., Oakland, CA
RO0000250

"Fourth Quarter 2000, Sixth Quarterly Groundwater Monitoring Report" dated December 6, 2000 was reviewed. The contaminant concentrations found in the groundwater samples collected on November 16, 2000 were consistent with prior sampling results. Monitoring well MW-2's concentrations were 25,000 ug/l Total Petroleum Hydrocarbons-Gasoline (TPH-G), <400 ug/l TPH-Diesel (TPH-D), 550 ug/l Benzene, 2,900 ug/l Toluene, 1,500 ug/l Ethylbenzene, and 7,100 ug/l Xylene (BTEX), <50 ug/l Methyl Tertiary-Butyl Ether (MTBE), 5,000 ug/l Oil & Grease, 2,247 ug/l Volatile Organic Compounds (VOCs), and <15 ug/l lead. Monitoring well MW-2's VOC concentrations were <25 ug/l n-Butylbenzene, 91 ug/l 1,2-Dichloroethane, <25 ug/l 1,2- Dichloropropane, 46 ug/l Isopropylbenzene, <25 ug/l p- Isopropyltoluene, 460 ug/l Naphthalene, 160 ug/l n-Propylbenzene, <25 ug/l Trichloroethene, 1,200 ug/l 1,2,4-Trimethylbenzene, and 290 ug/l 1,3,5 Trimethylbenzene. Concentrations found in monitoring wells MW-1 and MW-3 were nondetectable or nearly nondetectable for all contaminants.

We concur with Professional Service Industries' recommendation to continue groundwater monitoring and to conduct an investigation to determine the extent of the groundwater plume to the south. Therefore, a workplan for such an investigation is required. Additionally, if the results for MW-2 for the next round of sampling are consistent with those obtained recently, then a Corrective Action Plan, which includes an assessment of impacts, a feasibility study, and applicable cleanup levels should be considered. Also, the report was not signed, please check that future reports are signed.

If you have any questions, you may call me at 510/567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

C: Frank Poss, Professional Service Industries, 1320 W. Winton Ave., Hayward, CA 94545
file

LOP - RECORD CHANGE REQUEST FORM

printed: 02/01/2000

Mark Out What Needs Changing and Hand to LOP Data Entry
(Name/Address changes go to Annual Programs Data Entry)

Insp: DH

AGENCY # : 10000 SOURCE OF FUNDS: F SUBSTANCE: 8006619
StID : 6517 LOC:
SITE NAME: Caltrans DATE REPORTED : 05/11/1998
ADDRESS : 6th & Castro St DATE CONFIRMED: 05/11/1998
CITY/ZIP : Oakland 94607 MULTIPLE RPs : N

SITE STATUS

CASE TYPE: U CONTRACT STATUS: 4 PRIOR CODE: EMERGENCY RESP:
RP SEARCH: S DATE COMPLETED: 05/11/1998
PRELIMINARY ASMNT: DATE UNDERWAY: DATE COMPLETED:
REM INVESTIGATION: DATE UNDERWAY: DATE COMPLETED:
REMEDIAL ACTION: DATE UNDERWAY: DATE COMPLETED:
POST REMED ACT MON: DATE UNDERWAY: DATE COMPLETED:

ENFORCEMENT ACTION TYPE: 1 DATE ENFORCEMENT ACTION TAKEN: 05/11/1998
LUFT FIELD MANUAL CONSID:
CASE CLOSED: DATE CASE CLOSED:
DATE EXCAVATION STARTED : REMEDIAL ACTIONS TAKEN:

RESPONSIBLE PARTY INFORMATION

RP#1-CONTACT NAME: Micheal Flake
COMPANY NAME: Cal-trans -district 4
ADDRESS: P.o Box 23660
CITY/STATE: Oakland, Ca - 94623-0660

INSPECTOR VERIFICATION:

NAME _____ SIGNATURE _____ DATE _____

DATA ENTRY INPUT:

Name/Address Changes Only

ANNPGMS _____ LOP ____ DATE _____

Case Progress Changes

LOP _____ DATE _____

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

ENVIRONMENTAL HEALTH SERVICES
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(510) 337-9335 (FAX)

November 04, 1999

Jill Pollock
Department of Transportation
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Investigations at the CalTrans vacant lot, located at 6th and Castro Street, Oakland, CA

Dear Ms. Pollock,

This office has reviewed the October 14, 1999 Hazardous Waste Preliminary Site Investigation Report, prepared by Professional Service Industries, Inc. (PSI) for the above site. Based on our review of the analysis results of soil and groundwater samples collected from the eleven borings emplaced at the site (OAK-1 through OAK-11) and the three monitoring wells installed at the site (MW-1 through MW-3) the following is a list of our primary concerns:

- Elevated levels of lead were identified in both the soil and groundwater at the site. Up to 1,700 parts per million (ppm) lead was identified in the soil, exceeding the 400ppm human-health protective threshold value for a residential site and the 1,000ppm threshold value for a commercial site, per Region IX EPA's Preliminary Remediation Goals (PRGs). Contaminants in soil exceeding the PRG levels for the planned site use should be excavated. Otherwise, a Risk Management Plan (RMP) will be required stating that a cap will be maintained on the soil and that a Health & Safety Plan, in compliance with OSHA requirements, shall be prepared and followed every time there is construction/excavation work at the site. You will be required to file this RMP with the Deed to the property.
- Additionally, a number of soil samples exceeded the lead leachability threshold values for both the State STLC and Federal TCLP tests, indicating that the lead-contaminated soil may be impacting groundwater. Although groundwater samples also identified lead concentrations, these samples were not filtered with a .45 micron filter prior to analysis in order to obtain the actual dissolved lead concentrations. Therefore, in order to confirm whether the elevated lead-contaminated soil at the site is impacting groundwater, this office is requiring that the next round of quarterly groundwater samples be analyzed for dissolved lead, instead of total lead. If the dissolved lead analysis indicates that groundwater has, in fact, been impacted, excavation of the lead-contaminated soil may be required to prevent further impact. Additionally, the dissolved lead plume will need to be further delineated/characterized downgradient of OAK5 and OAK9.
- 1,2-Dichlorethane was identified in a groundwater sample collected from Well MW-2 at 160 parts per billion (ppb). This concentration exceeds the 5ppb drinking water Maximum Contaminant Level (MCL) for California. Currently, the San Francisco Bay-Regional Water Quality Control Board (RWQCB) is not

- closing cases with chlorinated hydrocarbons (VOCs) exceeding MCL concentrations, and is requiring on-going groundwater monitoring for these sites. Therefore, the monitoring wells shall continue to be analyzed for VOCs.

- Elevated levels of Oil & Grease were identified both in shallow soils at the site and in groundwater. Based on the elevated levels of Oil & Grease in shallow soils, this office will be requiring, as part of future closure requirements, that a cap be maintained over this contaminated soil and that a Health & Safety Plan be prepared as part of any future construction/excavation work at the site.

- Elevated levels of Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene were identified at the western end of the site. Based on the identified concentrations,

Quarterly groundwater monitoring of the three monitoring wells is required. Analysis of the groundwater samples shall include TPHg, TOG, BTEX, dissolved lead, and VOCs. Based on the results of the next several quarterly groundwater monitoring events, this office will determine whether further delineation of the observed groundwater contamination will be required, and whether a risk assessment will be required and what it will entail. The site is overdue for a quarterly groundwater monitoring event. The monitoring wells shall be sampled within the next 30 days of the date of this letter (i.e., by December 02, 1999), and the corresponding monitoring report shall be submitted to this office by January 13, 2000.

Lastly, there are a number of issues that were outlined in the November 16, 1998 letter that this office sent you that was not addressed in the report:

- This office required that a well survey be conducted within 0.5 miles radius of the site. This office has not received any response to this request;
- According to ENGEO Inc.'s January 27, 1993 Phase One Assessment Report, a former groundwater production well was reported to be on site. This office requested additional information on this well, and has not yet received any response. This office needs to know whether this well is currently being used. If it is, this office will need to know the screened interval of this well to determine whether it may be drawing or influencing the migration of the contaminant plume. If this well is no longer in use, it must be properly destroyed under permit; and
- This office required that research be conducted to determine whether the storm drain utility line trench running along the property was providing a conduit for contaminant plume migration at the site. This issue has not yet been addressed.

The above issues must be addressed and included with the next quarterly groundwater monitoring report.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin, R.G.
Hazardous Materials Specialist

Cc: Frank R. Poss
Professional Service Industries, Inc.
1320 West Winton Ave.
Hayward, CA 94545

Leroy Griffin
City of Oakland Fire Dept., OES
1605 Martin Luther King Jr. Way
Oakland, CA 94612-1393

TRANSMIT REPORT

1999.11-04 09:16
510 337 9335
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To Jill Pollock	From Juliet Shin
Co. Cal Trans	Co. Alameda Cty
Dept.	Phone # 510-567-6763
Fax # 510-286-5728	Fax # 510-337-9335

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

1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

November 04, 1999

Jill Pollock
Department of Transportation
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Investigations at the CalTrans vacant lot, located at 6th and Castro Street, Oakland, CA

Dear Ms. Pollock,

This office has reviewed the October 14, 1999 Hazardous Waste Preliminary Site Investigation Report, prepared by Professional Service Industries, Inc. (PSI) for the above site. Based on our review of the analysis results of soil and groundwater samples collected from the eleven borings emplaced at the site (OAK-1 through OAK-11) and the three monitoring wells installed at the site (MW-1 through MW-3) the following is a list of our primary concerns:

- Elevated levels of lead were identified in both the soil and groundwater at the site. Up to 1,700 parts per million (ppm) lead was identified in the soil, exceeding the 400ppm human-health protective threshold value for a residential site and the 1,000ppm threshold value for a commercial site, per Region IX EPA's Preliminary Remediation Goals (PRGs). Contaminants in soil exceeding the PRG levels for the planned site use should be excavated. Otherwise, a Risk Management Plan (RMP) will be required stating that a cap will be maintained on the soil and that a Health & Safety Plan, in compliance with OSHA requirements, shall be prepared and followed every time there is construction/excavation work at the site. You will be required to file this RMP with the Deed to the property.
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ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

June 15, 1999

Chris Zdunkiewicz
Cal Trans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Proposed monitoring well locations for the Cal Trans vacant lot, located at 6th and Castro Street, Oakland, CA 94607

Dear Ms. Zdunkiewicz,

Per Professional Service Industries, Inc.'s (PSI) workplan, dated May 14, 1999, for the above site, an initial round of borings have been sampled at the site and PSI is ready to install the three required permanent monitoring wells. Frank Poss, PSI, has faxed me a copy of the proposed well locations which were selected based on the analytical results of the boring samples (please refer to attached copy of figure showing proposed well locations). These locations are acceptable to this office. Per Mr. Poss's message to me, the three wells will be installed at the site on Thursday, June 17, 1999. Please be reminded that a report detailing both the boring and well work shall be submitted to this office within 45 days after completing field activities (i.e. ~ by July 30, 1999).

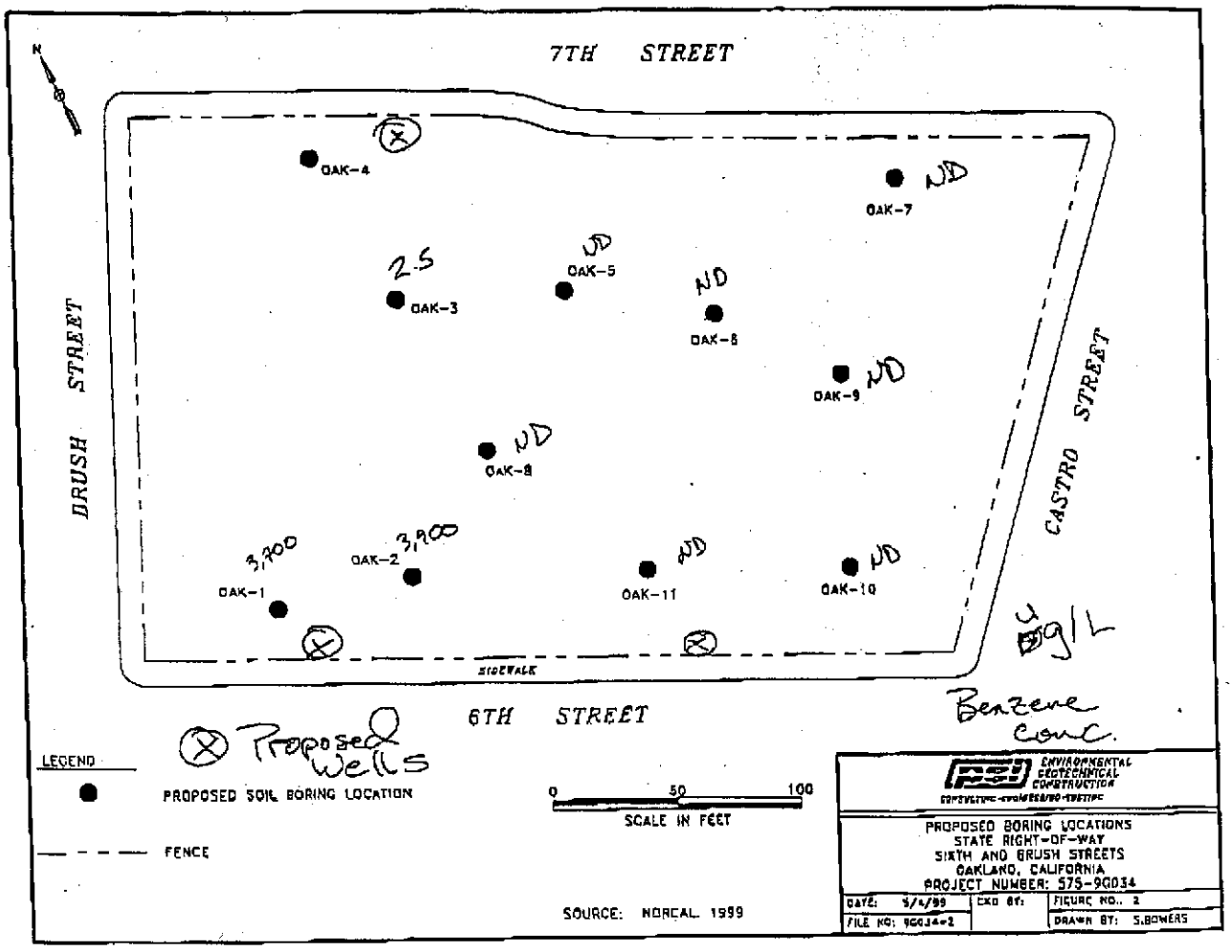
If you have any questions or comments, please contact me at (510)567-6763.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

ATTACHMENT

Cc: Frank R. Poss
Professional Service Industries, Inc.
1320 West Winton Ave.
Hayward, CA 94545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BRUSH STREET
CASTRO STREET
6TH STREET
SIDEWALK
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PSI ENVIRONMENTAL GEOTECHNICAL CONSTRUCTION
PROPOSED BORING LOCATIONS
STATE RIGHT-OF-WAY
SIXTH AND BRUSH STREETS
OAKLAND, CALIFORNIA
PROJECT NUMBER: 575-9G034
DATE: 5/4/99
CKD BY:
FIGURE NO.: 2
FILE NO: 9G034-2
DRAWN BY: S.BOWERS

TRANSMIT REPORT

1999.06-15 09:04
510 337 9335
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To Chris Zdunkiewicz	From Juliet Shin
Co. Cal Trans	Co. Alameda City
Dept.	Phone # 510-567-6763
Fax # 510-286-5728	Fax # 510-337-9335

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

1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

June 15, 1999

Chris Zdunkiewicz
Cal Trans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Proposed monitoring well locations for the Cal Trans vacant lot, located at 6th and Castro Street, Oakland, CA 94607

Dear Ms. Zdunkiewicz,

Per Professional Service Industries, Inc.'s (PSI) workplan, dated May 14, 1999, for the above site, an initial round of borings have been sampled at the site and PSI is ready to install the three required permanent monitoring wells. Frank Poss, PSI, has faxed me a copy of the proposed well locations which were selected based on the analytical results of the boring samples (please refer to attached copy of figure showing proposed well locations). These locations are acceptable to this office. Per Mr. Poss's message to me, the three wells will be installed at the site on Thursday, June 17, 1999. Please be reminded that a report detailing both the boring and well work shall be submitted to this office within 45 days after completing field activities (i.e. ~ by July 30, 1999).

If you have any questions or comments, please contact me at (510)567-6763.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

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

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

May 18, 1999

Chris Zdunkiewicz
Cal Trans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Workplan for investigations at the Cal Trans vacant lot, located at 6th and Castro Street, Oakland, CA 94607

Dear Ms. Zdunkiewicz,

This office has reviewed Professional Service Industries, Inc.'s workplan, dated May 14, 1999, for the above site and finds this workplan acceptable with the following changes:

- One of the three proposed groundwater monitoring wells must be located in the area of the former gas station adjacent to former Boring B-1, which identified elevated concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene in groundwater in 1996.
- The three groundwater monitoring wells must be surveyed to Mean Sea Level from an established benchmark.
- You are required to wait a minimum of 72 hours after installing the three monitoring wells before developing them. Additionally, you are required to wait a minimum of 72 hours after developing the wells before purging and sampling the wells. Per the attached guidance document from RWQCB, you have the option of seeking the non-purge approach for these wells in the future. If you are interested in the non-purge option, you must follow the protocol in the attached guidance document, which includes collecting both a purge and non-purge sample during this upcoming sampling event.
- Please be reminded that the analysis for benzene, toluene, ethylbenzene, and total xylenes should be included in your 8260 analysis of soil and groundwater samples.
- Lastly, a former site plan from 1995 indicates a groundwater production well on site, southwest of the former Durham Farm Creamery. Please provide information to this office as to whether this well still exists at the site. If it does not, please provide documentation that this well was properly destroyed. Based on the fact that this site is vacant, it is assumed that this well is no longer in use. If it is still in use, operation of this well must be discontinued until this site is closed.

It is the understanding of this office that this workplan will be implemented at the site on Wednesday and Thursday, May 19 and 20, 1999. A report documenting the work shall be submitted to this office within 45 days after completing field activities.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

ATTACHMENT

Cc: Frank R. Poss
Professional Service Industries, Inc.
1320 West Winton Ave.
Hayward, CA 94545

Post-it® Fax Note 7671	Date 1/4/99	# of pages ▶ 3
To Juliett Shin	From Chuck Headlee	
Co./Dept.	Co.	
Phone #	Phone #	
Fax # 337-9335	Fax #	

CalEPA

San Francisco Bay
Regional Water
Quality Control
Board

2101 Webster Street
Suite 500
Oakland, CA 94612
(510) 286-1255
FAX (510) 286-1380

Pete Wilson
Governor

To: Interested Parties

January 31, 1997
File: 1123.64

SUBJECT: **Utilization of Non-Purge Approach for Sampling of Monitoring Wells Impacted by Petroleum Hydrocarbons, BTEX, and MTBE**

REFERENCE: "The California Groundwater Purging Study for Petroleum Hydrocarbons", Report for Western States Petroleum Association by SECOR International Incorporated, Dated October 28, 1996

Finding and Recommendation

The WSPA study concludes that selection of a non-purge sampling methodology will not affect the overall variability of analytic data, and will provide a comparable, and in many cases, conservative estimate of petroleum hydrocarbons in groundwater. Based upon our review of the study, we conclude that for monitoring wells at fuel UST sites purging is not required providing the conditions we have outlined below are met. Our rationale is provided below.

Rationale

Since the release of the Western States Petroleum Association (WSPA) study on the effects of purging or not purging gasoline impacted monitoring wells prior to sampling there have been questions posed as to the validity and applicability of the study. Board staff acknowledge the concerns of some towards the possible bias in the study because of variations in data quality due to differing purging and sampling techniques utilized in the study, the lack of specific well design information or water quality parameter information, and the questions of statistical bias introduced into the study by the inclusion of non-detect data. However, we believe that these concerns are mitigated by the overall environmental and economic benefits discussed below.

Section 13267 (b) of the Water Code states that for technical or monitoring program reports the board may specify that ... "The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports". From an environmental perspective, there is an advantage in reducing the environmental burden by virtue of reducing the volumes of purge water for treatment and disposal, which in turn reduces secondary impacts to air and water quality from waste handling, transport, and treatment of the purge water. In

7. Existing wells which have already been routinely purged in previous sampling events immediate to being switched to a non-purging mode do not require an initial duplicate non-purged and purged sample.

8. Monitoring data frequency shall be as required by the appropriate regulatory oversight agency.

9. Should a Responsible Party request site-closure where the non-purged approach has been used, the final confirmation sampling event shall include both non-purged and purged samples from each well or as agreed upon with the appropriate regulatory oversight agency.

Prior to implementing the non-purge approach, the appropriate regulatory oversight agency shall be contacted, with an information copy to this office. Please call John Kaiser (510 - 286 - 0803) or me (510 - 286 - 0304) if you have any questions regarding this letter.

Loretta K. Barsamian
Executive Officer

Stephen I. Morse, P.E.
Chief,
Toxics Cleanup Division

cc: SWRCB - CWP (Alan Patton and Dave Deaner)
Regional Boards 1,3-9 UST Program Managers
RWQCB Region 2 UST Staff
USEPA, Region 9 (Matt Small)
Region 2 Local Agency UST Managers

Note: A synopsis of the WSPA Report including information on how to obtain the complete report may be found on the Internet at http://www.secor.com/purge.html

TRANSMIT REPORT

1999.05-18 16:01
510 337 9335
ALAMEDA CO EHS HAZ-OPS

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To Chris Zdunkiewicz	From Juliet Shin
Co. Cal Trans	Co. Alameda Cty
Dept.	Phone # 510-567-6763
Fax # (510) 286-5728	Fax # 510-337-9335

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

...Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

May 18, 1999

Chris Zdunkiewicz
Cal Trans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Workplan for investigations at the Cal Trans vacant lot, located at 6th and Castro Street, Oakland, CA 94607

Dear Ms. Zdunkiewicz,

This office has reviewed Professional Service Industries, Inc.'s workplan, dated May 14, 1999, for the above site and finds this workplan acceptable with the following changes:

- One of the three proposed groundwater monitoring wells must be located in the area of the former gas station adjacent to former Boring B-1, which identified elevated concentrations of Total Petroleum Hydrocarbons as gasoline (TPHg) and benzene in groundwater in 1996.
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TRANSMIT REPORT

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Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 4

To Frank Poss	From Juliet Shin
Co. PSI	Co. Alameda Cty
Dept.	Phone #
Fax # 510-785-1192	Fax #

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

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

May 18, 1999

Chris Zdunkiewicz
Cal Trans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
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TRANSMIT REPORT

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

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 5

To Frank Poss	From Juliet Shin
Co. PSI	Co. Alameda City
Dept.	Phone # 510-567-6763
Fax # 510-785-1192	Fax # 510-337-9335

1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

May 18, 1999

Chris Zdunkiewicz
Cal Trans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517
Re: Workplan for investigations at the Cal Trans vacant lot, located at 6th and Castro Street, Oakland, CA 94607

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DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

January 19, 1999

Ronald Moriguchi, Dist. Office Chief
Calif. Department of Transportation
P.O. Box 23660
Oakland, CA 94623-0660

STID: 6517 & 6591
Re: Investigations at two Caltrans sites, located at the corner of Mattox Road and Foothill in Hayward, CA, and 6th and Castro Street in Oakland, CA

Dear Mr. Moriguchi,

This office has received and read your letter, dated January 7, 1999, requesting an extension of the due date, from January 11, 1999 to March 31, 1999, for the submittal of a workplan for each of the two above referenced sites. This office will grant you this requested extension.

In response to your question, the State reimburses our office for overseeing investigations and cleanup related to sites that have had a release from petroleum underground storage tanks. Therefore, this office is reimbursed by the State for oversight of your 6th and Castro site in Oakland. However, the contaminants identified at the Mattox Road and Foothill site cannot definitely be related to releases from petroleum underground storage tanks, so this office must seek reimbursement for our oversight costs from the Responsible Parties, and not the State. The contaminants of concern at your Hayward site are Lead and Oil & Grease, and these constituents do not appear to be resulting from the former Exxon station tanks since analysis of samples collected from the site did not identify any gasoline or diesel constituents. Therefore, a deposit for this site is required for oversight costs. Please submit the requested $500.00 deposit for the Hayward site prior to March 31, 1999.

As stated above, the workplans for the two above Caltrans sites will be submitted to this office by March 31, 1999. If you have any further questions, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

Cc: Chris Zdunkiewicz
Caltrans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

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

ENVIRONMENTAL HEALTH SERVICES
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9335 (FAX)

November 16, 1998

Chris Zdunkiewicz
CalTrans, District 4
Environmental Engineering
P.O. Box 23660
Oakland, CA 94623-0660

STID 6517

Re: Investigations at the CalTrans vacant lot, located at 6th and Castro Street, Oakland, CA 94607

Dear Ms. Zdunkiewicz,

In 1987, ERM-West Consultants (ERM) conducted an environmental site assessment to identify any environmental problems at the above site resulting from past uses of the site. Historical records searches determined that the site had formerly been occupied by a number of businesses, most notably a gas station, an auto repair garage, Durham Farm Creamery, a machine shop, and laundry facility. At least four underground storage tanks were associated with the former gas station, and dairy. ERM drilled seven borings at the site, B-1 through B-7, down to 15- to 17-feet below ground surface (bgs). Soil samples collected from Borings B-2 through B-5 were analyzed for Volatile Organics using Method 8240, which included the analyses for benzene, toluene, ethylbenzene, and total xylenes (BTEX). Soil samples collected from Borings B-1, B-6, and B-7 were specifically analyzed for BTEX, ethylene dibromide (a lead scavenger), napthalene, and Total Petroleum Hydrocarbons as Gasoline (TPHG). Analyses of the soil samples identified up to 1.3 parts per million (ppm) ethylbenzene, 1.5ppm toluene, and 7.9ppm total xylenes.

Groundwater samples were collected from Borings B1 and B6 and analyzed for Volatile Organics using Method 8240. Analysis of these groundwater samples identified up to 0.5 parts per billion (ppb) ethylbenzene, 0.3ppb toluene, and 5ppb total xylenes.

Additional investigations were continued at the site in 1995 when Geocon advanced seven hydropunches, OAK1 through OAK7, at the site. Soil samples were collected between 1- and 3-feet bgs from OAK3 through OAK7, and between 1- and 17-feet bgs in the remaining hydropunch locations. Soil samples collected from all seven borings were analyzed for Total Lead and Oil and Grease, and selected soil samples were additionally analyzed for CAM 17 metals, TPHG, Total Petroleum Hydrocarbons as Diesel (TPHD), and BTEX. Analysis of these soil samples identified up to 410ppm Total Lead, and 8,000ppm Oil and Grease. Groundwater samples were collected from OAK2 and OAK6 and analyzed for TPHG, TPHD, and BTEX. No contaminants were identified in these two samples above detection limits.

In response to the above identified contamination, International Technology Corporation (IT) drilled eleven borings, Borings B1-1 through B1-11, at the site in 1996. Soil samples collected from all the borings were analyzed for TPHG, TPHD, Oil and Grease, BTEX, Total Lead, and STLC and TCLP leachability tests. Selected soil samples were also analyzed for Halogenated Volatiles using Method 8010. Analysis of these soil samples identified up to 1,100ppm TPHG, 2.6ppm benzene, 34ppm toluene, 25ppm ethylbenzene, 140ppm total xylenes, and 397ppm Total Lead. Several soil samples containing lead exceeded the Hazardous Waste threshold value of 5ppm for lead in the STLC leachability test, however, these samples were below threshold values for the TCLP test. A total of four "grab" groundwater samples were collected from Borings B1-4, B1-6, B1-8, and B1-11 and analyzed for TPHG, TPHD, BTEX, and Halogenated Volatiles. Analysis of these groundwater samples identified up to 1,700ppb TPHG, 51ppb benzene, 200ppb toluene, 59ppb ethylbenzene, 290ppb total xylenes, and 5.4ppb 1,2-dichloroethane.

Per Article 11, Division 3, Chapter 16, Title 23 of the California Code of Regulations, you are required to conduct a Preliminary Site Assessment (PSA) to determine the lateral and vertical extent and severity of soil and groundwater contamination which has resulted from the release at the site. The information gathered by the PSA will be used to determine an appropriate course of action to remediate the site, if deemed necessary. The major elements of such an investigation, include, but are not limited to, the following:

- A minimum of three groundwater monitoring wells shall be installed at the site. During the installation of the groundwater monitoring wells, soil samples are to be collected at five-foot-depth intervals and any significant changes in lithology.
- Subsequent to the installation of the monitoring wells, these wells must be surveyed to Mean Sea Level to an accuracy of 0.01 foot. Groundwater samples are to be collected and analyzed quarterly, along with water level measurements to calculate groundwater flow directions at the site. Groundwater samples collected from these wells shall be analyzed for TPHG, BTEX, Oil & Grease, soluble lead, and chlorinated hydrocarbons using Method 8010.

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. All reports and proposals must be submitted under a seal of a California –Registered Geologist, -Certified Engineering Geologist, or – Registered Civil Engineer.

The PSA workplan is due within 60 days of the receipt 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 groundwater contamination characterization;
- Interpretations 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 or remediation; and
- An Interpretation and Conclusions section

As part of the required groundwater investigations, a well survey shall be conducted within 0.5 miles of the site to locate any wells that may be impacted by the site or influencing the groundwater flow directions at the site. According to ENGEO Inc.'s January 27, 1993 Phase One Assessment report, a former groundwater production well may be located on the site.

Additionally, research must be conducted to determine whether the storm drain utility line trench running along the property could influence the flow direction of the contaminant plume. Information must also be submitted to this office regarding whether the temporary wells installed by ERM were ever destroyed properly under permit. If not, these wells must be properly closed to prevent contaminated surface water from infiltrating into the groundwater.

In addition to the above required groundwater investigations, a human-health risk assessment shall be conducted for the shallow lead-contaminated soil at the site. The potential threat of these lead concentrations will depend on the planned future uses of the site. For example, the California Environmental Protection Agency's Preliminary Remediation Goals for lead in soil at a residential site is 130ppm. Based on the results of additional soil and groundwater investigations at the site, a risk assessment addressing some of the other contaminants, such as benzene, may eventually be required as well.

Lastly, please submit the original laboratory analytical results with the QA/QC information and chemist's signature to accompany the sample results listed in Table 1 of the December 4, 1996 IT Report.

The PSA workplan, along with your responses to the above requests for information, shall be submitted to this office within 60 days of the date of this letter, i.e., by January 11, 1998.

If you have any questions or comments, please contact me at (510) 567-6763.

Sincerely,

Juliet Shin
Hazardous Materials Specialist

Cc: Kristen L Schober, Cal Trans, District 4
Office of Right-Of-Way, P.O. Box 23660, Oakland, CA 94623-0660

October 30, 1998

Juliet Shin
Alameda County Environmental Health
1131 Harbor Bay Parkway #250
Alameda CA 94502-6577

Per your request, I am forwarding copies of the reports you mentioned in your notes and comments, dated October 19, 1998, regarding the Caltrans parcels at Mattox and Foothill in Hayward, and 6th and Castro in Oakland.

Copies of the following three reports are enclosed: the July 19, 1995 Workplan for the Geocon Site Investigation, the 1987 Initial Site Assessment prepared by ERM West, and the Phase One Environmental Site Assessment prepared by ENGEO Incorporated, January 27 1993. I am in the process of addressing the comments that were sent to our Office via fax simile on October 19, 1998. Please give me a call at (510) 286-4914 with any further questions or comments you may have regarding the assessment of these two parcels.

Sincerely,

Chris Zdunkiewicz
Environmental Engineering
Caltrans

Cal Trans
District 4, Environmental Engineering
P.O. Box 23660
Oakland, CA
94623-0660

Kristin L. Schober
Dist
Office of Right-of-Way

ALAMEDA COUNTY HAZARDOUS MATERIALS DIVISION
DEPOSIT / REFUND ACCOUNT SHEET printed03/18/98

SITE INFORMATION

Former Service Station
0 6th St & Castro St
Oakland 94607
Site Contact:
Site Phone :

StID: 6517 Site#: 6409
PROJECT#: 6409A
PROJECT TYPE:*** M ***
INSP: Tom Peacock
ACCT. SHEET PG #: ____

PROPERTY OWNER INFORMATION

Owner Contact: Leslie / Norma
Owner Phone :

Could you please close the dep/ref
M Logan

PAYOR INFORMATION

I T Corporation
4585 Pacheco Blvd
Martinez CA 94553 # 381
Payor Contact: Dennis P Dunn
Payor Phone : 372-9100

Date	Action Taken	Time In	Time Out	Hours Spent/ Depstd	Hour Balnce	Money Spent/ Depositd	Money Balance
03/17/98	Rcpt# 805509 Deposit of $500.00 @ $94/hour			+5.31	+5.31	$500.00	$500.00
03/17/98	Admin. Charge: 1 hour			1.00	4.31	94.00	$406.00
4/16/98	Review			2.0			
4/17/98	Documentation + Discussion			1.0			
4/17/98	Transfer to LOP.			1.0			

UPON COMPLETION OF PROJECT

PROJ COMPLETED BY : Madhulla Logan ATTACH: __ State Forms A,B & C
__ Billing Adjustment*

DATE OF COMPLETION : 4/17/98 DATE SENT TO BILLING: ____

TOTAL COST OF PROJECT: ____ REFUND AMOUNT: ____ Rev. 7/96

* Billing adjustment forms needed when site is in our UST program.

REPORT: WrkShtA (Admin)