Chan, Barney, Env. Health

From: Nair, Gopakumar [GNair@oaklandnet.com]

Sent: Tuesday, July 12, 2005 2:33 PM

To: Chan, Barney, Env. Health

Subject: Oakland Municipal Service Center project update

Dear Mr. Chan:

I would like to introduce myself and update you on the progress of the Oakland Municipal Service Center (MSC) site remediation. I work under Mark Gomez at the City's Environmental Services Division. Odili Ojuku, who managed this project before, had left the City to accept a position in his home country, so I had taken over the project about two months ago.

As notified by Odili, we are in the process of installing the groundwater treatment system at MSC. The City has purchased all equipment and associated components according to the system design. We were on our way to meet the goal of starting the treatment system on August 1st. Unfortunately, we encountered a major hurdle. Since the gas and electric connections at the MSC facility were insufficient to share for running the treatment system, we had to apply for separate lines with PG&E. For the past four months, we have been struggling with PG&E to install these lines. Even after we completed the utility trenches, they are not willing to schedule an inspector and get the meters connected. To make it short, it has been a frustrating experience for me to deal with PG&E. I am hoping to get the connections by the end of this month.

Because of this unforeseen circumstance, the City would like to request for some additional time in installing and starting the treatment system. I hope you understand our situation. If we are able to get the utility connections by the end of July, we should be able to get the system installed and start running by the end of August or the beginning of September.

We have been continuing with hydrogen peroxide injection at the site. The latest event of H2O2 injection was completed in the second week of June. We have scheduled the semi-annual groundwater sampling for next week. I will send you the sampling report, as soon as I get it. Sorry for any delay caused by the transition period from Odili leaving the City and me taking over this project.

If you have any questions, please let me know. I look forward to working with you on this project. Thanks.

Gopal Nair
Environmental Program Specialist
Public Works Agency
Environmental Services Division
City of Oakland
(510) 238-6361
http://www.oaklandpw.com

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

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February 15, 2005

Mr. Odili Ojukwu
City of Oakland Public Works Agency
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612

Dear Mr. Ojukwu:

Subject: Fuel Leak Case RO0000293, Municipal Service Center, 7101 Edgewater Dr., Oakland, CA 94621

Alameda County Environmental staff has reviewed the case file for the subject site including the December 7, 2004 Semi-Annual Groundwater Monitoring Report by Levin Fricke and determined that additional information is needed at your site to progress toward case closure. We are concerned that you have failed to submit the work plan for enhanced bioremediation for Plume A and further investigation of conduits at this site and the conduit/plume site map, requested submitted by January 10, 2005 in our December 8, 2004 letter.

Technical Comments

- Separate phase hydrocarbons continue to be present in up to 10 wells. Our office fully expects the implementation of the approved work plan for DPE to begin no later than July 05 and to be fully operable by August 05. Any delays must be accompanied by a complete explanation. In the meanwhile, you were instructed to physically remove by absorbent pads free product from these wells. This information is to be reported in your monitoring reports.
- Due to the presence of utilities, which can act as preferential pathways, the threat to the nearby San Leandro Bay exists. The requested utilities maps overlaid upon the site and plume map is necessary to evaluate this risk.

Technical Report Request

- March 18, 2005- Work plan for enhanced bioremediation for Plume A, conduit/site/plume map and work plan for conduit investigation as appropriate.

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.

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.

PERJURY STATEMENT AND PROFESSIONAL CERTIFICATION

All work plans, technical reports, or technical documents submitted to this office 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.

Additionally, to be considered a valid technical report you are to present site specific data, data interpretations, and recommendations prepared by the 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.

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

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos
M. Gomez, 250 Frank H. Ogawa Plaza, Suite 5301, Oakland, CA 94612
Mr. Xinggang Tong, URS, 1333 Broadway, Suite 800, Oakland, CA 94612
Mr. Charles Pardini, Levine Fricke, 1900 Powell St., 12th Floor, Emeryville, CA 94608

2_15_05 7101Edgewater

ALAMEDA COUNTY
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December 8, 2004

Mr. Odili Ojukwu
City of Oakland Public Works Agency
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612

Dear Mr. Ojukwu:

Subject: Fuel Leak Case RO0000293, Municipal Service Center, 7101 Edgewater Dr., Oakland, CA 94621

Alameda County Environmental staff has reviewed the case file for the subject site including the October 27, 2004 Dual-Phase Extraction Work Plan by URS. We approve of the work plan to treat plumes B, C and D at the site and request that you also address the following technical comments.

TECHNICAL COMMENTS

1. Semi-annual monitoring should continue to verify the free product onsite does not impact the nearby San Leandro Bay. Please adhere to the March/September sampling schedule noted in the July 2004 monitoring report.
2. According to the schedule in the URS work plan, DPE operations will not start until July 05 and not begin full operation until August 05. Please keep our office informed of any delays in this projected schedule. In the interim, we concur that absorbent socks should be placed in those wells with free product and routinely replaced as necessary.
3. Our office agrees that DPE should not be performed in Plume A where the soil type and contamination is not conducive. However, please investigate additional enhanced biodegradation materials besides the recommended hydrogen peroxide. Such additives might include specific microbes, additional nutrients, surfactants, etc.
4. Please expand on the November 16, 2004 Conduit Study submitted by Ninyo & Moore. The report identified conduits, which may be acting as preferential pathways for contamination. Please describe what has or will be done to investigate, isolate and remediate these areas. What affect will the DPE have on the conduits? Please identify the conduits on a site map and provide work plan responding to this request.

TECHNICAL REPORT REQUEST

Please submit the following technical reports according to the following schedule.

- January 10, 2005- Semi-annual monitoring report, work plan for enhanced bioremediation for Plume A and further investigation of conduits.
- April 15, 2005- Semi-annual monitoring report
- October 15, 2005- Semi-annual monitoring report

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

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, D. Drogos
M. Gomez, 250 Frank H. Ogawa Plaza, Suite 5301, Oakland, CA 94612
Mr. Xinggang Tong, URS, 1333 Broadway, Suite 800, Oakland, CA 94612

12_8_04 7101Edgewater

ALAMEDA COUNTY
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October 15, 2004

Mr. Odili Ojukwu
City of Oakland
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612-2034

Dear Mr. Ojukwu:

Subject: Fuel Leak Case RO0000293, Municipal Service Center, 7101 Edgewater Drive, Oakland, CA 94621

Alameda County Environmental Health staff has reviewed the case file for the subject site including the July 14, 2004 *Ninyo & Moore, Groundwater Monitoring Report Spring Semi-Annual 2004 Municipal Service Center 7101 Edgewater Drive* and determined that additional information is needed at this site to progress to case closure. Please address the following technical comments and submit the technical reports as requested.

TECHNICAL COMMENTS

1. It appears that no active remediation has occurred at this site since the dual phase extractions tests were performed by URS in 5/02 and by Cambria in 6/02. Both pilot tests indicated that this remediation technique would be successful in removing and reducing free product. However, URS recommended enhanced bio-remediation in the area of plume A while conducting DPE within plume B. The presence of free product was reported in the Semi-Annual 2004 report in the areas of all four identified plumes. The free product poses an imminent threat to the San Leandro Bay and the estuary, even though contaminant levels in perimeter wells have not yet exceeded Aquatic ESLs. Therefore, our office requests the implementation of DPE in those areas (plumes B-D) where free product is present. The plume A area is an exception, where soils are less permeable and less amenable to DPE. I understand that hydrogen peroxide addition has been introduced into wells in this area to enhance bioremediation.
2. Semi-annual groundwater monitoring should continue for the site. Monitoring wells MW-8 and MW-9, not located during the last monitoring event should be located and sampled. Subsequent monitoring reports should provide the amount of hydrocarbons removed from each plume during the prior two quarters and a cumulative total. Please also include the analysis of PAHs in wells MW-13, MW-14 and MW-17, since these compounds are typically presence in high boiling hydrocarbons, which have been observed at the site.
3. Ninyo & Moore proposed performing a conduit study to examine contaminant flow paths to San Leandro Bay. If this hasn't been done, our office concurs with this recommendation. We are aware that some of the former storm drain lines have been closed. Please determine if any active storm drains exist onsite. Please provide a copy of the most recent storm water runoff inspection for this site. Ninyo & Moore also recommends taking shoreline sediment samples if the conduit study indicates a preferential pathway exists. At this time, our office recommends not sampling sediment.

Instead, please include the applicable Aquatic ESL for each contaminant of concern in your monitoring results and report in **bold** all results exceeding the corresponding ESL.

TECHNICAL REPORT REQUEST

Please submit the following technical report according to the following schedule:

- November 1, 2004-Work plan to perform DPE
- November 15, 2004-Conduit/Preferential Pathway Study
- November 30, 2004- Second Semi-Annual 2004 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
Mr. M. Gomez, City of Oakland, 250 Frank H. Ogawa Plaza, Suite 5301, Oakland 94612
10_15_04 7101Edgewater

3978 / 293 RO

CAMBRIA

To:	Barney Chan / Joseph Cotton
Company:	ACHCSA / City of Oakland
Fax:	337-9335 / (510) 238-7286
Phone:	567-6765 / (510) 238-6259
From:	Bob Clark-Riddell
Phone:	(510) 420-3303
Pages:	4, including cover
Date:	May 17, 2002
Re:	PolyChem

Fax

Hard Copy to Follow? **Yes** ☐ **No** X

Barney and Joseph,

Here is information about PolyChem Petroleum Oil Release VRA, the surfactant-type substance for enhancing removal and degradation of free product at MSC.

The vendor says that heating the substance is not required for our application, although it would help the process.

To discuss, please call me or the vendor – David Hull at (510) 727-0662. Thank you.

4950 Varsity Ave
Castro Valley, CA 94546
(510) 727-0662 Telephone
(510) 537-5965 Fax

MicroClean Environmental Services

Fax

To: Bob Clark-Riddell **From:** David Hull

Fax: (510) 420-9170 **Pages:** 2, including cover page

Phone: **Date:** 5/8/2002

Re: Oil Release VRA Information **CC:**

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply**

• **Comments:**

Bob,

Per our conversation today, I am forwarding a copy of the manufacturer's Oil Release VRA cut-sheet for your use. The directions apply to this product's use for recovering hydrocarbons from tankers during salvage and recovery operations.

I will forward information regarding analytical protocol that could be used during feasibility testing, along with information about other technologies that could be useful, as soon as possible.

Dave

POLYCHEM

U.S. POLYCHEMICAL CORPORATION

EXECUTIVE OFFICES •PLANT • LABORATORY
584 Chestnut Ridge Road, Chestnut Ridge, NY 10977
(800) 431-2072 · (845) 356-5530
www.uspoly.com · Fax (845) 356-6656

POLYCHEM PETROLEUM OIL RELEASE -VRA

DESCRIPTION:

Polychem Petroleum Oil Release-VRA is a specially designed additive to loosen, dilute, and release heavy oils from solid surfaces. Polychem Petroleum Oil Release-VRA is designed to clean bunker, asphalt and other heavy crudes that may have cured for extended periods of time. Polychem Petroleum Oil Release-VRA is unique in its composition with high solvency power to quickly penetrate, soften and solubilize the aged bunker or crude oils, which have been exposed to sub-zero, and below sea-level conditions. Polychem Petroleum Oil Release-VRA non-toxic, non-petroleum, and all natural product that be used as a replacement for toluene, acetone, chlorinated solvents, and other more toxic cleaning agents. Polychem Petroleum Oil Release-VRA is readily biodegradable, non-toxic to human and aquatic organisms. It is highly compatible with the petroleum oils and becomes completely solubilized in it. Polychem Petroleum Oil Release-VRA is free of HAPS, and is a replacement chemical for toxic and or petroleum solvent usage. Polychem Petroleum Oil Release-VRA is not flammable.

Polychem Petroleum Oil Release-VRA is not soluble in water, but dissolves in the oil phase, thereby; it is separated along with the oil removed.

PROPERTIES:

Composition:	: Mixture salts of fatty Acids, Solubilizers, Detergents, Coupling agents	Temperature	: Ambient
		Viscosity, ASTM D-445-88	: 5 CPS, @ 20°C
		Flash point , ASTM D-56-87	: >100°C,(>212°F)
		pH , ASTM D-1293-84(90)	: N.A
Biodegradability	: Completely biodegradable	Diluent	: Water
Form	: Clear liquid	Additives	: None
Odor	: Mild	Heavy Metals	: Below 2 PPM
Specific gravity, ASTM D-1298-85(90)	: 0.870, @ 20°C,	Cyanide	: None Detected
		Chlorinated Hydrocarbons	: None Detected
		Use concentration, Oil Release-VRA: water	: 1: 9 to 1:19

Light Duty Dried Petroleum Cleaning: A product to water ratio of 1 part Polychem Petroleum Oil Release-VRA to 19 parts of water.

Heavy Duty Dried Petroleum Cleaning: A product to water ratio of 1 part Polychem Petroleum Oil Release-VRA to 9 parts of water.

Application Procedure:

Method 1: Heat the required volume of Polychem Oil Release-VRA to the operating temperature and circulate. Periodically check the concentration of the solubilized bunker oil. If the concentration of dissolved oil appears fairly constant, pump hot water to the solution and circulate for additional time. Again, check the oil content in the oil-water phase to a constant value and pump out for filtration.
Add about 10% by volume of fresh Polychem Oil Release-VRA to the filtrate --- water, heat and re-circulate. Repeat application until the tank if free of residues.

Method 2: Add about 10% by volume of Oil Release-VRA to the hot water and circulate into the tank until a steady ratio of oil to water is established. Filter and recharge the filtered water with fresh Polychem Oil Release-VRA for additional cleaning. Repeat application.

Transportation Information:	Product is not regulated
UN ID Number:	Not applicable
Regulatory Information:	Product is user-friendly & environmental-safe and cleared of Federal, State Regulations for safety, health and toxicity
Other Risk Characterization:	Human Risk: Minimum
(Please refer to the MSDS)	**Environmental Risk: Low**

SPECIAL HANDLING AND PRECAUTIONS FOR STORAGE:

a) **FLAMMABILITY:** IMO : Non-Flammable DOT: Non-Hazardous

b) **VENTILATION:** None Normally Required.

c) **Skin And Eye Contact: Protective Clothing; Treatment In Case Of Contact:**
Avoid prolonged contact with skin and eyes. Flush eyes with plenty of water at least for 15 minutes. Get medical attention. Wear long sleeve shirt, chemical resistant gloves and chemical protective goggles in case of exposure to mist.

d) **MAXIMUM STORAGE TEMPERATURE:** 180°F
MINIMUM STORAGE TEMPERATURE: -25°F
OPTIMUM STORAGE TEMPERATURE: 40°F-140°F
TEMPERATURE OF PHASE SEPARATIONS OR CHEMICAL CHANGES: None.

SHELF LIFE: The shelf life of Polychem Oil Release-VRA is unlimited in unopened containers.
Containers must be kept closed when not in use to prevent contamination.

DISPOSAL: The spent water after filtration must be checked for the level of oil contamination. Polychem Dispersit SPC 1000 may be used to disperse any residual oil contaminant in the waste water as per approved procedure. The cleaned tanks may be sealed with a 1% solution of Polychem Dispersit SPC 1000 for ensured protection.

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

ENVIRONMENTAL HEALTH SERVICES
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November 8, 2001
StID3978/ RO0000293

Mr. Joseph Cotton
City of Oakland Public Works
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612-2034

Re: Dual Phase Extraction Workplan for City of Oakland Municipal Service Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the October 26, 2001 Dual Phase Extraction Workplan for the referenced site prepared by Cambria Environmental Technology, Inc. (Cambria). This work plan provides the specific details for the implementation of your DVE pilot test, the remediation choice determined by your previous feasibility study. Such remediation was required based upon the existence of free and dissolved petroleum product and its proximity to the San Leandro Bay.

The work plan is anticipated to be able to treat free product, dissolved product and vadose soil contamination and is applicable to volatile as well as non-volatiles. This work plan is approved. Please update our office on the progress of this pilot test/remediation in your monitoring report and include the amount of petroleum removed.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan

Barney M. Chan
Hazardous Materials Specialist

cc: B. Chan, files
Ms. D. Heinz, Port of Oakland, 530 Water St., Oakland, CA 94604
Mr. Bob Clark-Riddell, Cambria, 1144 65th St., Suite B, Oakland CA 94608

Wpap7101EdgewaterDr

[redacted] #3[redacted]

Chan, Barney, Env. Health

From: Joseph Cotton [SMTP:jcotton@oaklandnet.com]
Sent: Thursday, July 05, 2001 2:59 PM
To: Matthews, Keith
Cc: Andrew Clark-Clough; "Burl Welton
Subject: UNDERGROUND FUEL TANK LEAK AT THE MUNICIPAL SERVICE CENTER FUELIN G AREA

OFD Inspector Keith Mathews,

This correspondance is to inform you that the final test results from the certified Tank Tightness Test conducted by Confidence UST Services Inc. at the Municipal Service Center on June 29, indicate that there is a 0.06 gallon per hour leak in the 12,000-gallon unleaded gasoline underground fuel storage tank. The other active USTs (20,000-gallon unleaded UST and the 20,000-gallon diesel UST) appear to have passed the test.

I have given instructions to Equipment Services Division and Municipal Building Division to the evacuate fuel from the leaking UST and immediately take the tank out of service until further notice. I will complete the necessary paper work informing all of the appropriate regulatory agencies of the fuel release.

If you have questions or require additional information, please call me at (510) 238-6259.

Joseph Cotton

ALAMEDA COUNTY
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June 29, 2001
StID # 3978/ RO0000293

Mr. Joseph Cotton
City of Oakland Public Works
Dalziel Bld.
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612-2034

Re: Evaluation of Free-Product Removal Alternatives, City of Oakland Municipal Service Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the June 2001 URS Corporation technical report referenced above. This specific report evaluates five (5) options for the treatment and removal of the four (4) free product/sheen areas identified at the referenced site. Using a semi-quantitative analysis of these methods scoring each alternative on effectivenss, implementability and cost, the alternative Dual-Phase Extraction was determined to the preferable remediation method. Our office concurs with this evaluation. Therefore, you may initiate this remediation as soon as possible. Your consultant states that the remediation can be started within 60 days of regulatory approval.

Please keep our office informed on the status of this remediation in you future monitoring reports.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. Xinggang Tong, URS Corporation, 500 12th St., Suite 200, Oakland CA 94607-4014
FPrem7101Edgewater

ALAMEDA COUNTY
HEALTH CARE SERVICES
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April 26, 2001
StID # 3978

Mr. Joseph Cotton
City of Oakland Public Works
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612-2034

Re: City of Oakland Municipal Service Center, 7101 Edgewater Ave., Oakland, CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the March 30, 2001 Fourth Quarter 2000 Monitoring Report for the above referenced site as prepared by Cambria. This report details the results of monitoring, in accordance with the County's previously approved schedule. I have the following observations and concerns regarding this monitoring report:

- In the future, please conform with the analytical methods mentioned in my February 7, 2001 letter, item 9. Groundwater samples should be filtered through a 0.7 micron glass fiber filter, not a 0.45 micron filter.
- It was noticed that quality control data (spike recovery) was done on the water samples before and after silica gel treatment, however, there was no QC data performed on a filtered and non-filtered sample. Please insure that this is done in the future.
- Your consultant recommends silica gel treatment and filtering prior to TPHg analysis as well as on TEPH. This is not recommended by our office, nor is it common in analytical laboratories. This procedure involves steps, which would allow volatilization of this compound and compromise the results.
- Your consultant recommends using the concentrations of specific SVOCs to evaluate TPHmo risk in groundwater. Please note that SFRWQCB Order 99-045 states that the groundwater cleanup goal for total oil and grease is site specific, therefore, it should not be ignored.

You may contact me at (510) 567-6765 if you have any comments or questions.

Sincerely,

Barney M. Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. Bob Clark-Riddell, Cambria Environmental, 1144 65th St., Suite C, Oakland CA 94608
Ms. D. Heinze, Port of Oakland, P.O. Box 2064, Oakland CA 94604-2064

4qtrmon7101Edgewater

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

Post-it® Fax Note 7671 | Date | # of pages ▶ 5
To T. Howard | From B Chan
Co./Dept. Cambria | Co. ACEH
Phone # | Phone # 510-567-6765
Fax # 510-420-9170 | Fax #

ENVIRONMENTAL PROTECTION
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February 7, 2001
StID # 3978

Mr. Joseph Cotton
City of Oakland Public Works
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, CA 94612-2034

Re: City of Oakland Municipal Service Center, 7101 Edgewater Ave., Oakland CA 94621

Dear Mr. Cotton:

Thank you for the site inspection provided to me on January 31, 2001. It allowed me to have a greater appreciation of the site. As you are aware, I have reviewed the Baseline 1/2001 Site History and Characterization Report and have exchanged with you my observations and comments. I have also reviewed your responses, many of which were addressed during the site inspection and follow-up conversations. The following incorporates my initial comment/questions and a proposed resolution based on your response.

1.
The two interior linear track drains within Bld. 5 were described as concrete-lined trenches without any bottom other than a layer of gravel. Doesn't this allow for contamination to move both towards the collection pits and down-gradient within the building? There is a lack of information of subsurface conditions beneath Bld. 5.

Our office agrees that perimeter data suggests that any releases which occurred from the interior track drains has not contributed to groundwater contamination down-gradient beyond Building 5. However, because the potential of contamination within Building 5 has not been completely explored, future workers must be notified of the potential of encountering contaminants within this area. Without further investigation, the potential for contamination should be noted in a Risk Management Plan or some other means of notification.

2.
Most of the contaminants of concern are assumed to have come from the former USTs (except that from the drains in Bld. 5). Are there any historic surface releases, which could contribute to the contaminants, being found in soil and GW?

Because of the lack of control over those wrecked City vehicles placed in the "boneyard", there remains a potential that oil and other automotive fluids may have been released from these vehicles that could impact soil and groundwater. This issue is important since this might represent a source ~~from~~ of some of the high boiling hydrocarbons being detected both on and off-site.

3.
The fill material seems to be discounted as a preferential pathway because it is not reasonable to expect a large continuous layer of coarse-grained material in the fill, however, the fill material itself is likely more permeable than the native soils and therefore acts as a preferential zone ie the area beyond the original site boundary.

The on-site filled areas and the native soils are likely less permeable than the fill material brought in to make the present shoreline boundary. The City's releases are on-site, however, should their releases be able to migrate to the fill material of the current shoreline, their migration rate from the site would likely be faster than was onsite.

4.
Both diesel and gasoline ranged hydrocarbons are found near former UST 6, gasoline and jet fuel ranged hydrocarbons were found in both TBW-5 and MW-16 and gasoline, diesel and motor oil found in soil samples down-gradient of MW-6. The point is that these mixtures of hydrocarbons, though unexplainable by historic records, represents on-site mixture of contaminants. Therefore, the argument for different sources of contaminants due to differences in contamination or no history of use is not strong.

It appears that we made never be able to determine with certainty where the on-site contamination and the contaminated fill areas begin and end. The former contents of the USTs do not account for all identified chemicals of concern found both on and off-site. Hopefully, the new off-site monitoring data precludes the need to do substantial or any off-site remediation.

5.
What is the likely source of the SVOCs found in soil samples 10S-10W, collected in the vicinity of former UST 6?

It may not serve any purpose to determine sources of SVOCs if their concentrations do no pose a human health or environmental risk, as is expected.

6.
The storm drainpipe appears up-gradient not down-gradient of the former UST 6 location. Does the free product plume extend this far east of the former tank?

If soil and groundwater contamination is not entering the storm drain piping trench north of UST 6, no further investigation of the trench is warranted. Can this be shown without trench sampling? What does current data indicate?

7.
To account for not testing samples for VOCs, metals and semi-VOCs from the removal of USTs 12 and 13, these analytes should be tested in a down-gradient well at least once.

Please attempt to sample MW-6 for these analytes, if possible. This well is the closest down gradient well from these former USTs. Can groundwater be sampled in the presence of free product/sheen without potential contamination? Can this be done with a discrete sampler?

8.
I understand that the sanitary and storm drains may have been modified to prevent them acting as preferential pathways. Please describe where and what modifications have been done.

I understand a liner has been placed within the storm drain shown in Figure 15 in this report. Please indicate on Figure 15, the location of the product recovery well and future check dam mentioned during our site visit.

9.
Instead of testing water samples for turbidity and selectively filtering and silica gel treating these samples, you should filter and treat all TPH extractable water samples. The broad "humps" and lack of discrete peaks in chromatograms is not indicative of sediments or emulsions. It is a result of volatilization and degradation of specific compounds.

You stated you will filter and treat with silica gel all TPH extractable water samples at the site from now on. Please observe the following procedures during this procedure:

- Filter the water sample through a glass fiber filter (0.7 micron). The 0.45 micron filter is made of organic material that may have absorptive properties.
- Treat the extract of the water sample with silica gel. This should be done in a flask and agitated using an ultrasonic bath. The extract should then be sampled/diluted for analysis. Column silica gel treatment is subject to incomplete elution of the chemicals of concern.
- Please run a spiked method blank through the same procedure. Any deviation from typical percent recovery must be evaluated and explained. The acceptable recovery range for this test method should be stated by the laboratory.
- Any deviation from this procedure should be shown to be equivalent to this method.

10.
The report states that generally the wells furthest from the shore are least impacted while those on the shore are greater impacted. While this may be true, really those areas down-gradient of releases are the most impacted (free product). In addition to this, the near shoreline wells are impacted with high boiling hydrocarbons.

The above statement was made to counter the generalization that the most impacted areas (wells) are those on the shoreline versus those on-site. Impacted wells and areas exist near onsite releases.

11.
The Water Board's RBSLs would be applicable, specifically the eco RBSLs.

Either Water Boards eco-risks numbers or site-specific eco RBSLs will be used at this site.

12.
Some confusion appears to exist as to when the interim measures proposed to treat free product areas will be done. The report states that if the free product plume is expanding, these measures will be done. This is not acceptable. Free product must be remediated regardless of its migration.

During our site inspection, you clarified that your consultant will be providing a feasibility study and making a recommendation for a more aggressive remediation approach. You also mentioned methods for free product removal and enhanced bio-remediation. Our office agrees with this approach. Please provide your feasibility study and recommended remediation to our office as soon as possible. I understand, your remediation system may be operative by July 2001.

13.
The report states that the City may request the County to discontinue monitoring the shoreline wells except MW16 & MW17. This is not acceptable as long as contaminant sources are immediately up-gradient of the other perimeter wells.

New monitoring data indicates that the existing perimeter wells may still be used in lieu of installing onsite perimeter wells.

14.
Although you have stated that you are working on a feasibility study and risk assessment, the report does not mention this. Clean-up levels should also be discussed in either of these reports. Please clarify when these reports will be prepared.

This has already been addressed. See question 12.

I look forward to your comments, the recent groundwater monitoring report and your feasibility study and remediation plan. Please contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. B. Abelli-Amen, Baseline Environmental Consulting, 5900 Hollis St., Suite D, Emeryville, CA 94608
Mr. Bob Clark-Riddell, Cambria Environmental, 1144 65th St., Suite C, Oakland CA 94608
Ms. D. Heinze, Port of Oakland, P.O. Box 2064, Oakland CA 94604-2064

Com7101Edgewater

Chan, Barney, Public Health, EHS
From: jcotton@oaklandnet.com [SMTP:jcotton@oaklandnet.com]
Sent: Tuesday, January 30, 2001 6:20 PM
To: 'Chan, Barney, Public Health, EHS'
Cc: /O=CITY OF OAKLAND PUBLIC WORKS/OU=PWANT/CN=RECIPIENTS/CN=Jcotton@oaklandnet.com
Subject: FW: QM Sample Results

Barney,

Here is the e-mail from Cambria describing the filtered unfiltered results of groundwater samples collected from select perimeter wells.

Joseph
-----Original Message-----
From: Bob Clark-Riddell [mailto:briddell@cambria-env.com]
Sent: Friday, January 05, 2001 3:14 PM
To: Cotton Joseph A
Subject: QM Sample Results
Importance: High

GW samples meas w & wo filtering.

*

Today we received the lab results for the 4th quarter sampling. The results for SVOCs and hydrocarbons are very encouraging.

SVOCS: The only SVOC detected was 10 ppb pyrene in well MW-13. No SVOCs were detected in wells MW-9 and MW-17.

HYDROCARBONS: **Almost no diesel or motor oil** was detected in samples filtered with a 0.45 micron filter prior to extraction, while the non-filtered samples did have detections.

More specifically, no hydrocarbons were detected after 0.45 micron filtration in wells MW9, MW-14, and MW-17. The greatest difference with motor oil results was in well MW-15: 36,000 ppb before filtration and <200 ppb after filtration. In well MW-13, motor oil was 36,000 ppb before filtration and 1,100 ppb after filtration. For wells MW-12 and MW-15, no motor oil was detected after filtration but TPHd was detected after filtration at 50 ppb and 73 ppb, respectively.

Summarized results are shown below and on the draft excel table attached.

MW-9 all ND after filtration
MW-12 TPHmo ND after filtration, 14,000 ppb TPHmo before filtration. 50 ppb TPHd after filtration.
MW-13 1,100 TPHmo after filtration, 36,000 ppb TPHmo before filtration.
MW-14 All ND after filtration.
MW-15 TPHmo ND after filtration, 36,000 ppb TPHmo before filtration. 73 ppb TPHd after filtration.
MW-17 all ND after filtration.

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

October 26, 2000
StID # 3978

R0293

Mr. Joseph Cotton
City of Oakland, Public Works
Environmental Services Division
250 Frank H. Ogawa Plaza, Ste. 5301
Oakland CA 94612-2034

Re: Recommendations of Third Quarter 2000 Monitoring Report for Municipal Services Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the **September 26, 2000 Third Quarter 2000 Monitoring Report** for the above referenced site prepared by Cambria, your consultant. We are aware that a number of additional reports are forthcoming, which will evaluate remedial actions and make conclusions regarding the existence of off-site contaminant sources. We look forward to these reports. This letter responds specifically to the recommendations made in the referenced monitoring report.

Two recommendations area made in this report. Cambria recommends discontinuing bioparameter analyses based upon the amount of existing data. **Please provide a summary of the bioparameter data and cite those results where the observed trends noted in Table B were shown.** Cambria recommends collecting dissolved oxygen readings from all wells annually. Our office believes that these readings should be collected each time a well is sampled. This test may be done in the field along with the other common field parameters ie pH, temperature and conductivity. In the event that remediation is performed that does not rely on natural attenuation, dissolved oxygen readings may be omitted.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr.Bob Clark-Riddell, Cambria, 1144 65th St., Suite B, Oakland CA 94608

Rec7101Edgewater

BASELINE

ENVIRONMENTAL CONSULTING

11 July 2000
98383-17

#3978

Mr. Barney Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: Response to Comments on Work Plan for Additional Subsurface Investigation, City of Oakland Municipal Services Center, 7101 Edgewater Drive, Oakland

Dear Barney:

The purpose of this letter is to respond to the Alameda County Health Care Services Agency (County) comment letter (dated 29 June 2000) regarding BASELINE's 16 June 2000 work plan for the subject site. On 10 July 2000, we discussed each of the concerns/requests presented in the County comment letter with you, and agreed on the following (each discussion below corresponds to the bullet items on page two of the County comment letter):

- It was agreed that this proposed phase of field activities could proceed prior to final concurrence that off-site free product (in the vicinity of MW-16) may not be associated with on-site activities. We have arranged for the requested chromatograms to be submitted to you and the County under separate cover by Cambria Environmental Technology, Inc..

- The work plan, as submitted, includes six soil borings and one monitoring well between MW-6 and MW-16. The County agreed that this was sufficient as long as product was not identified in any of these locations. As with all the proposed borings, if product were identified, additional borings would be installed at a greater distance from the expected source until the extent is defined.

- The work plan specified collection of soil samples from the soil/groundwater interface at each of perimeter borings defining the extent of free product at each location. The County suggested that groundwater samples should be collected from each of these borings in addition to the specified soil samples. In our discussions, it was agreed that the groundwater samples would not provide useful information since they would not represent actual groundwater quality conditions (likely to be turbid) and were not required for the subsequent health risk assessment to be developed for the site. Therefore, no grab groundwater samples will be collected as part of this phase of field work.

101 H Street, Suite L • Petaluma, CA 94952 • (707) 762-5233 • FAX (707) 762-5271
Emeryville Petaluma San Francisco

In addition, the County request that a soil sample be collected from a depth of three feet or less was discussed. We agreed that since there is adequate data (product fingerprinting, soil and groundwater sample results) characterizing "worst case" conditions in the vicinity of free product areas near TBW-1, TBW-5, and MW-6 that the additional soil samples would not be needed at these locations. However, the contaminants of concern have not been fully characterized in the vicinity of the sump pits near Building No. 5. Therefore, a soil sample within the upper three feet would be collected in any free product area associated with the sump pits. In addition, since solvents may have been used in Building No. 5 and drained to the sump pits, volatile organic hydrocarbons (EPA 8260) have been added to the analyte list for samples collected near the sump pits.

- As recommended by the County, we will ensure that samples collected for analysis of physical parameters are not located within contaminated areas.

We have scheduled on-site sampling activities for period between 19 and 21 July 2000. Should you have any questions or wish to discussed this letter further, please contact us at your convenience.

Sincerely,

Bruce Abelli-Amen
Senior Hydrogeologist
Cert. Hydrogeologist No. 96

Bruce Abelli-Amen
Yane Nordhav FOR
Principal

BAA/YN
cc: Joseph Cotton, City of Oakland

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

June 29, 2000
StID # 3978

Mr. Joseph Cotton
City of Oakland
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612-2034

Re: Work Plan for Additional Subsurface Investigation, City of Oakland Municipal Service Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the following technical reports from your consultants:

- Well Installation and Destruction Report, March 1, 2000, Cambria
- First Quarter 2000 Monitoring and Recommendation Report, May 16, 2000, Cambria and
- Work Plan for Additional Subsurface Investigation, June 16, 2000, Baseline.

This letter serves to comment on these reports and to specifically comment on the Baseline work plan. The first two reports provide information on soil and groundwater contamination in the area between the municipal service center and the San Leandro Bay and Damon Slough, which is leased from the Port of Oakland by the East Bay Regional Parks District. Based on a review of the chemical analysis of the contaminants, your consultant concludes that the motor oil contamination found off-site is not from the service center's operations. It is believed that this contamination is the result of contaminated imported fill material. The soil in this strip of land is noticeably more permeable than that beneath the service center.

Free product is present in both on and off-site wells. The on-site wells with free product are located either near former underground tanks or near the former remote dispenser line. Free product has also been observed in excavations and storm drains near Building 5 and in the storm drain east of TBW-1. Baseline's work plan intends to find the lateral extent of the free product found on-site. A series of direct push borings are proposed around the source areas to make this assessment. Additional borings are proposed for analysis of polynuclear aromatic hydrocarbons and physical parameters with the intent of using this information in a site specific health risk assessment. This information will be used to determine an appropriate remediation plan. Note, your remediation plan should minimally address the removal of the free product.

Our office conditionally approves this work plan, however, you are requested to respond to the following additional concerns:

- Prior to concurring on the origin of the off-site free product, please provide our office with copies of the gas chromatograms of all free products found on and off-site. These results should also include samples from the free product found near Building 5 and that found in storm drains.
- Because of the uncertainty of the source of the off-site free product, you may also want to include borings near MW-16, or between MW-6 and MW-16 as suggested by Cambria.
- The proposed borings surrounding the free product source areas should be sampled for both soil and groundwater and analyzed for the proposed suite of analytes. In addition, a shallow soil sample, (less than or equal to three feet), from each source area should also be run for potential use in your health risk assessment. This assumes this soil area will not be excavated. This sample should be the taken at the point of the highest apparent contamination based on field screening.
- The soil samples proposed for the analysis of physical parameters should represent a typical background sample within the vadose zone. Please insure that samples are not located within a contaminated area.

Please provide your response to these items prior to initiating this work plan.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Ms. Y. Nordhav, Baseline Environmental Consulting, 5900 Hollis St., Suite D, Emeryville, CA 94608
Ms. D. Heinze, Port of Oakland, P.O. Box 2064, Oakland CA 94604-2064

Wp7101Edgewater

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700
(510) 337-9432

December 3, 1999
StID # 3978

Mr. Joseph Cotton
City of Oakland Public Works
250 Frank H. Ogawa Plaza, Ste. 5301
Oakland CA 94612-2034

Re: Subsurface Investigation at City of Oakland Municipal Services Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Cotton:

This letter serves to comment on the recent changes to the original August 26, 1999 work plan for the above referenced site. This work plan proposed the installation of four monitoring wells along the western boundary of the site and one nested remediation test well. I previously conditionally approved this work plan in my September 7, 1999 letter. The work plan also recommended the closure of two wells, MW-3 and MW-4, located on the east side of Edgewater Drive. I understand these well closures have already occurred.

The November 30, 1999 letter from Cambria proposes two additional monitoring wells to better assess groundwater in the southwest portion of the site. Since this well array will give more information, our office approves this proposal. Upon review of past analytical data, it appears that the analysis of TPH as motor oil should also be added to the soil and groundwater samples from the proposed wells. You may recall that the appearance of oily material has been a concern at this site, even though a waste oil release has not been observed. We assume that these wells will be included among those wells scheduled for quarterly groundwater monitoring. Please confirm the monitoring schedule for the existing and proposed wells.

As mentioned in my September 7, 1999 letter, please outline how the remediation test well will be used. What wells will be used as the observation wells? How long will the well be extracted? How will the contaminants be stored/disposed?

Please provide your written comment to this letter within 30 days or no later than January 7, 2000. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. D. Elias, Cambria, 1144 65th St., Suite B, Oakland CA 94608
3wpap7101Edgewater

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)

September 7, 1999
StID # 3978

Mr. Joseph Cotton
City of Oakland Public Works
Environmental Services
250 Frank H. Ogawa Plaza, Ste. 5301
Oakland CA 94612-2034

Re: City of Oakland Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the August 26, 1999 Cambria report for the above site. The report includes a proposal to install monitoring wells and a remediation test well and the decommissioning of wells MW-3 and MW-4. I have previously approved of the closure of these two wells in my August 31, 1999 letter, so you may proceed with their closure. Four monitoring wells are proposed in locations located down-gradient to identified "hot" spots identified from the underground tank piping removal and from current monitoring data. The remediation well will be a combination air sparge dual-phase extraction well and will be located near former USTs and a hot spot along the former piping run. The monitoring wells are approved and you may schedule their installation. Prior to installing the remediation well, please describe how it will be used.. Will this well be extracted from periodically or will it be part of a pilot test for potential future expansion?

Our office has also reviewed the Fuel Pipeline Removal Sampling Report and the First Quarter 1999 Monitoring Report for this site as prepared by Cambria. Our office has the following comments and concerns:

- Please provide copies of the disposal receipts for the piping and all soil, groundwater and liquid waste generated during the piping removal.
- The piping removal report stated conduit piping was put into the piping trench. Was this conduit put into the entire length of the trench? If not, please provide a site map indicating its location. What will be the rationale when determining its use?
- Please be aware that the referenced San Francisco Airport Order has been updated since the July 1999 report, therefore, certain referenced clean-up levels have changed. The new TPHd soil clean-up concentration is 518 ppm and 640 ppb in groundwater. In addition, the recommended clean-up level for benzene in groundwater is 71 ppb. These concentrations are subject to change based on the most information.
- With these clean-up levels in mind, our office noticed, as was pointed out in the piping removal report, detection levels on some soil samples were extremely high for TPHd and benzene. This presents a problem when determining if these areas require remediation or whether we should rely on natural bio-remediation. The uncertainty of benzene concentration could cause an over-estimate of potential risk to human health and may require a deed restriction.

- In regards to the first quarter 1999 monitoring report, there appears to be uncertainty as to whether aerobic or anaerobic bio-degradation is occurring. The May 4, 1999 evaluation stated that it appears that both are occurring. The bio-parameter analysis shown is atypical of what is seen normally and cannot be used to make a judgment as to the extent of bio-remediation. This analysis compares TPHg + TPHd concentration in monitoring wells versus sulfate concentration in wells in sampled during this event. Typically, the concentration of the chemical of concern is compared with that of the bio-parameter indicator over time. I would suggest a long- term trend analysis of bio-indicators and TPH concentration to illustrate bio-degradation.

Please inform our office prior to your well installations and provide a written comment to the above observations **within 30 days or by October 9, 1999**.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

c: **B. Chan, files**
Mr. D. Elias, Cambria, 1144 65th St., Suite B, Oakland CA 94608

2Wpap7101Edgewater

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)

August 31, 1999
StID # 3978

Mr. Joseph Cotton
City of Oakland Public Works
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612-2034

Re: City of Oakland Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Cotton:

This letter confirms our office's concurrence in approving the closure of monitoring wells MW-3 and MW-4 at the above referenced site. These two wells, located on the east side of Edgewater Drive on the property designated Alternative Site 1, have never detected any groundwater contamination and are not required for the on-going subsurface investigation on the western Municipal Service Center parcel.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: **B. Chan, files**
Mr. D. Elias, Cambria Environmental, (by fax only)
WellclAP7101

CAMBRIA

January 11, 1999

Mr. Mark Hersh
City of Oakland -Public Works Agency
Environmental Services
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612-2034

Re: **City of Oakland Municipal Service Center**
7101 Edgewater Drive
Oakland, California 94621

Dear Mr. Hersh:

Cambria Environmental Technology, Inc. (Cambria) is pleased to provide the City of Oakland (City) with this letter confirming a January 7, 1999 telephone conversation with Barney Chan of Alameda County Health Care Services (ACHCS). We initiated the conversation to discuss Mr. Chan's January 5, 1999 letter discussing the 3rd quarter 1998 quarterly monitoring report. This letter also serves to address the comments and requests included in Mr. Chan's letter.

RESPONSE TO COMMENTS

ACHCS Comment 1: We do not recommend adding the analytes TPHd, TPHg, BTEX and MTBE to the parameters for MW-7. Prior sampling for these analytes did not detect them and this was the rationale for eliminating them in the first place.

The 3rd Quarter 1998 monitoring report stated that these additional analytes were to be added to the schedule to be compared to future bioparameter analyses. In the January 7, 1999 telephone conversation, Mr. Chan recommended that we assume that the concentrations are non-detect during the future comparisons. Mr. Chan stated that it would be fine if the City wanted to analyze for the additional analytes, but that he did not require the analyses. In a subsequent conversation with Mr. Hersh, we decided to complete the hydrocarbon analyses at least during the 1st quarter 1999 to establish a baseline for the biodegradation assessment. The City may remove the analytes from the schedule at a future date.

ACHCS Comment 2: Though direct relationships between sodium and chloride concentrations have not been seen in the samples from the bay and the monitoring wells, our office still assumes that there is potential connection with the bay and the outlying wells. Our office will require further investigation ie tidal study or tracer sturdy to eliminate this potential pathway.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608 - 1053
Tel (510) 420-0700
Fax (510) 420-9170

ALAMEDA COUNTY ENVIRONMENTAL HEALTH / HAZARDOUS MATERIALS DIVISION
1131 HARBOR BAY PKWY., RM. 250, ALAMEDA, CA 94502-6577 (510)567-6700 FAX (510) 337-9355

HAZARDOUS WASTE GENERATOR INSPECTION REPORT

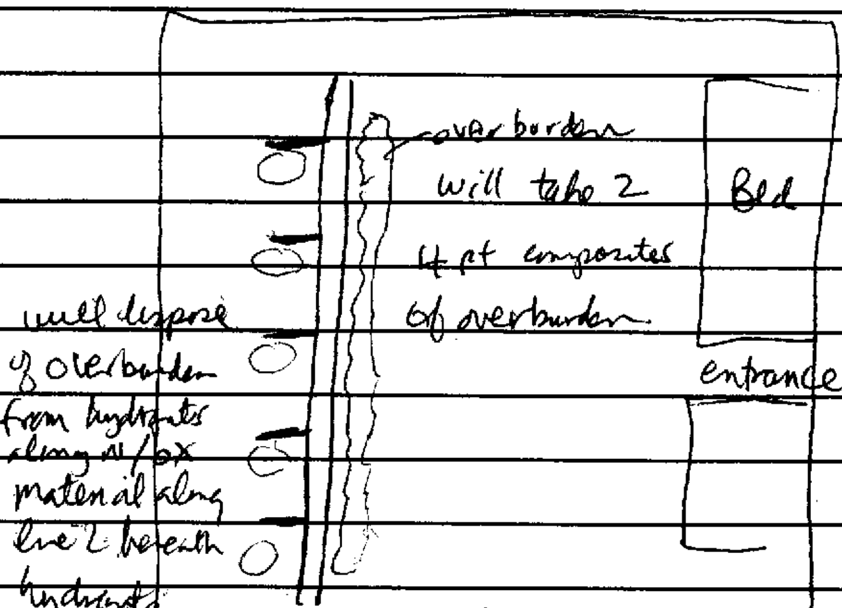
STID #: 3998

FACILITY NAME: Municipal Service Center 10/16/98

PG. 1 OF 1

SUPPLEMENTAL FORM

7101 Edgewater Drive



N

Approx 375' line
hydrants 50' apart
Edgewater Drive

B. Schultz - Cambria
present

Actually (8) hydrants spaced approx 50' apart
~~Hydr~~ lines are being flushed prior to pulling, anticipate OX
near beneath hydrants. Joints connecting the piping lie
in between hydrants.
Because contractor was running behind schedule, I left w/o
witnessing any sampling

PRINT NAME:	INSPECTED BY: B. CHAN
SIGNATURE:	DATE: 10/16/98

GEN/SUPP RPT(REV. 7/94) JNS /ECO

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy.
Suite 250
Alameda, CA 94502-6577
(510) 567-6700

II,III

Site ID # ____ Site Name MSC Today's Date 10/8/98

Site Address 7101 Edgewater Dr.

City Oak Zip 94621 Phone ____

____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:
- ___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- ___ II. Business Plans, Acute Hazardous Materials
- X III. Underground ~~Tanks~~ piping Removal

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

II.A BUSINESS PLANS (Title 19)

___	1. Immediate Reporting	2703
___	2. Bus. Plan Stds.	25503(b)
___	3. RR Cars > 30 days	25503.7
___	4. Inventory Information	25504(a)
___	5. Inventory Complete	2730
___	6. Emergency Response	25504(b)
___	7. Training	25504(c)
___	8. Deficiency	25505(a)
___	9. Modification	25505(b)

II.B ACUTELY HAZ. MAT'LS

___	10. Registration Form Filed	25533(a)
___	11. Form Complete	25533(b)
___	12. RMPP Contents	25534(c)
___	13. Implement Sch. Req'd? (Y/N)	___
___	14. OffSite Conseq. Assess.	25524(c)
___	15. Probable Risk Assessment	25534(d)
___	16. Persons Responsible	25534(g)
___	17. Certification	25534(f)
___	18. Exemption Request? (Y/N)	25536(b)
___	19. Trade Secret Requested?	25538

III. UNDERGROUND TANKS (Title 23)

General

___	1. Permit Application	25284 (H&S)
___	2. Pipeline Leak Detection	25292 (H&S)
___	3. Records Maintenance	2712
___	4. Release Report	2651
___	5. Closure Plans	2670

Monitoring for Existing Tanks

___ 6. Method
1) Monthly Test
2) Daily Vadose
Semi-annual gndwater
One time soils
3) Daily Vadose
One time soils
Annual tank test
4) Monthly Gndwater
One time soils
5) Daily Inventory
Annual tank testing
Cont pipe leak det
Vadose/gndwater mon.
6) Daily Inventory
Annual tank testing
Cont pipe leak det
7) Weekly Tank Gauge
Annual tank tstng
8) Annual Tank Testing
Daily Inventory
9) Other ____

___	7. Precis Tank Test Date: ____	2643
___	8. Inventory Rec.	2644
___	9. Soil Testing .	2646
___	10. Ground Water.	2647

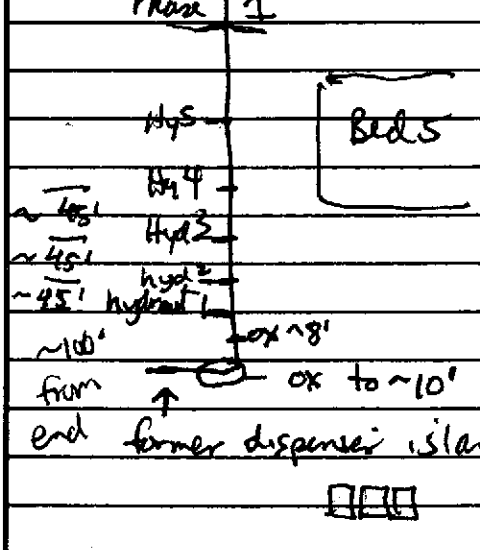
New Tanks

___	11. Monitor Plan	2632
___	12. Access. Secure	2634
___	13. Plans Submit Date: ____	2711
___	14. As Built Date: ____	2635

Rev 6/88

Comments:

Present to witness TW
2nd phase of piping removal (South of 1st phase)
Approx. 350'. Mr Herson,
2 EPA rep. D Elias + B. Schultz
from Cambria present



under #3 - appear fuel release
under #2 - appear diesel release
under #1 - oily - gas odor

[illegal]

the excavating the sandy material from pipeline, should also exc. beneath the hydrant + sample beneath them

II, III

Contact: ____

Title: ____ Inspector: B CHAN

Signature: ____ Signature: BC

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy.
Suite 250
Alameda, CA 94502-6577
(510) 567-6700

II,III

Site ID # _____ Site Name MSC Today's Date 9/22/98 — 9/23

Site Address 7101 Edgewater Dr.

City Oak Zip 94621 Phone _____

____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:
____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Business Plans, Acute Hazardous Materials
✓ III. Underground Tanks piping removal

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

II.A BUSINESS PLANS (Title 19)

___	1. Immediate Reporting	2703
___	2. Bus. Plan Stds.	25503(b)
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___	7. Training	25504(c)
___	8. Deficiency	25505(a)
___	9. Modification	25505(b)

II.B ACUTELY HAZ. MAT'LS

___	10. Registration Form Filed	25533(a)
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___	16. Persons Responsible	25534(g)
___	17. Certification	25534(f)
___	18. Exemption Request? (Y/N)	25536(b)
___	19. Trade Secret Requested?	25538

III. UNDERGROUND TANKS (Title 23)

General

___	1. Permit Application	25284 (H&S)
___	2. Pipeline Leak Detection	25292 (H&S)
___	3. Records Maintenance	2712
___	4. Release Report	2651
___	5. Closure Plans	2670

Monitoring for Existing Tanks

___ 6. Method
1) Monthly Test
2) Daily Vadose
Semi-annual gndwater
One time soils
3) Daily Vadose
One time soils
Annual tank test
4) Monthly Gndwater
One time soils
5) Daily Inventory
Annual tank testing
Cont pipe leak det
Vadose/gndwater mon.
6) Daily Inventory
Annual tank testing
Cont pipe leak det
7) Weekly Tank Gauge
Annual tank tsting
8) Annual Tank Testing
Daily Inventory
9) Other _____

___	7. Precis Tank Test Date: _____	2643
___	8. Inventory Rec.	2644
___	9. Soil Testing .	2646
___	10. Ground Water.	2647

New Tanks

___	11. Monitor Plan	2632
___	12. Access. Secure	2634
___	13. Plans Submit Date: _____	2711
___	14. As Built Date: _____	2635

Rev 6/88

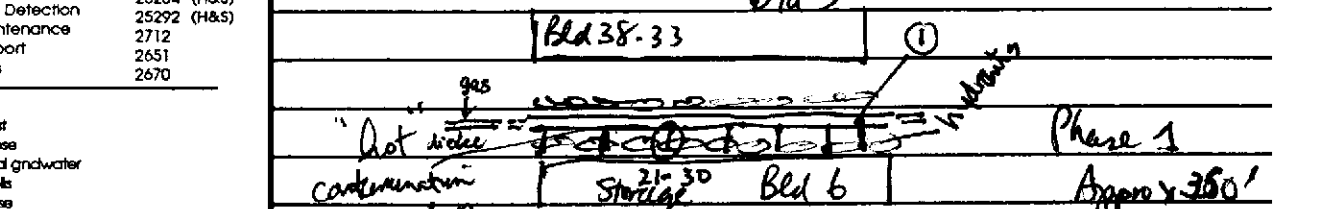
Comments:

N ↑

Edgewater Drive

Bld 3

Bld 38-33



Some fuel odors + water observed in trench
will sample on 9/23/98, piping approx 3-4' bgs.
Turn Key Construction contractors - Jerry McCesland
Trench ~ 2' wide, 4' deep, piping ~ 2-3" wide
steel pipes with vinyl type wrap
hydrants are ~ 50' apart
soil samples will be tube @ joints & T's to hydrants
R Schultz - Cambria present for sampling
① 1st spl @ piping joint to 1st (south) exposed hydrant
a 6" brass tube & 2-8oz jars of soil collected for analysis

II, III

Contact: _____

Title: _____ Inspector: BCHM

Signature: _____ Signature: _____

FACSIMILE

To: Barney Chan
Organization: Alameda County Health Care Services
Fax #: 510-337-9335
Re: Dispensing System Piping Removal, City of Oakland, Municipal Service Center

RB 3978

Date: August 11, 1998

Pages: 1, including this cover sheet.

Dear Mr. Chan,

This FAX memorializes our August 11, 1998, telephone conversation with yourself, myself, Mark Hersh of the City of Oakland and Bob Schultz of Cambria. In our conversation we notified you that the EPA laboratories will not be able to run an 8260 confirmation for MTBE. Therefore, any MTBE detected by the 8020 analysis will be confirmed or addressed at a later date. We also agreed on compositing four in-situ samples for each organic lead analysis, and that we would not be analyzing samples for total lead.

Sincerely, David Elias

cc: Mark Hersh, City of Oakland

From the desk of...

David Elias
Senior Geologist
Cambria Environmental Technology, Inc.
1144 65th Street, Suite B
Oakland, California 94608

(510) 420-3307
Fax: (510) 420-9170

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

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

August 3, 1998
StID # 3978

Mr. Mark Hersh
City of Oakland, Public Works Agency
250 Frank Ogawa Plaza, Suite 5301
Oakland CA 9461-2034

Re: Municipal Service Center Fuel Pipeline Removal, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Hersh

This letter responds to the July 31, 1998 fax of Cambria Environmental's soil sampling plan for the above site. Both sampling of the overburden and soil beneath the piping is addressed in this plan. This plan was proposed to optimize the amount of soil which will require either remediation or disposal. Over-excavation is proposed for the anticipated more impacted soils beneath the pipeline. Please adhere to the following sampling guidelines:

- The eighteen (18) soil samples to be taken to characterize the overburden should be taken just above the piping. Each of the two adjacent soil samples should be composited and analyzed for TPHg, TPHd, BTEX and MTBE. Prior to running the TPHd analysis, the sample should be run through a silica gel clean-up.
- To characterize the soil beneath the piping, one soil sample should be taken every 20 linear feet. Each two adjacent soil samples should be composited and analyzed for the same parameters mentioned above. Every attempt should be made to sample from beneath the former hydrant locations and at other points of potential release.
- Because of the proximity of the former underground diesel and gasoline tanks to the bay, the most appropriate soil threshold level is the saltwater protection zone. Therefore the threshold concentrations to be observed are:

	Mg/kg	SOIL new #s 26-1464 267	WATER ug/l 9,150 393
TPHg	16		
TPHd	68		
Benzene	2.7		
Ethylbenzene	5		
Toluene	2700		
Xylenes	990		

You are reminded to contact me 48 working hours prior to this field work. I may be reached at (510) 567-6765.

Sincerely,

Barney M Chan

Barney M. Chan, Hazardous Materials Specialist

C: B. Chan, files
Mr. D. Elias, Cambria, 1144 65th St.,Suite B, Oakland CA 94608 **pipe7101**

Oakland
All-America City
1993

CITY OF OAKLAND

DALZIEL BUILDING • 250 FRANK H. OGAWA PLAZA, SUITE 5301 • OAKLAND, CALIFORNIA 94612

Public Works Agency
Environmental Services

(510) 238-6688
FAX (510) 238-7286
TDD (510) 238-7644

July 30, 1998

Mr. Barney Chan
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Subject: **Response to Comments for City of Oakland Municipal Service Center Workplan (94407)**

Dear Mr. Chan:

Transmitted herewith is a copy of a letter prepared by our consultant, Cambria Environmental Technology, responding to your comments on the Workplan for investigation and remediation of soil and groundwater at the City of Oakland's Municipal Service Center at 7101 Edgewater Drive. We hope that the concerns you raised in your comment letter are satisfactorily addressed and look forward to implementing the tasks necessary to achieve site closure.

Please call me at 238-7695, if you have any questions or require additional information.

Sincerely,

Mark B. Hersh
Environmental Program Specialist

cc: Andrew Clark-Clough, PWA/ESD
David Elias, Cambria Environmental Technology

CAMBRIA

July 29, 1998

Mr. Mark Hersh
City of Oakland -Public Works Agency
Environmental Services - Dalziel Building
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612

Re: **Response to Comments**
City of Oakland Municipal Service Center
7101 Edgewater Drive
Oakland, California 94621

Dear Mr. Hersh:

Cambria Environmental Technology, Inc. (Cambria) is pleased to provide the City of Oakland (City) with this response to a May 21, 1998 letter from Barney Chan of Alameda County Health Care Services (ACHCS) to yourself and the City. The letter addressed a previously submitted Workplan and subsequent written comments regarding the site referenced above. We have reviewed the following correspondence: 1)Dove Engineering Group (Dove) January 20, 1998, Workplan, 2) ACHCS April 6, 1998, Comments, 3) Dove May 8, 1998, Response to Comments, and 4) ACHCS May 21, 1998, Response to Comments. Based on this review and our understanding of the environmental impacts at the site, we concur with the proposed investigative and remedial program. We also understand that some outstanding issues have not been satisfactorily finalized. The purpose of this letter is to address the unresolved concerns presented in the May 21, 1998 ACHCS letter. At this time Cambria is prepared to move forward with the investigative and remedial Workplan, and looks forward to working with the City and ACHCS. Presented below are responses to Mr. Chan's comments.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite 8
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

RESPONSE TO COMMENTS

ACHCS Task 1-Comment 1: *Our office recommends evaluating saltwater intrusion by establishing the sodium to chloride ratio in estuary water and comparing this with the sodium to chloride ratio in the monitoring wells. Brackish water should have a fairly consistent sodium to chloride ratio.*

During the third quarter 1998 quarterly monitoring, Cambria will collect groundwater samples from the ten site wells and a sample of the estuary water and analyze the samples for sodium and chloride. In addition, we will review and tabulate historical electrical conductivity measurements and total dissolved solids (TDS) results from historical groundwater monitoring events. The comparison and correlation of these four parameters may demonstrate which wells are located in or near the historical higher permeability wetland stream channels.

ACHCS Task 1-Comment 2: *The bioremediation parameters ORP, sulfate, nitrate and iron were originally proposed to be tested in "selected" wells.....Biodegradation is then stated to be non-uniform and anticipated to vary across the site. Because of this potential variability across the site, our office requests that all wells be tested for the bioremediation parameters.*

Dove analyzed groundwater samples collected from wells MW-8,9, and 10 for bioparameters on November 20, 1997. The data presented in their January 22, 1998 Groundwater Monitoring Report suggests that biodegradation is occuring beneath the site.

However, Cambria agrees that a site-wide biodegradation assessment will be useful, and will analyze groundwater samples from all of the 10 site wells for the bioparameters listed above, in August 1998. We will also measure dissolved oxygen concentrations. A site wide assessment of the bioparameters will serve as a benchmark for the biodegradation potential at different areas of the site. We also recommend collecting a complete round of bioparameters in February, during the next scheduled sampling of all the site wells, to assess the consistency of our initial bioremediation data and to provide bioremediation data collected during higher water levels.

ACHCS Task 1-Comment 3: *I would just like to clarify our request, one well should be downgradient of the former USTs (1,2&3) in addition to any warranted based on the results of the pipeline removal.*

Cambria and the City agree with this request and will install at least one well downgradient (southwest) of former tanks 1,2, and 3 after the fuel distribution piping has been removed, likely in September 1998. We will propose additional wells if data collected during the piping removal suggests that soil or groundwater has been significantly impacted by diesel or gasoline from the recently removed dispensing system, or if the groundwater flow direction in the vicinity of the former tanks appears to flow towards the north, as in the area near MW-1. Any wells installed near the former tankpit will be designed for possible future remediation with additional screening in the vadose zone for soil vapor extraction (SVE) and an additional deeper, 1-inch diameter, dual cased well for air sparging.

ACHCS Task 2-Comment 4: *Our office suggests that a review of previous data be done and a decision be made whether an additional tidal study is necessary.*

Uribe and Associates (Uribe) of Oakland completed a 5-day tidal study in November of 1996. They measured depth-to-water three times, during low, rising, and high tide, using a standard groundwater sounding probe. During their study they measured tidal influence ranging from 0.07 to 2.61 ft in both temporary and permanent monitoring wells. This study showed that the gradient across the site changes by as much as 0.02 ft/ft between low and high tide.

Contaminant transport will be an important element in the proposed ecological risk assessment, especially to estimate the average discharge of contaminants to the estuary. Because the groundwater depth was measured on different days and based on only three measurements, and since the actual range of influence may in fact be larger, additional tidal influence assessment is warranted. Therefore, we recommend completing a one week tidal influence study using the 10 existing site wells. We will use Troll 4000 down hole data loggers and pressure transducers in each of the 10 site wells. The down hole loggers will run continuously for the week and should provide excellent data to assess tidal influences across the site.

ACHCS Task 3-Comment 5: *....please submit a closure application and a work plan for soil and groundwater sampling, source removal and piping disposal by June 15, 1998.*

This Workplan was submitted on July 9, 1998, and we are currently working with the City and ACHCS to resolve the concerns presented in a ACHCS July 16, 1998, letter. If needed, we will respond to the comments in writing after our scheduled July 30, 1998, meeting with myself, yourself, and Mr. Barney Chan.

ACHCS Task 4-Comment 6: *I would like to clarify my request to sample and remove free product from the recovery wells.*

Cambria will measure the thickness of floating product in the four tank backfill wells. If no floating product is measured, we will proceed with collecting groundwater samples. Also, as ACHCS recommends, if floating product is present we will remove the floating product either by bailing or by installing passive or active floating product skimmers.

ACHCS Task 5-Comment 7: *Our office has not yet received a copy of the Draft ULRP report. It is also premature to consider any cleanup levels in a draft without Water Board concurrence.*

Please find attached the most recent ULRP Draft Guidelines for your review. We will only use cleanup levels acceptable to Regional Water Quality Control Board when considering site remedial target concentrations. Any site specific target concentrations will be submitted to ACHCS and the Water Board prior to implementation.

CLOSING

Cambria appreciates providing consulting services to the City of Oakland. Please contact me at (510) 420-3307 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc.

David Elias, RG
Senior Geologist

H:\City of Oakland\MSC\workplanregresp.wpd

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

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

July 16, 1998
StID #3978

Mr. Mark Hersh
Public Works Agency, Environmental Services
Dalziel Building
250 Frank H. Ogawa Plaza, Suite 5301
Oakland CA 94612

Re: Fuel Distribution System Piping Removal Workplan, City of Oakland Municipal Service Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Hersh:

Our office has received and reviewed the July 9, 1998 work plan for the removal of the fuel distribution system from the City of Oakland Municipal Service Center. Please address the following County concerns prior to initiating this work:

- Please notify our office at least two **working** days prior to the field work. Our office should be present to witness, if possible, all soil and groundwater sampling.
- As I mentioned in a voice message to you, our office cannot approve the reuse of excavated soil from this removal without adequate characterization. Your work plan requests the reuse of all excavated soil which is free of "gross" contamination and the disposal of "gross" contaminated soil. This characterization is too subjective, therefore, our office recommends actual sampling and analytical testing of soil. We further request that soil reuse levels be consistent with "cleanup" levels required for sites such as this ie near the bay fringe. To come up with soil cleanup numbers for TPH, you may start by looking at the Water Board Order, Draft Revised Tier 1 TPH levels for the Saltwater Ecological Protection Zone (SEPZ) at the San Francisco International Airport. Certainly, the airport site is unique and the site conditions may not be identical to the Service Center, however, you must provide additional evidence for suggesting alternative cleanup levels. Having said this, the Tier 1 level for TPHg in soil is 26-1464 ppm and that for TPHd is 267 ppm. The acceptable TPHg concentration increases as the inward land distance increases. Therefore, instead of using "gross" contamination for reuse or disposal determination, I suggest the above levels. If necessary, you may want to expedite the analyses by using a mobile laboratory. Field kits are available which may also be helpful in segregating the "gross" and marginally impacted soils. A sampling frequency of 1 per every 20 cubic yards or one two-point composite for every 50 cubic yards is reasonable.
- Should groundwater be encountered initially or through overexcavation, it should be sampled and run for the proposed analytes; TPHg, BTEX, MTBE, TPHd and lead. I agree that all samples run for TPHd should be treated with a silica gel cleanup prior to analysis. MTBE should also be confirmed (EPA 8260 or 8240) if detected.

- Our office agrees with the previously discussed soil analysis frequency of one per every 40 linear feet, however, to be consistent with Title 23, Division 3, Chapter 16, Section 2672 (d) (1), I suggest taking a soil sample every 20 linear feet and compositing every two samples into one prior to chemical analysis.

Please respond to the above comments prior to initiating your piping removal. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
A. Clark-Clough, PWA, Environmental Services
Mr. D. Elias, Cambria Environmental, 1144 65th St., Suite B, Oakland CA 94608

Piwp7101

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

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 1
To M. Hersh	From B CHAN
Co. City of Oak PWA	Co. ACEH
Dept.	Phone # 567-6765
Fax # 238-7286	Fax #

SERVICES
LOP)
)

June 15, 1998
StID # 3978

Mr. Mark Hersh
City of Oakland, Environmental Services
Public Works Agency

Re: Pipeline Removal Workplan and Response to Comments on Site Workplan, City of Oakland Municipal Service Center (7101 Edgewater Dr., 94621)

Dear Mr. Hersh:

Our office has received and reviewed your June 10, 1998 letter requesting to revise the timetable for the submittal of specific work plans and the initiation of pipeline removal at the above site. Given the current status of your consultant and contractor, our office agrees with the new schedule proposed:

- Pipeline Removal Work Plan — July 15, 1998
- Commence Pipeline Removal — August 3, 1998
- Revised Site Work Plan — July 31, 1998

Please contact our office by July 27, 1998 to confirm that the piping removal is on schedule and to set a time for our office to be onsite to witness sampling.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: files
Fax copy sent to Mr. Hersh
Sch7101

Oakland
All-America City
1993

CITY OF OAKLAND

ENVIRONMENTAL SERVICES • 1333 BROADWAY, SUITE 330A • OAKLAND, CALIFORNIA 94612

Public Works Agency

(510) 238-6688
FAX (510) 238-7286
TDD (510) 238-7644

June 10, 1998

Mr. Barney Chan
Alameda County Environmental Health Services
1131 Harbor Bay Parkway
Alameda, California 94502-6577

Subject: Pipeline Removal Workplan and Response to Comments on Site Workplan, City of Oakland Municipal Service Center (94407)

Dear Mr. Chan:

In response to the submittal requests in your letter dated May 21, 1998, this letter requests an extension for the 1) submittal of the workplan for removal of the fuel distribution pipeline, 2) commencement of work to remove the pipeline, and 3) submittal of responses to your comments on the overall site workplan for the remediation of the City of Oakland's Municipal Service Center at 7101 Edgewater Drive. The City proposes the following submittal dates:

Submittal/Task	Requested Date	Proposed Date
Pipeline Removal Workplan	June 15, 1998	July 15, 1998
Commence Pipeline Removal	June 30, 1998	August 3, 1998
Revised Site Workplan	June 22, 1998	July 31, 1998

We request these extensions in order that we may finalize arrangements with contractors and with the U.S.E.P.A, who are providing partial funding for this project.

Please inform me if our proposed dates are acceptable. Please call me at 238-7695, if you have any questions or require additional information.

Sincerely,

Mark B. Hersh
Environmental Program Specialist

cc: Andrew Clark-Clough
Jeff Krohn

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

May 21, 1998
StID # 3978

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

Mr. Mark Hersh
City of Oakland Public Works Agency
1333 Broadway, Suite 330A
Oakland, CA 94612

Re: Response to County Evaluation of Work Plan for 7101 Edgewater Drive, Oakland CA 94621, Municipal Service Center

Our office has received and reviewed the May 8,1998 Dove Engineering Group letter responding to my April 6, 1998 letter regarding their work plan for the above site. I still have some questions since the responses in this letter are not specific or definitive. I would like to go over each of my remaining questions in hopes of receiving a revised work plan or clarification.

Task 1 pertains to the monitoring program for the site. The original Dove work plan proposes to monitor wells MW-1, MW-2, MW-6, MW-7 and MW-8 for TDS. MW-4 was to be monitored for chloride. Dove states that this would be done to determine the degree of brackish water intrusion from the buried channels known to exist at the site. However, Dove goes on further to state that TDS may not be reflective of Bay water intrusion and chemical analysis for TDS and chloride may be deleted from the program. Instead, electrical conductivity,(ec), will be used as an indicator of TDS/chloride content.

If ec can be used as a good estimate for TDS/chloride content, this evaluation could have already been done since this information already exists as part of the data commonly provided with quarterly monitoring. Our office recommends evaluating saltwater intrusion by establishing the sodium to chloride ratio in estuary water and comparing this with the sodium to chloride ratio in the monitoring wells. Brackish water should have a fairly consistent sodium to chloride ratio.

The bioremediation parameters ORP, sulfate, nitrate and iron were originally proposed to be tested in "selected" wells. In my letter, I asked which wells would be "selected" and what the logic in determining these wells would be. Dove's response was the selection of wells would be based upon well proximity to shoreline, existing buildings, and degree of biologic action expected. This information is available, therefore, these wells should be identified. Biodegradation is then stated to be non-uniform and anticipated to vary across the site. Because of this potential variability across the site, our office request that **all** wells be tested for the bioremediation parameters.

Our office requested groundwater monitoring down-gradient of the area of former USTs 1,2 & 3. I also stated that additional well(s) may be necessary to monitor down-gradient of the piping run should significant contamination be observed during piping removal. Dove's response to this was,"one or two wells downgradient of the former tank pit in areas where the highest levels of contaminants are observed during the fuel line removal may be warranted". I would just like to clarify our request, one well should be down-gradient of the former USTs in **addition** to any warranted based on the results of the pipeline removal.

Work Plan Task 2-

Our office is confused by Dove's reply for Work Plan Task 2. One of the actions in task 2 of the original work plan was the performance of a 100 hour tidal study, however, Dove's response letter states that "a rigorous tidal study may not be needed". Later, Dove explains how the tidal influence will be determined ie by measuring changes in water-level elevations and comparing them to known tidal fluctuation. Then Dove later states, "It is unclear whether a correlation between groundwater levels and flow and tide can be directly established." Our office suggests that a review of previous data be done and a decision be made whether an additional tidal study is necessary.

Our office will be overseeing the removal of the existing pipeline at this site. Because the piping removal is stated to occur in June 1998, please provide a work plan for its removal, sampling and the disposal of any soil, groundwater or free product which may be encountered.

Work Plan Task 3

Since our office will be overseeing the closure/removal of existing pipelines and dispenser systems and this work is tentatively scheduled for June 1998, please submit a closure application and a work plan for soil and groundwater sampling, source removal and piping disposal **by June 15, 1998** to insure no delays in the expected removal date. Our office should be notified 48 working hours prior to piping removal.

Work Plan Task 4

I would like to clarify my request to sample and remove free product from the recovery wells. As part of your monitoring program, you should inspect these recovery wells for the presence of free product. If present, free product should be removed. If no product is present, I recommended that the groundwater be sampled and analyzed. Based on the analysis of this groundwater, recommendations could be made to add supplements, remove groundwater etc.

Work Plan Task 5

It is likely that a Tier 1 ASTM RBCA will indicate that no unacceptable risk to human health exists at this site. It is assumed that the site cleanup levels will be that which is necessary to be protective of the environment, ie aquatic life potentially found in the estuary.

Our office has not yet received a copy of the Draft ULRP report. It is also premature to consider any cleanup levels in a draft without Water Board concurrence.

Any site referred to as a "brownfield" must still go through a risk assessment evaluation. Any corrective action must still be protective of human health, water quality and the environment. Typically, cleanup requirements are based on known future use and exposure(s) and a risk management plan is usually required.

Please provide a written comment to this letter **within 30 days or by June 22, 1998.** You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. C. Palmer, Dove Engineering Group, 7677 Oakport St., Suite 105, Oakland CA 94621

7101resp

D V E
ENGINEERING
GROUP

Alameda County Health Care Services May 8, 1998
Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Attn: Mr. Barney M. Chan, Hazardous Materials Specialist

RE: Response to Alameda County Health Care Services letter dated April 6, 1998 RE: Work Plan for Municipal Services Center, 7101 Edgewater Drive, Oakland CA 94621 (StID # 3978)

Dear Mr. Chan,

Dove Engineering Group, Inc. (DEGI) has prepared this letter in response to the above referenced letter sent to the City of Oakland (City) regarding the Municipal Services Center (MSC). The Alameda County Health Care Services Agency (ACHCSA) has reviewed the February 19, 1998 work plan which DEGI prepared for the MSC site. This letter presents our responses to the County work plan comments in the order presented in ACHCSA letter of April 6, 1998.

Response to County Letter

Monitoring Program - Parameters

The proposal to monitor MW-1, MW-2, MW-6, MW-7 and MW-8 for TDS was initially proposed to ascertain the degree of brackish water intrusion to the buried channels shown on Figure 1. Similarly chloride analysis in MW-4 was to attempt to ascertain whether there was saline water intrusion through the northern channel. This approach was in part taken from previous work may be revised based on our evaluation of current site conditions. The TDS may not be as reflective of Bay water intrusion into the channels and the relationship of TDS to contaminant movement may be inconclusive. Chemical analysis for TDS and chloride may be deleted from the program. The use of electrical conductivity taken during monitoring well sampling will be used as an indicator of TDS/chloride content.

The selection of monitoring wells to be used as indicators of biodegradation activity will follow the completion of Task 2 (data review). The selection is anticipated to be based upon the well proximity to shoreline edge, existing buildings and degree of biologic action expected to occur around the site. Biodegrading processes are usually not uniform at any site and are anticipated to vary across the MSC site due to construction activity, presence and thickness of fill and age of past fuel leaks. The current monitoring program for fuel contaminants yields an approximation of biodegradation given the observed degraded concentrations of BTEX, and drift of TPHG from the laboratory standard.

Monitoring Program - Well Locations

The area near former USTs 1, 2, and 3 and the hydropunch sampling have shown product sheen and elevated concentrations of dissolved contaminants. At this time, the existing wells in the former tank pit are used to monitor in that area. However, one or two wells downgradient of the former tank pit in areas where the highest levels of contaminants are

observed during the fuel line removal may be warranted. Since the fuel line removal is upcoming, DEGI recommends that any new monitoring wells be installed after the pipeline removal in order to optimize their locations.

Work Plan Task 2

Task 2 is envisioned to encompass review of all previous subsurface work and monitoring data of the investigation to date. The Task 2 points outlined in the work plan are those which should yield a summary of the investigation and allow the cleanup and risk based study to move forward. These subtasks may be modified. For example, a brief review of the of investigation data, including the installation of the last three monitoring wells and water level measurements, suggests that a rigorous tidal study may not be needed in light of the data collected so far. However, the review of the existing data needs to be completed and then the need and scope for further work can be evaluated in response to specific clarifying information concerns:

- Concern: Identify those wells to be used in the tidal study. Response: Wells to be used for tidal study will be identified based upon the review performed under Workplan Task 2. Your office will be informed of the selections prior to conducting the study.
- Concern: Will there be a sampling plan to verify any of the identified potential pathways? Response: If potential pathways are identified and are interpreted to be significant, then samples will be collected to evaluate chemical migration for that pathway.
- Concern: Clarify what is meant by assessing the completeness of site chemistry data. Response: Site chemistry completeness will be evaluated by reviewing the existing data (Task 2) relative to the information needed to adequately characterize and remediate the site. This information includes identifying source areas, potential migration pathways, influence of tidal fluctuation on migration, potential for natural attenuation, etc. Data will be considered complete in DEGI's review such that the data characterize the contaminant extent, can assess risk to human health and environment and implement an appropriate cleanup action.
- Concern: It is necessary to continue to collect biodegradation parameters to verify conclusions regarding the extent on natural attenuation. Therefore, continued quarterly evaluation of data is recommended. Response: Natural biodegradation and attenuation is occurring on the site. Data collected to date, as well as future soil and groundwater sampling, will be used to evaluate the biodegradation and attenuation and/or the effectiveness of the selected remedial alternative. Any proposed modifications to the approved sampling schedule will be submitted to your office for review.
- Concern: Please detail how the limits of tidal influence will be determined. Response: Tidal influence will be assessed by measuring changes in water-level elevations and comparing them to known tidal fluctuation. Groundwater flow characteristics are complex given the presence of buried tidal channels, presence of artificial fill and man-made features. Previous data suggests that tidal influence occurs near the western border of the site, however its inland extent appears limited. It is unclear whether a correlation between groundwater levels and flow and tide can be directly established.

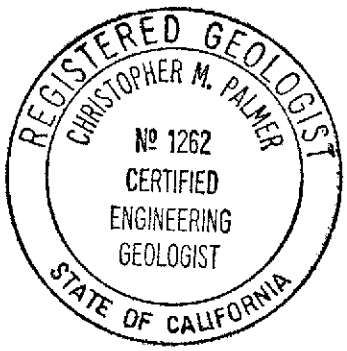
Work Plan Task 3

The City has issued a Request for Proposals to environmental contractors for the removal of the fuel pipeline system. Proposals are due to be submitted on April 27, 1998. A contractor will be selected thereafter and field work should commence by late Spring. A work plan describing sampling and analysis, source removal, and soil and piping disposal will be sent to your office under separate cover prior to the start of work.

If you have any questions, please call our office or Mr. Mark Hersh at 510/238-7695.

Sincerely,

Christopher M. Palmer, CEG 1262; HG 246
Project Manager



cc: Mr. Mark Hersh, City of Oakland

References

Letter dated November 4, 1997 to Mr. Mark Hersh City of Oakland Environmental Services Division 1330 Broadway, Suite 330A Oakland, CA 94612 RE: Groundwater Monitoring for Municipal Services Center, Last Quarter, 1997.

Dove Engineering Group, Inc. Workplan City of Oakland Municipal Services Center, Oakland, California, prepared for Mark Hersh, City of Oakland Public Works Agency Environmental Services Division, dated 1/20/98.

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

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

April 6, 1998
StID # 3978

City of Oakland Public Works Agency
Mr. Mark Hersh
1333 Broadway, Suite 330A
Oakland CA 94612

Re: Work Plan for Municipal Service Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Hersh:

Our office has received and reviewed the February 19, 1998 work plan for the above site as prepared by DOVE Engineering Group. This work plan proposes a number of tasks to monitor, study and characterize, remove free product, remove underground piping, upgrade existing tanks, develop site cleanup goals and prepare a remedial action plan. Our office has a number of comments, questions and additional requirements regarding these tasks.

Task 1 provides a monitoring program for the wells at this site. The monitoring schedule previously approved by our office in our November 7, 1997 will be followed. In addition to the monitoring in this schedule it is proposed to monitor wells; MW-1, MW-2, MW-6, MW-7 and MW-8 for TDS. Please explain the logic for selecting these wells for this particular analysis. MW-4 is proposed to be analyzed for chloride. Please explain why this well was chosen for this analysis and the significance of this parameter.. The bioremediation parameters; oxidation-reduction potential, sulfate, nitrate and iron are also proposed for "selected" wells without identifying these wells. What will be the logic in determining which wells will be analyzed?

In regards to site monitoring, it appears that one area, near former USTs 1,2 and 3 is not currently being adequately monitored. Because of the appearance of free product in the tank pit of these USTs, it is necessary to have a monitoring well immediately downgradient of this location. In addition, it was noted that free product or sheen was noted in a number of hydropunch samples near the existing fuel distribution lines. Therefore, you should evaluate whether groundwater monitoring downgradient to these areas may also be needed.

Task 2 proposes to collect additional information and reviewing existing site data to better understand the hydrogeology of the site. This work includes:

- Compilation of historic groundwater flow maps
- Compilation of soil and groundwater contaminant distribution maps
- Preparation of geologic cross sections for the site
- Performance of a 100 hour tidal influence study on four wells
- Identify possible preferred pathways and including tidal effects, subsurface drains and media
- Assess completeness of the site chemistry data
- Review of the biologic activity data to evaluate effects of biodegradation and
- Interpret the effects of the tidal influence and determine the limits of the "fresh" water boundary.

In regards to these actions, please:

- Identify those wells to be used in the tidal study. — may not be necessary.
- Will there be a sampling plan to verify any of the identified potential pathways? yes
- Please clarify what is meant by assessing the completeness of site chemistry data.
- It is necessary to continue to collect biodegradation parameters to verify conclusions regarding the extent of natural degradation. Therefore, continual quarterly evaluation of data is recommended.
- Please detail how the limits of tidal influence will be determined.

On every 40'

Task 3 includes providing field support for UST upgrade and pipeline removal. The reports states that the existing pipeline, approximately 2,400 lineal feet, will be removed in spring 1998. In addition, USTs 7,8 and 9 will be upgraded prior to the 1998 deadline. Please be aware that the City of Oakland Fire Services, Hazardous Materials Division will oversee the upgrading of the operating tanks. It is not clear, however, if the County or the City will oversee the piping removal. In any event, please provide a work plan for the removal of the piping, including specifics for soil and groundwater sampling and analysis, potential free product removal, soil disposal and piping disposal. I will inform you as soon as our offices determine who will oversee the piping removal.

Task 4 proposes a method for the removal of any free product from the recovery wells installed in the former UST pits. Please verify the number and locations of recovery wells at this site. Because of the ability of free product and groundwater to collect within the former tank pits, it is advisable to not only remove free product but sample and analyze the groundwater within the tank pits. This information is necessary to determine which and how much of each supplement should be added to the tank pits to enhance bioremediation.

Task 5 proposes to develop site cleanup objectives. This section elaborates on methods to identify concentrations within different zones at the site. Chemicals of potential concern (COPCs) will be identified. A tiered approach similar to the ASTM risk-based corrective action method is proposed. The terms, screening media concentrations (SMC), and preliminary target concentrations (PTC) are also proposed for determination. These two concentrations are to be consistent with ASTM RBCA methodology and the Urban Land Redevelopment Program (ULRP). Please keep in mind that the ASTM RBCA does not address impact to ecological receptors, therefore, other references must be used. In addition, our office has not received nor been instructed to use the ULRP guidance document, therefore, these cleanup levels must receive Water Board approval prior to County acceptance. Please send our office a copy of the ULRP document.

The site is proposed to be divided into four zones, the vadose and saturated zones upgradient and overlying the tidally-influenced groundwater. It is reasonable to have different soil and groundwater cleanup levels for each zone.

In addition to the two references mentioned, other cleanup standards such as USEPA PRGs , RWQCB Basin Plan and the RWQCB draft Tier 1 Standards for LUFT Sites Adjacent to Surface Waters should be considered.

The work plan mentions that other "Brownfields" petroleum sites around the SF Bay will also be reviewed for reference and pertinence to this site. Please identify and provide a summary of those sites which have been so categorized and closed. I am not aware of any of these sites in the City of Oakland.

Our office anticipates the need for Water Board concurrence in accepting cleanup standards other than Tier 1 standards, therefore, when these standards are developed a joint meeting with both agencies will be necessary for their input.

The final two tasks are the preparation of a Remedial Action Plan and on-going verification monitoring. An attached Estimated Schedule for Work Tasks was also provided. Please revise this schedule to include specific dates as best as they can be estimated.

Please provide a written response to the letter within 30 days or by May 8, 1998.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

C: B. Chan, files
Mr. Chris Palmer, Dove Engineering Group, 7677 Oakport St., Suite 105, Oakland CA 94621

wpap7101

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

November 7, 1997
StID # 3978

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

Mr. Mark Hersh
City of Oakland
Environmental Services Division
1330 Broadway, Suite 330A
Oakland CA 94612

Re: Groundwater Monitoring at Municipal Service Center, 7101 Edgewater Drive, Oakland CA 94621

Dear Mr. Hersh:

I have received and reviewed the November 6, 1997 fax from Dove Engineering Group detailing the proposed monitoring for the wells at the above referenced site. The schedule is consistent with that previously proposed in Woodward-Clyde's January 8, 1997 letter. This schedule and analyses is accepted with the following comments/conditions:

* Please provide a site map indicating the location of those wells scheduled for monitoring. I am aware that ~~that~~ monitoring wells MW-8 through Mw-10 were the three borings completed as wells by Uribe & Associates, however, I never received a well completion report.

* In regards to the proposed analytical methods please be aware that EPA Method 8260 will only be required if MTBE is detected during the modified 8020 analysis. Therefore, you may forego analysis by EPA Method 8260 if MTBE is ND by modified 8020.

The analysis for Iron +2 in groundwater is an indicator of anaerobic biodegradation and is typically done using a colormetric method ie 3500 D in SM. Method 6010 is an ICP method which measures total iron.

* Please submit the above mentioned well completion report and the tank closure report for USTs 1,2,3, 12 and 15 removed in May 1997. You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

c: B.Chan, files
C. Palmer, Dove Eng., 7677 Oakport St., Suite 105, Oakland 94621

monap7101

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

II, III

Site ID # 3978 Site Name Municipal Service Center Today's Date 9/5/97

Site Address 710 Edgewater Drive

City Oak Zip 94621 Phone

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

p. 1

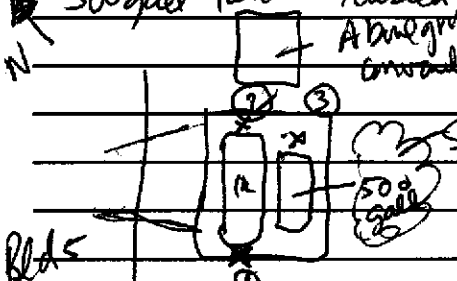
Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
__X__ III. Underground Storage Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments: Witness removal of 2- single walled steel USTs.

1K lubeoil (#10) ~0 LEL 3.8 O2
500 gallon waste oil (#11) ~2 LEL ~4 O2
TPE - contractor, M Hersh - City of Oak, P. Dement-Acc
S. Crafard OFD present
Pexanna - tank hauler
1K tank - rusted, wrapping deteriorated, no obvious holes other than that made when anchor detached from tank
500 gall tank - rusted, wrapping gone, no obvious hole, except where strap was pulled off



- Concrete slab exist below tank
- spoils are gravelly sand

Sple 1 - at west side of 1K tank @ floor level @~9' Soil was moist, gravel, silty clay - no odor
@9' Sple 2 - @ east end of slab, black moist gravelly silt @~8' no odors
Sple 3 - @ east end of 500 gallon tank (fill end) - black, moist, gravel - silt - no odors

II, III

Contact

Title Dem Dent Inspector B. CHAN

Signature Dem Dent Signature B Chan

Spoils - 4 discrete spls to be composited in lab
All spls will be run for TEPH, TPHG, BTEX. Based on these results 4 of 4 will be decided if any other analyses necessary.

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

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

July 10, 1997
StID # 3978

Mr. Mark Hersh
City of Oakland Environmental Services
1333 Broadway, Suite 330A
Oakland CA 94612

Re: Closure In-Place for UST-10 and UST-11 at the Municipal Service Center, 7101 Edgewater Drive, Oakland 94621

Dear Mr. Hersh:

Our office has received and reviewed your July 3, 1997 work plan for the closure in-place of the above referenced tanks at the City's Municipal Service Center.

Our office approves of this closure based upon the perceived threat to the integrity of the existing building should these tanks be removed.

Enclosed, please find a stamped and signed copy of your work plan. Please adhere to the listed activities. Please note the additional requirements added to the analysis section. Total Oil and Grease to **all** soil and water samples plus semi-volatiles via EPA Method 8270 to the lone water sample and the soil sample with the highest TOG concentration is required. In addition, should underground piping exist from these tanks, this piping must be properly closed. Prior to closing the piping, you may choose to either pressure test the line or sample along it every twenty feet.

Please inform me at least **72 working hours** prior to the tank closure. You may contact me at (510) 567-6765.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

c: B. Chan, files

MSCinplace

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

pr

II, III

Site ID # 3998 Site Name Municipal Service Center Today's Date 6/23/97

Site Address 7101 Edgewater Drive

City Oak Zip 94621 Phone ______

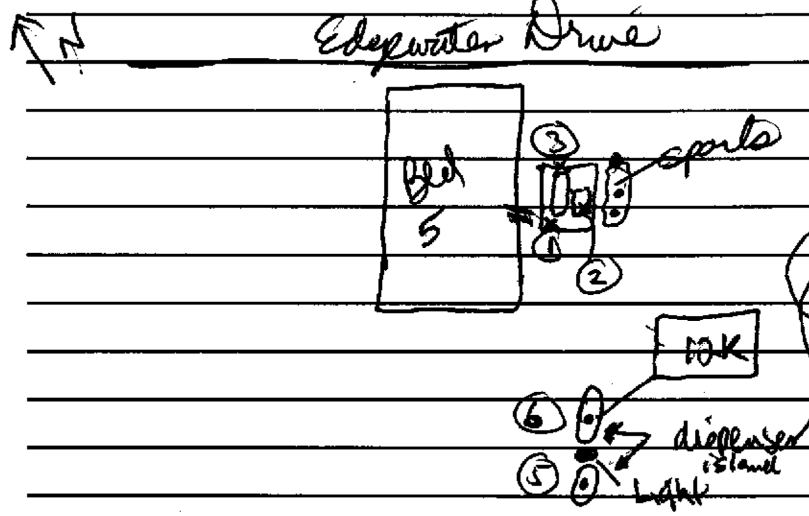
_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
✓ III. Underground Storage Tanks Removal

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:
Witness the removal of 2 - 1-1K (fresh) fuel oil & 1-500 waste oil tank located just no of the former 12k diesel tank



TRE - Contractor Jeff F.
Microsearch - J. Sutton/spler
Dexanna - Transporter
OFD - S. Crafford
500 - 0% LEL, 1.7% O_2
1000 - 0% LEL, 4.3% O_2
rusted, tarwrapped steel
no obvious holes observed
same as above, area beneath tank ripped where tie down was

Site conditions: spoils from the diesel/gas tank pit + 12k diesel pits has been removed + areas asphalted
• concrete slab beneath tanks, fill is mainly sand ~(20 cyds)
sple ①, from NW corner, into gravely, sandy silt - no odor
sple ②, from beneath (sidewall) 500 gal tank, gravel + sand + silt - no odor
sple ③, from NE corner ("), brown gravel, sandy silt no odor

II, III

Contact ______
Title ______
Signature ✗ ______

Inspector B Chan
Signature BChan

Small amt of water in pit -

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

p2

II, III

Site ID # 3978 Site Name Municipal Service Center Today's Date 6/23/97

Site Address 7101 Edgewater Drive

City Oak Zip 94621 Phone

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER

____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials

_✓_ III. Underground Storage Tanks Removal

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:

Backfill will be sampled & composited into one (3pt)
- May run for analytes detected in the sidewall sples for None - run TOG if no analytes detected in any of the three sidewalls.
- Pls remove or cap the lines leading into tankpit. Vent piping should be removed.
- May run only sple 2 for the entire waste oil parameters (TPHg, d, mo or (TOG), chlorinated solvents, semivolatile + metals: Cd, Cr, Pb, Ni + Zn) Sples 1+3 run for TPHmo or TOG only.
- One sple taken from west + east dispenser island locations - some fuel odor noticeable in each sple. Pls run sple ⑤+⑥ for TPHg, d, BTEX + MTBE.

II, III

Contact

Title

Signature X

Inspector B Chan

Signature B Chan

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

Hazardous Materials Inspection Form

II, III

Site ID # 3978 Site Name Municipal Service Center Today's Date 5/21/97

Site Address 7101 Edgewater (1)

City Oak Zip 94621 Phone

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

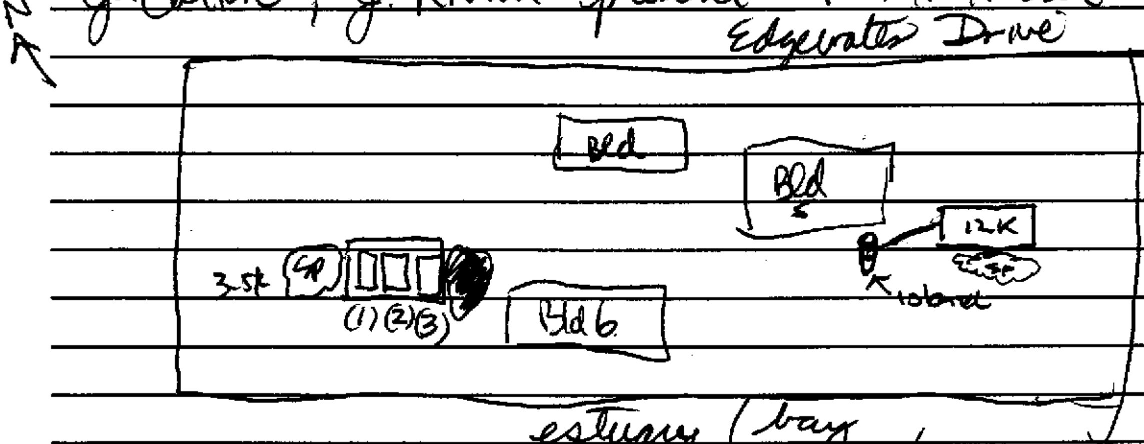
Inspection Categories:

____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials
✓ III. Underground Storage Tanks

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:

Present to witness removal of:
1-12k fibreglass tank (diesel) - south side of site - no obvious holes/cracks
backfill mainly pea gravel ~ approx 15 x 30 x 6 ≈ 100 cy
GW in pit, obvious signs of fuel release on water
Contractor: TPE - J. Farhoomand et al
J. Cotton, J. Krohn present + M. Hersh



OFD - S. Crawford present. 0% LEL / 0% O_2 (12k tank)
Clearwater Env Management / pumping out GW
3-5K All tanks 0% LEL + low O_2 (<10%)
Tank #1 - steel asphalt wrap - deteriorated, no obvious holes
Tank #2 " " " " " " "
Tank #3 " " " " " " "

II, III

Contact

Title

Signature X [signature]

Inspector B. CHAN

Signature B Chan

and spoils pile ≈ 100 cy, approx 2/3 "clean" & 1/3 "impacted" out of this 66 cy → 3 discrete samples for possible reuse / actually took 5 discrete samples of spoils

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Pkwy
Alameda CA 94502
510/567-6700

p2

Hazardous Materials Inspection Form

II, III

Site ID # _____ Site Name M.S.C Today's Date 5/21/97

Site Address 7101 Edgewater

City Oak Zip 94621 Phone ______

_____ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

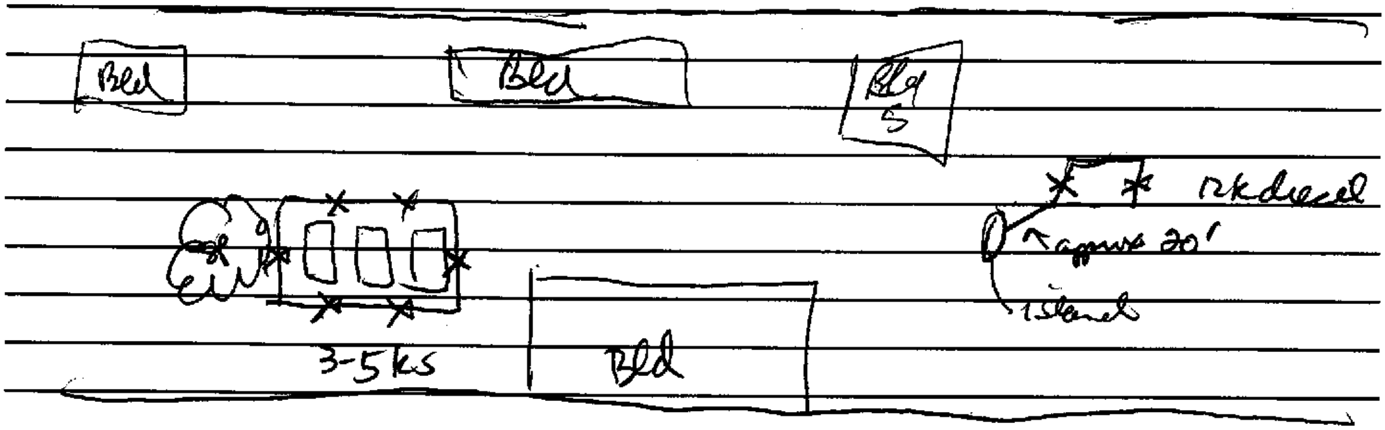
____ I. Haz. Mat/Waste GENERATOR/TRANSPORTER

____ II. Hazardous Materials Business Plan, Acutely Hazardous Materials

✓ III. Underground Storage Tanks Removals

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:



estuary / bay

Inspected GW present in the 3-5K pit, GW or water came into pit as east wall was exposed. Fuel odor present in pit + in soil sples. Approx 2500 gallons water removed from diesel pit. FP is present, saturated contaminated soil exists w/i pit (~150 cy) sitting on the concrete slab. Original spoils is marginally contaminated (2) soil sples taken on sidewalls just above groundwater.

- the contaminated soil w/i 5K tankpit will be disposed, a layer of pea gravel placed + finished to surface w/ "clean" spoils. The 12k tank will be backfilled w/ pea gravel.

Pls sple beneath piping run midway from 12k pit & dispenser island plus under ea. dispenser (2).

II, III

Contact ______

Title ______

Signature X Truman Kwok

Inspector B. Chan

Signature B Chan

extraction casing will be placed w/i pits for treatment or water extraction

Barney Chan
Project Specialist

4/24/97 Blue
Note other requirements in RED

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PARKWAY, RM 250
ALAMEDA, CA 94502-6577
PHONE # 510/567-6700
FAX # 510/337-9335

ACCEPTED
Underground Storage Tank Closure Permit Application
Alameda County Division of Hazardous Materials
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction/destruction.
One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal.
Any changes or alterations of these plans and specifications must be submitted to this this Department and to the Fire and Building Inspections Department to determine if such changes meet the requirements of State and local laws.
Notify this Department at least 72 hours prior to the following required inspections:

_____ Removal of Tank(s) and Piping
_____ Sampling
_____ Final Inspection

"THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:

Contact Specialist

UNDERGROUND TANK CLOSURE PLAN
*** * * Complete according to attached instructions * * ***

1. Name of Business City of Oakland Municipal Service Center
   Business Owner or Contact Person (PRINT) Jeffrey S Krahn
2. Site Address 7101 Edgewater Drive
   City Oakland Zip 94621 Phone (510) 615-5515
3. Mailing Address 7101 Edgewater Drive
   City Oakland Zip 94621 Phone (510) 615-5515
4. Property Owner City of Oakland
   Business Name (if applicable) _____
   Address 7101 Edgewater Drive
   City, State Oakland CA Zip 94621
5. Generator name under which tank will be manifested
   City of Oakland
   EPA ID# under which tank will be manifested CA D981424609

6. Contractor Tank Protect Engineering of Northern California, Inc.

Address 2521 Whipple Road

City Union City CA 94587 Phone (510) 429-8088

License Type* Haz A 575837 ID# _____

***Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.**

7. Consultant (if applicable) Same as contractor

Address _____

City, State _____ Phone _____

8. Main Contact Person for Investigation (if applicable)

Name Jeffrey S. Dyohn Title _____

Company City of Oakland

Phone (510) 615-5515

9. Number of underground tanks being closed with this plan 9

Length of piping being removed under this plan ? O

Total number of underground tanks at this facility (**confirmed with owner or operator) 14

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

**** Underground storage tanks must be handled as hazardous waste ****

a) Product/Residual Sludge/Rinsate Transporter

Name Owner's responsibility EPA I.D. No. _____
(Tanks will be emptied prior to removal day)

Hauler License No. _____ License Exp. Date _____

Address _____

City _____ State _____ Zip _____

b) Product/Residual Sludge/Rinsate Disposal Site

Name N/A EPA ID# _____

Address _____

City _____ State _____ Zip _____

c) Tank and Piping Transporter

Name Erickson, Inc. EPA I.D. No. CAD009466392

Hauler License No. 0019 License Exp. Date _____

Address 255 Parr Blvd

City Richmond State CA Zip 94801

d) Tank and Piping Disposal Site

Name Erickson, Inc EPA I.D. No. CAD009466392

Address 255 Parr Blvd

City Richmond State CA Zip 94801

11. Sample Collector

Name Louis Travis III

Company Tank Protect Engineering of Northern California Inc.

Address 2821 Whipple Road

City Union City State CA Zip 94587 Phone (510) 429-8088

12. Laboratory

Name Priority Environmental Labs

Address 1764 Houret Court

City Milpitas State CA Zip 95035

State Certification No. 1708

13. Have tanks or pipes leaked in the past? Yes[✓] No[ ] Unknown[ ] N/A

If yes, describe. _____

14. **Describe methods to be used for rendering tank(s) inert:**

Use 25 lbs of dry ice per each 1,000 gallon capacity for each tank. Verify with onsite LEL meter.

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be permanently plugged.

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.

15. **Tank History and Sampling Information *** (see instructions) *****

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
5,000	Diesel	Soil	One sample at each end of tank, max of 20ft below the pit into native soil
5,000	Gasoline Leaded	Soil	
5,000	Gasoline UL	Soil	
8,000	Unknown	Soil	
2,000	~~Gasoline~~ Diesel	Soil	
1,000	Lube Oil	Soil	
500	Waste Oil	Soil	
1,000	Lube Oil	Soil	
500	Waste Oil	Soil	
	Piping	Soil	One sample every 20 lineal feet of under existing joint dispenser.

* If groundwater is present in the excavation sample will be collected from sidewall at soil/water interface

One soil sample must be collected for every 20 linear feet of piping that is removed. A ground water sample must be collected if any ground water is present in the excavation.

Excavated/Stockpiled Soi	
Stockpiled Soil Volume (estimated) 20 Cubic Yards	**Sampling Plan** One composite sample consisting of at least 4 discrete samples for every 50 cubic yards minimum of one sample for every 20 cubic yards maximum

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [X] no [ ] unknown

If yes, explain reasoning _____

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without prior approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist IN ADVANCE of backfilling operations.

16. Chemical methods and associated detection limits to be used for analyzing samples:
The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.
See attached Table 2.

17. Submit Site Health and Safety Plan (See Instructions)

Contaminant Sought	EPA or Other Sample Preparation Method Number		EPA or Other Analysis Method Number	Method Detection Limit
Diesel TPHD	GCFID BTEX Total or organic lead	3550 8020	DHS EPA	1 ppm .005 ppm
Gasoline TPHG	GCFID BTEX	5030 8020	DHS EPA	1 ppm .005 ppm
waste oil	GCFID GCFID O+G BTEX CLHC If any detected include AA for Cd, Cr, Pb, Zn, 8270 for PCB, PCP, PNA, Creosote	5030 3550 5520 D+E 8240 8240	DHS EPA DHS EPA EPA EPA ← required	1 ppm 1 ppm 50 ppm .005 ppm
Fuel oil TPH as motor oil	BTEX TPH as motor oil	8240	EPA	.005ppm
If groundwater encountered:				
TPHG	GCFID	5030	DHS	1 ppm
TPHD	GCFID	3550	DHS	1ppm
BTEX	8020		EPA	.005ppm

+ any other analyte required above

18. Submit Worker's Compensation Certificate copy

Name of Insurer State Compensation Insurance Fund

19. Submit Plot Plan ***(See Instructions)***

20. Enclose Deposit (See Instructions)

21. **Report any leaks or contamination to this office within 5 days of discovery.**
The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.

22. **Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.**

23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

CONTRACTOR INFORMATION

Name of Business Tank Protect Engineering of Northern California Inc.

Name of Individual Jafar Farhoomand

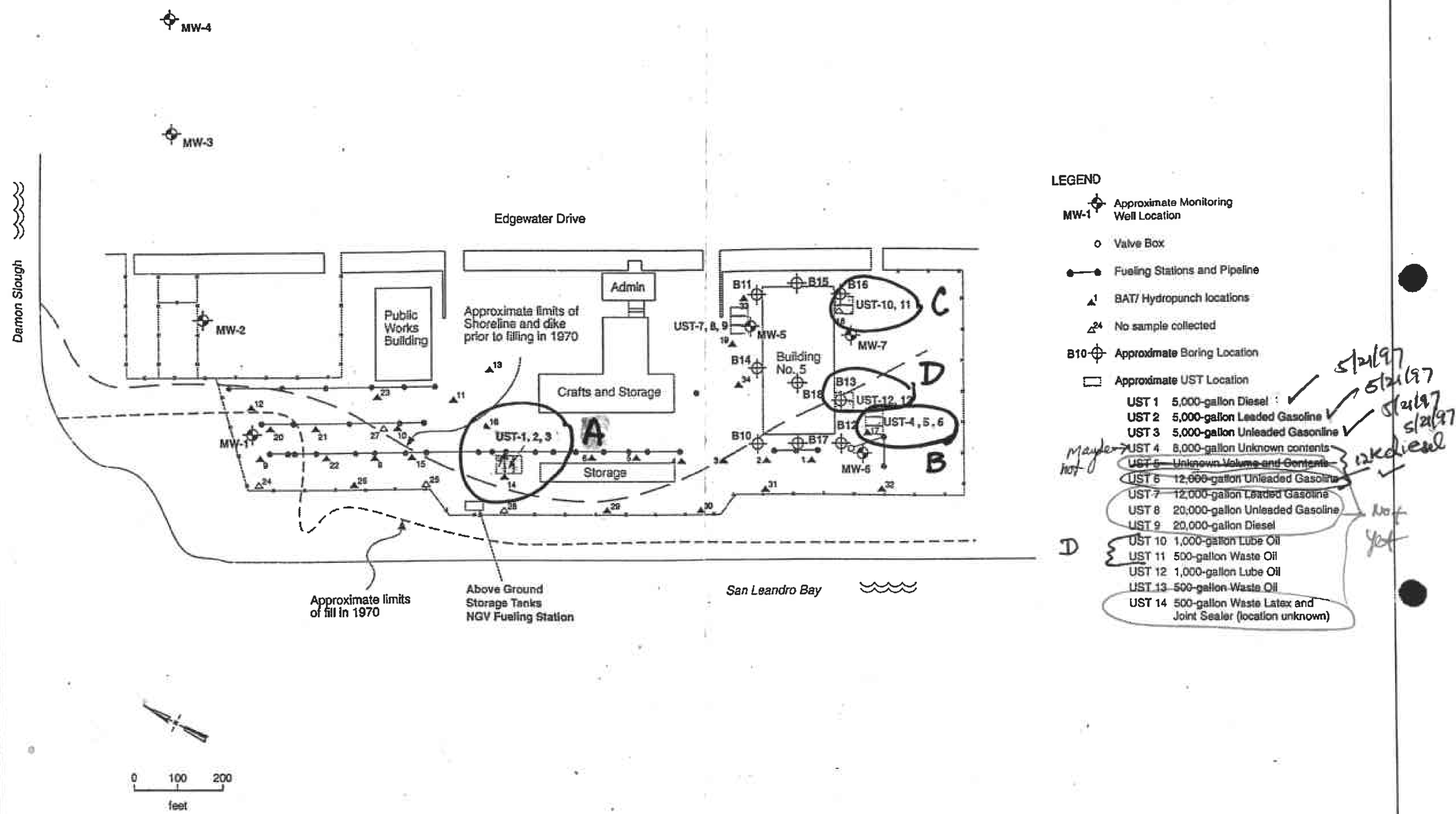
Signature Jafar Farhoomand Date 4-16-97

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business City of Oakland

Name of Individual Jeffrey S. Krohn

Signature Jeffrey S. Krohn Date 4/16/97



Project No. 92C0414A	City of Oakland Municipal Service Center	SITE MAP	Figure 1
Woodward-Clyde Consultants			

92C0414A-2900/111795/site.geo

ALAMEDA COUNTY ENVIRONMENTAL PROTECTION DIVISION

DECLARATION OF SITE ACCOUNT REFUND RECIPIENT

There may be excess funds remaining in the Site Account at the completion of this project. The PAYOR (person or company that issues the check) will use this form to predesignate another party to receive any funds refunded at the completion of this project. In the absence of this form, the PAYOR will receive the refund.

SITE INFORMATION:

Site ID Number
(if known)

City of Oakland
Name of Site

7101 Edgewater Drive
Street Address

Oakland CA 94587
City, State & Zip Code

I designate the following person or business to receive any refund due at the completion of all deposit/refund projects:

Tank Protect Engineering of Northern California, Inc.
Name

2821 Whipple Road
Street Address

Union City CA 94587-1233
City, State & Zip Code

Sharon Payne
Signature of Payor

April 16, 1997
Date

Sharon Payne
Name of Payor
(PLEASE PRINT CLEARLY)

Tank Protect Engineer
Company Name of Payor

RETURN FORM TO:

County of Alameda, Environmental Protection
1131 Harbor Bay Parkway, Rm 250
Alameda CA 94502-6577
Phone#(510) 567-6700

rev.4/6/95;closure.pln\RW

SITE SAFETY PLAN
TANK PROTECT ENGINEERING OF NORTHERN CALIFORNIA, INC.

Site: **City of Oakland**
Municipal Service Center
7101 Edgewater Drive
Oakland, CA 94621

Project Number: 365-9

Original Site Safety Plan: Yes (X) No ( ) Revision Number:
Plan Prepared By: **Tank Protect Engineering** Date: **04/18/97**
Plan Approved By: **Jeff Farhoomand** Date: **04/18/97**

Please respond to each item as completely as possible. Where an item is not applicable, please mark "N/A".

1. KEY PERSONNEL AND RESPONSIBILITIES

(Include name, telephone number and health and safety responsibilities; i.e., project manager - Joe Smith - responsible for supervision of all site activities.)

Project Manager:	**Jeff Farhoomand**	**(510) 429-8088**
Site Safety Manager:	**Louis Travis III**	**(510) 429-8088**
Alternate Site Safety Manager:		
Field Team Members:	**Louis Travis III**	**(510) 429-8088**
	James Bender,	**(510) 429-8088**

Agency Reps: [Please specify by one of the following symbols: Federal: (F), State: (S), Local: (L), Contractor(s): (C)

(L) Alameda County Health Care Services Agency: (510) 567-6700
(L) Oakland Fire Department: (510) 238-3851

2. JOB HAZARD ANALYSIS

2.1 OVERALL HAZARD EVALUATION

Hazard Level:	High ( )	Moderate (X)	Low ( )	Unknown ( )
Hazard Type:	Liquid ( )	Solid ( )	Sludge ( )	Vapor/Gas (X)

Known or suspected hazardous materials present on site

See below: 1 - Gasoline vapors contain benzene, toluene, xylenes, ethylbenzene; 2 - Diesel; 1 - Waste oil, 4 - New oil

Characteristics of hazardous materials included above (complete for each chemical presents):

MATERIAL #1

Corrosive ( )	Ignitable (X)	Toxic (X)	Reactive ( )
Volatile (X)	Radioactive ( )	Biological Agent ( )	
Exposure Routes:	Inhalation (X)	Ingestion ( )	Contact (X)
			Skin & Mucous Membrane

MATERIAL #2

Corrosive ( )	Ignitable (X)	Toxic (X)	Reactive ( )
Semi-Volatile (X)	Radioactive ( )	Biological Agent ( )	
Exposure Routes:	Inhalation (X)	Ingestion ( )	Contact (X)

MATERIAL #3

Corrosive ( )	Ignitable (X)	Toxic (X)	Reactive ( )
Volatile ( )	Radioactive ( )	Biological Agent ( )	
Exposure Routes:	Inhalation ( )	Ingestion ( )	Contact (X)

MATERIAL #4

Corrosive ( )	Ignitable ( )	Toxic ( )	Reactive ( )
Volatile ( )	Radioactive ( )	Biological Agent ( )	
Exposure Routes:	Inhalation ( )	Ingestion ( )	Contact ( )

2.2 JOB-SPECIFIC HAZARDS

For each labor category specify the possible hazards based on information available (i.e., Task-driller, Hazards-trauma from drill rig accidents, etc.) For each hazard, indicate steps to be taken to minimize the hazard.

Task - Tank Removal; Hazard - Gasoline Vapor Explosion: To minimize - use 25 lbs. of dry ice per each 1,000 gallon capacity to inert vapor present in tank.

The following additional hazards are expected on site (i.e., snake infested area, extreme heat, etc.): **N/A**

Measures to minimize the effects of the additional hazards are:
N/A

3. MONITORING PLAN

3.1 (a) Air Monitoring Plan

Action levels for implementation of air monitoring. Action levels should be based on published data available on contaminants of concern. Action levels should be set by persons experienced in industrial hygiene.

Level (i.e.,.5 ppm)	Action Taken (i.e., commence perimeter monitoring)
5 ppm	**Cease work and commence perimeter monitoring until contamination disperses.**

(b) Air Monitoring Equipment

Outline the specific equipment to be used, calibration method, frequency of monitoring, locations to be monitored, and analysis of samples (if applicable).

Air monitoring will be done by using Gastech Model 1314. Hexane will be used for calibration of Gastech.

If air monitoring is not to be implemented for this site, explain why: **N/A**

3.2 Personnel Monitoring

(Include hierarchy of responsibilities decision making on the site)

Safety officer advises field manager who delegates responsibilities to individual team workers.

3.3 Sampling Monitoring

(a) Techniques used for sampling: **Insert a probe inside the tank to determine LEL and oxygen levels.**

(b) Equipment used for sampling: **Gastech Model 1314**
1 - Hydrocarbon Super Surveyor

(c) Maintenance and calibration of equipment: **Use hexane for calibration. Equipment will be calibrated prior to operation.**

4. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Equipment used by employees for the site tasks and operations being conducted. Be Specific (i.e., hard hat, impact resistance goggles, other protective glove, etc.).

Hard hat, protective gloves (petroleum resistant), safety glasses or goggles, respirator (with organic vapor filter) for site emergency personnel.

5. SITE CONTROL AND SECURITY MEASURES

The following general work zone security guidelines should be implemented:

- Work zone shall be barricaded and caution tape used.
- Visitors will not enter the work zone unless they have attended a project safety briefing.
- Persons will not leave the work zone without first passing through the decontamination zone.

6. DECONTAMINATION PROCEDURE

List the procedures and specific steps to be taken to decontaminate equipment and PPE. **Wash with tri-sodium phosphate solution and rinse with clean potable water.**

7. TRAINING REQUIREMENTS

Prior to mobilization at the job site, employees will attend a safety briefing. The briefing will include the nature of the wastes and the site, donning personal protection equipment, decontamination procedures and emergency procedures.

8. MEDICAL SURVEILLANCE REQUIREMENTS

If any task requires a very high personnel protection level, personnel shall provide assurances that they have received a physical examination and they are fit to do the task. Also personnel will be instructed to look for any symptom of heat stress, heat stroke, heat exhaustion or any other unusual symptom. If there is any report of that kind it will be immediately followed through, and appropriate action will be taken.

9. STANDARD OPERATION PROCEDURES

Tank Protect Engineering of Northern California, Inc. (TPE) is responsible for the safety of all TPE employees on site. Each contractor shall provide all the equipment necessary to meet safe operation practices and procedures for their personnel on site and be responsible for the safety of their workers.

A "Three Warning" system is utilized to enforce compliance with Health and Safety procedures practices which will be implemented at the site for worker safety:

* Eating, drinking, chewing gum or tobacco, and smoking will be allowed only in designated areas.
* Wash facilities will be utilized by workers in the work areas before eating, drinking, or use of the toilet facilities.
* Containers will be labeled identifying them as waste, debris or contaminated clothing.
* All site personnel will be required to wear hard hats and advised to take adequate measures for self protection.
* Any other action which is determined to be unsafe by the site safety officer.

10. CONFINED SPACE ENTRY PROCEDURES

No one is allowed to enter any confined space operation without proper safety measures.

11. EMERGENCY RESPONSE PLAN

Fire extinguisher(s) will be on site prior to excavation. Relevant phone numbers:

Person	Title	Phone No.
Jeff Farhoomand	Project Manager	**(510) 429-8088**
	Fire	911 or
	Police	911 or
	Ambulance	911 or
	Poison Control Center	(800) 523-2222
	Nearest off-site no.	
Alameda Hospital		**(510) 522-3700**
Mr. Jeffery S. Krohn	Client Contact	**(510) 615-5515**

U.S EPA - ERT		(201) 321-6660
Chemtrec		(800) 424-9300
Centers for Disease Control	Day	(404) 329-3311
	Night	(404) 329-2888
National Response Center		(800) 424-8802
Superfund/RCRA Hotline		(800) 424-8802
TSCA Hotline		(800) 424-9065
National Pesticide Information Services		(800) 845-7633
Bureau of Alcohol, Tobacco, and Firearms		(800) 424-9555

HEALTH AND SAFETY COMPLIANCE STATEMENT

I, _____ have received and read a copy of the project Health and Safety Plan.

I understand that I am required to have read the aforementioned document and have received proper training under the occupational Safety and Health Act (29 CFR, Part 1910.120) prior to conducting site activities at the site.

_____ _____
Signature Date

_____ _____
Signature Date

_____ _____
Signature Date

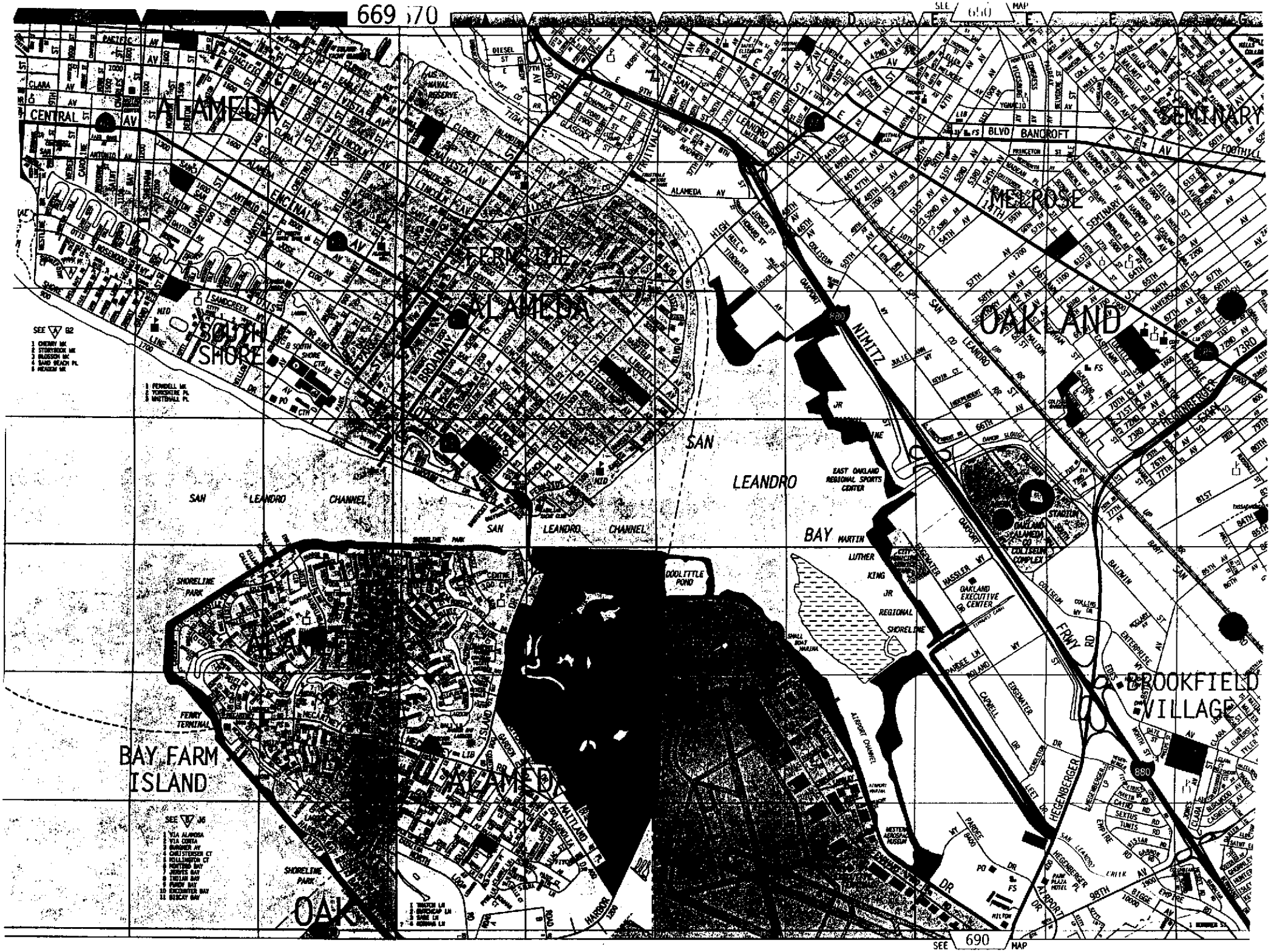
_____ _____
Signature Date

Nearest Hospital:

Alameda Hospital
2070 Clinton Avenue
Alameda, CA 94501
Gen. Info. (510) 522-3700
Emergency (510) 523-4357

Directions From Site:

From Edgewater take 880 North, Exit on 29th Street/Park Street going west. Turn "right" on Otis Drive, "right" on Willow Street, look for hospital on left hand side.


669 670
SEE 690 MAP
ALAMEDA
FERRY TERMINAL
ALAMEDA
SOUTH SHORE
SAN LEANDRO
OAKLAND
SEMINARY
MELROSE
BAY FARM ISLAND
ALAMEDA
OAK
BROOKFIELD VILLAGE
SAN LEANDRO CHANNEL
SAN LEANDRO BAY
DOOLITTLE POND
NIMITZ FRWY
880
SEE 690 MAP

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY TANK CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☒ 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: 7101 Edgewater Drive

I. TANK DESCRIPTION

COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown
B. MANUFACTURED BY: Unknown
C. DATE INSTALLED (MO/DAY/YEAR) Unknown
D. TANK CAPACITY IN GALLONS: 500

II. TANK CONTENTS

IF A-1 IS MARKED, COMPLETE ITEM C.

A. ☐ 1 MOTOR VEHICLE FUEL ☐ 2 PETROLEUM ☐ 3 CHEMICAL PRODUCT ☒ 4 OIL ☐ 80 EMPTY ☐ 95 UNKNOWN

B. ☐ 1 PRODUCT ☒ 2 WASTE

C. ☐ 1a REGULAR UNLEADED ☐ 1b PREMIUM UNLEADED ☐ 1c MIDGRADE UNLEADED ☐ 2 LEADED ☐ 3 DIESEL ☐ 4 GASAHOL ☐ 5 JET FUEL ☐ 6 AVIATION GAS ☐ 7 METHANOL ☐ 8 M85 ☐ 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED — C. A. S. # :

III. TANK CONSTRUCTION

MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: ☐ 1 DOUBLE WALL ☒ 2 SINGLE WALL ☐ 3 SINGLE WALL WITH EXTERIOR LINER ☐ 4 SINGLE WALL IN A VAULT ☐ 5 INTERNAL BLADDER SYSTEM ☐ 95 UNKNOWN ☐ 99 OTHER

B. TANK MATERIAL (Primary Tank): ☒ 1 BARE STEEL ☐ 2 STAINLESS STEEL ☐ 3 FIBERGLASS ☐ 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC ☐ 5 CONCRETE ☐ 6 POLYVINYL CHLORIDE ☐ 7 ALUMINUM ☐ 8 100% METHANOL COMPATIBLE W/FRP ☐ 9 BRONZE ☐ 10 GALVANIZED STEEL ☐ 95 UNKNOWN ☐ 99 OTHER

C. INTERIOR LINING OR COATING: ☐ 1 RUBBER LINED ☐ 2 ALKYD LINING ☐ 3 EPOXY LINING ☐ 4 PHENOLIC LINING ☐ 5 GLASS LINING ☐ 6 UNLINED ☒ 95 UNKNOWN ☐ 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: ☐ 1 POLYETHYLENE WRAP ☐ 2 COATING ☐ 3 VINYL WRAP ☐ 4 FIBERGLASS REINFORCED PLASTIC ☐ 5 CATHODIC PROTECTION ☐ 91 NONE ☒ 95 UNKNOWN ☐ 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____
DROP TUBE YES _____ NO _____ STRIKER PLATE YES _____ NO _____ DISPENSER CONTAINMENT YES _____ NO _____

IV. PIPING INFORMATION

CIRCLE **A** IF ABOVE GROUND OR **U** IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A (U) 1 SUCTION; A U 2 PRESSURE; A U 3 GRAVITY; A U 4 FLEXIBLE PIPING; A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL; A U 2 DOUBLE WALL; A U 3 LINED TRENCH; A U 95 UNKNOWN; A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL; A U 2 STAINLESS STEEL; A U 3 POLYVINYL CHLORIDE (PVC); A U 4 FIBERGLASS PIPE; A U 5 ALUMINUM; A U 6 CONCRETE; A U 7 STEEL W/ COATING; A U 8 100% METHANOL COMPATIBLE W/FRP; A U 9 GALVANIZED STEEL; A U 10 CATHODIC PROTECTION; A U 95 UNKNOWN; A U 99 OTHER

D. LEAK DETECTION: ☐ 1 MECHANICAL LINE LEAK DETECTOR ☐ 2 LINE TIGHTNESS TESTING ☐ 3 CONTINUOUS INTERSTITIAL MONITORING ☐ 4 ELECTRONIC LINE LEAK DETECTOR ☐ 5 AUTOMATIC PUMP SHUTDOWN ☐ 99 OTHER

V. TANK LEAK DETECTION

☐ 1 VISUAL CHECK ☐ 2 MANUAL INVENTORY RECONCILIATION ☐ 3 VADOZE MONITORING ☐ 4 AUTOMATIC TANK GAUGING ☐ 5 GROUND WATER MONITORING ☐ 6 ANNUAL TANK TESTING ☐ 7 CONTINUOUS INTERSTITIAL MONITORING ☐ 8 SIR ☐ 9 WEEKLY MANUAL TANK GAUGING ☐ 10 MONTHLY TANK TESTING ☐ 95 UNKNOWN ☐ 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)
2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING ∅ GALLONS
3. WAS TANK FILLED WITH INERT MATERIAL? YES ☐ NO ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED/SIGNATURE): Jeffrey S. Krohn — Jeffrey S. Krohn — DATE 4/19/97

LOCAL AGENCY USE ONLY

THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# — COUNTY # ☐☐ JURISDICTION # ☐☐☐ FACILITY # ☐☐☐☐☐☐ TANK # ☐☐☐☐☐☐

PERMIT NUMBER | PERMIT APPROVED BY/DATE | PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

INSTRUCTIONS FOR COMPLETING FORM "B"

GENERAL INSTRUCTIONS

Section 2711 of Title 23, Division 3, Chapter 16, California Code of Regulations and sections 25286, 25287, and 25289 of Chapter 6.7, Division 20, Health and Safety Code require tank owners to apply for an UST operating permit.

1. One FORM "B" shall be completed for each tank for all NEW PERMITS, PERMIT CHANGES, REMOVALS and/or any other TANK INFORMATION CHANGE.
2. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
3. Please type or print clearly all requested information.
4. Use a hard point writing instrument, you are making 3 copies.
5. Tank owners must submit a plot plan to the local agency showing the location of the USTs with respect to buildings and landmarks [2711 (a)(8) CCR].
6. Tank owners must submit documentation showing compliance with state financial responsibility requirements to the local agency for petroleum USTs [2711 (a)(11) CCR].

TOP OF FORM: MARK ONLY ONE ITEM

1. Mark an (X) in the box next to the item that best describes the reason the form is being completed.
2. Indicate the DBA or Facility name where the tank is installed.

I. TANK DESCRIPTION - COMPLETE ALL ITEMS - IF UNKNOWN - SO SPECIFY

A. Indicate owners tank ID # - If there is a tank number that is used by the owner to identify the tank (ex. AB70789).
B. Indicate the name of the company that manufactured the tank (ex. ACME TANK MFG).
C. Indicate the year the tank was installed (ex. 1987).
D. Indicate the tank capacity in gallons (ex. 25,000 or 10,000 etc.).

II. TANK CONTENTS

A. 1. IF MOTOR VEHICLE FUEL, check box 1 and complete items B & C.
2. If not MOTOR VEHICLE FUEL, check the appropriate box in section A and complete items B & D.
B. Check the appropriate box.
C. Check the type of MOTOR VEHICLE FUEL (if box 1 is checked in A).
D. Print the chemical name of the hazardous substance stored in the tank and the C.A.S.#. (Chemical Abstract Service number), if box 1 is NOT checked in A.

III. TANK CONSTRUCTION - MARK ONE ITEM ONLY IN BOX A, B, C & D

1. Check only one item in TYPE OF SYSTEM, TANK MATERIAL, INTERIOR LINING and CORROSION PROTECTION.
2. If OTHER, print in the space provided.

IV. PIPING INFORMATION

1. Circle "A" if above ground circle "U" if underground, and circle both if applicable.
2. If UNKNOWN circle; or if OTHER, print in space provided.
3. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirement for the piping.

V. TANK LEAK DETECTION

1. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirements for the tank.

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED - MONTH/YEAR (January, 1988 or 01/88)
2. ESTIMATED QUANTITY of HAZARDOUS SUBSTANCE remaining in the tank (in Gallons).
3. WAS TANK FILLED WITH INERT MATERIAL? Check "Yes" or "No".

TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED [see section 2711 (a)(13) CCR]

INSTRUCTION FOR THE LOCAL AGENCIES

The state underground storage tank identification number is composed of the two digit county number, the three digit jurisdiction number, the six digit facility number and the six digit tank number. The county and jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4303. The facility number must be the same as shown in form "A". The tank number may be assigned by the local agency, however, this number must be numerical and cannot contain an alphabet. If the local agency prefers the State Board to assign the tank number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINAL AND YELLOW COPIES. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY TANK CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☒ 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: 7101 Edgewater Drive

I. TANK DESCRIPTION

COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown
B. MANUFACTURED BY: Unknown
C. DATE INSTALLED (MO/DAY/YEAR) Unknown
D. TANK CAPACITY IN GALLONS: 1,000

II. TANK CONTENTS

IF A-1 IS MARKED, COMPLETE ITEM C.

A. ☐ 1 MOTOR VEHICLE FUEL ☐ 2 PETROLEUM ☐ 3 CHEMICAL PRODUCT ☒ 4 OIL ☐ 80 EMPTY ☐ 95 UNKNOWN

B. ☐ 1 PRODUCT ☒ 2 WASTE

C. ☐ 1a REGULAR UNLEADED ☐ 1b PREMIUM UNLEADED ☐ 1c MIDGRADE UNLEADED ☐ 2 LEADED ☐ 3 DIESEL ☐ 4 GASAHOL ☐ 5 JET FUEL ☐ 6 AVIATION GAS ☐ 7 METHANOL ☐ 8 M85 ☐ 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED — C. A. S. # :

III. TANK CONSTRUCTION

MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: ☐ 1 DOUBLE WALL ☒ 2 SINGLE WALL ☐ 3 SINGLE WALL WITH EXTERIOR LINER ☐ 4 SINGLE WALL IN A VAULT ☐ 5 INTERNAL BLADDER SYSTEM ☐ 95 UNKNOWN ☐ 99 OTHER

B. TANK MATERIAL (Primary Tank): ☒ 1 BARE STEEL ☐ 2 STAINLESS STEEL ☐ 3 FIBERGLASS ☐ 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC ☐ 5 CONCRETE ☐ 6 POLYVINYL CHLORIDE ☐ 7 ALUMINUM ☐ 8 100% METHANOL COMPATIBLE W/FRP ☐ 9 BRONZE ☐ 10 GALVANIZED STEEL ☐ 95 UNKNOWN ☐ 99 OTHER

C. INTERIOR LINING OR COATING: ☐ 1 RUBBER LINED ☐ 2 ALKYD LINING ☐ 3 EPOXY LINING ☐ 4 PHENOLIC LINING ☐ 5 GLASS LINING ☐ 6 UNLINED ☒ 95 UNKNOWN ☐ 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL ? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: ☐ 1 POLYETHYLENE WRAP ☐ 2 COATING ☐ 3 VINYL WRAP ☐ 4 FIBERGLASS REINFORCED PLASTIC ☐ 5 CATHODIC PROTECTION ☐ 91 NONE ☒ 95 UNKNOWN ☐ 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) ___ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) ___
DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION

CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A (U) 1 SUCTION; A U 2 PRESSURE; A U 3 GRAVITY; A U 4 FLEXIBLE PIPING; A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL; A U 2 DOUBLE WALL; A U 3 LINED TRENCH; A U 95 UNKNOWN; A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL; A U 2 STAINLESS STEEL; A U 3 POLYVINYL CHLORIDE (PVC); A U 4 FIBERGLASS PIPE; A U 5 ALUMINUM; A U 6 CONCRETE; A U 7 STEEL W/ COATING; A U 8 100% METHANOL COMPATIBLE W/FRP; A U 9 GALVANIZED STEEL; A U 10 CATHODIC PROTECTION; A U 95 UNKNOWN; A U 99 OTHER ___

D. LEAK DETECTION: ☐ 1 MECHANICAL LINE LEAK DETECTOR ☐ 2 LINE TIGHTNESS TESTING ☐ 3 CONTINUOUS INTERSTITIAL MONITORING ☐ 4 ELECTRONIC LINE LEAK DETECTOR ☐ 5 AUTOMATIC PUMP SHUTDOWN ☐ 99 OTHER ___

V. TANK LEAK DETECTION

☐ 1 VISUAL CHECK ☐ 2 MANUAL INVENTORY RECONCILIATION ☐ 3 VADOZE MONITORING ☐ 4 AUTOMATIC TANK GAUGING ☐ 5 GROUND WATER MONITORING ☐ 6 ANNUAL TANK TESTING ☐ 7 CONTINUOUS INTERSTITIAL MONITORING ☐ 8 SIR ☐ 9 WEEKLY MANUAL TANK GAUGING ☐ 10 MONTHLY TANK TESTING ☐ 95 UNKNOWN ☐ 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)
2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING ___ 0 ___ GALLONS
3. WAS TANK FILLED WITH INERT MATERIAL ? YES ☐ NO ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE) Jeffrey S. Krohn — Jeffrey S. Krohn — DATE 4/18/97

LOCAL AGENCY USE ONLY

THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# — COUNTY # ☐☐ JURISDICTION # ☐☐☐ FACILITY # ☐☐☐☐☐☐ TANK # ☐☐☐☐☐☐

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

INSTRUCTIONS FOR COMPLETING FORM "B"

GENERAL INSTRUCTIONS

Section 2711 of Title 23, Division 3, Chapter 16, California Code of Regulations and sections 25286, 25287, and 25289 of Chapter 6.7, Division 20, Health and Safety Code require tank owners to apply for an UST operating permit.

1. One FORM "B" shall be completed for each tank for all NEW PERMITS, PERMIT CHANGES, REMOVALS and/or any other TANK INFORMATION CHANGE.
2. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
3. Please type or print clearly all requested information.
4. Use a hard point writing instrument, you are making 3 copies.
5. Tank owners must submit a plot plan to the local agency showing the location of the USTs with respect to buildings and landmarks [2711 (a)(8) CCR].
6. Tank owners must submit documentation showing compliance with state financial responsibility requirements to the local agency for petroleum USTs [2711 (a)(11) CCR].

TOP OF FORM: MARK ONLY ONE ITEM

1. Mark an (X) in the box next to the item that best describes the reason the form is being completed.
2. Indicate the DBA or Facility name where the tank is installed.

I. TANK DESCRIPTION - COMPLETE ALL ITEMS - IF UNKNOWN - SO SPECIFY

A. Indicate owners tank ID # - If there is a tank number that is used by the owner to identify the tank (ex. AB70789).
B. Indicate the name of the company that manufactured the tank (ex. ACME TANK MFG).
C. Indicate the year the tank was installed (ex. 1987).
D. Indicate the tank capacity in gallons (ex. 25,000 or 10,000 etc.).

II. TANK CONTENTS

A. 1. IF MOTOR VEHICLE FUEL, check box 1 and complete items B & C.
2. If not MOTOR VEHICLE FUEL, check the appropriate box in section A and complete items B & D.
B. Check the appropriate box.
C. Check the type of MOTOR VEHICLE FUEL (if box 1 is checked in A).
D. Print the chemical name of the hazardous substance stored in the tank and the C.A.S.#. (Chemical Abstract Service number), if box 1 is NOT checked in A.

III. TANK CONSTRUCTION - MARK ONE ITEM ONLY IN BOX A, B, C & D

1. Check only one item in TYPE OF SYSTEM, TANK MATERIAL, INTERIOR LINING and CORROSION PROTECTION.
2. If OTHER, print in the space provided.

IV. PIPING INFORMATION

1. Circle "A" if above ground circle "U" if underground, and circle both if applicable.
2. If UNKNOWN circle; or if OTHER, print in space provided.
3. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirement for the piping.

V. TANK LEAK DETECTION

1. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirements for the tank.

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED - MONTH/YEAR (January, 1988 or 01/88)
2. ESTIMATED QUANTITY of HAZARDOUS SUBSTANCE remaining in the tank (in Gallons).
3. WAS TANK FILLED WITH INERT MATERIAL? Check "Yes" or "No".

TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED [see section 2711 (a)(13) CCR]

INSTRUCTION FOR THE LOCAL AGENCIES

The state underground storage tank identification number is composed of the two digit county number, the three digit jurisdiction number, the six digit facility number and the six digit tank number. The county and jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4303. The facility number must be the same as shown in form "A". The tank number may be assigned by the local agency, however, this number must be numerical and cannot contain an alphabet. If the local agency prefers the State Board to assign the tank number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINAL AND YELLOW COPIES. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY TANK CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☒ 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: 7101 Edgewater Drive

I. TANK DESCRIPTION

COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown
B. MANUFACTURED BY: Unknown
C. DATE INSTALLED (MO/DAY/YEAR) Unknown
D. TANK CAPACITY IN GALLONS: 500

II. TANK CONTENTS

IF A-1 IS MARKED, COMPLETE ITEM C.

A. ☐ 1 MOTOR VEHICLE FUEL ☐ 2 PETROLEUM ☐ 3 CHEMICAL PRODUCT ☒ 4 OIL ☐ 80 EMPTY ☐ 95 UNKNOWN

B. ☐ 1 PRODUCT ☒ 2 WASTE

C. ☐ 1a REGULAR UNLEADED ☐ 1b PREMIUM UNLEADED ☐ 1c MIDGRADE UNLEADED ☐ 2 LEADED ☐ 3 DIESEL ☐ 4 GASAHOL ☐ 5 JET FUEL ☐ 6 AVIATION GAS ☐ 7 METHANOL ☐ 8 M85 ☐ 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED — C. A. S. # :

III. TANK CONSTRUCTION

MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: ☐ 1 DOUBLE WALL ☒ 2 SINGLE WALL ☐ 3 SINGLE WALL WITH EXTERIOR LINER ☐ 4 SINGLE WALL IN A VAULT ☐ 5 INTERNAL BLADDER SYSTEM ☐ 95 UNKNOWN ☐ 99 OTHER

B. TANK MATERIAL (Primary Tank): ☒ 1 BARE STEEL ☐ 2 STAINLESS STEEL ☐ 3 FIBERGLASS ☐ 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC ☐ 5 CONCRETE ☐ 6 POLYVINYL CHLORIDE ☐ 7 ALUMINUM ☐ 8 100% METHANOL COMPATIBLE W/FRP ☐ 9 BRONZE ☐ 10 GALVANIZED STEEL ☐ 95 UNKNOWN ☐ 99 OTHER

C. INTERIOR LINING OR COATING: ☐ 1 RUBBER LINED ☐ 2 ALKYD LINING ☐ 3 EPOXY LINING ☐ 4 PHENOLIC LINING ☐ 5 GLASS LINING ☐ 6 UNLINED ☒ 95 UNKNOWN ☐ 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: ☐ 1 POLYETHYLENE WRAP ☐ 2 COATING ☐ 3 VINYL WRAP ☐ 4 FIBERGLASS REINFORCED PLASTIC ☐ 5 CATHODIC PROTECTION ☐ 91 NONE ☒ 95 UNKNOWN ☐ 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) ___ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) ___
DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION

CIRCLE **A** IF ABOVE GROUND OR **U** IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A (U) 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE
A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W/ COATING A U 8 100% METHANOL COMPATIBLE W/FRP
A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A U 95 UNKNOWN A U 99 OTHER

D. LEAK DETECTION: ☐ 1 MECHANICAL LINE LEAK DETECTOR ☐ 2 LINE TIGHTNESS TESTING ☐ 3 CONTINUOUS INTERSTITIAL MONITORING ☐ 4 ELECTRONIC LINE LEAK DETECTOR ☐ 5 AUTOMATIC PUMP SHUTDOWN ☐ 99 OTHER

V. TANK LEAK DETECTION

☐ 1 VISUAL CHECK ☐ 2 MANUAL INVENTORY RECONCILIATION ☐ 3 VADOZE MONITORING ☐ 4 AUTOMATIC TANK GAUGING ☐ 5 GROUND WATER MONITORING ☐ 6 ANNUAL TANK TESTING ☐ 7 CONTINUOUS INTERSTITIAL MONITORING ☐ 8 SIR ☐ 9 WEEKLY MANUAL TANK GAUGING ☐ 10 MONTHLY TANK TESTING ☐ 95 UNKNOWN ☐ 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)
2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING 0 GALLONS
3. WAS TANK FILLED WITH INERT MATERIAL? YES ☐ NO ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE): Jeffrey S Krohn — DATE: 4/18/97

LOCAL AGENCY USE ONLY

THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# — COUNTY # ☐☐ JURISDICTION # ☐☐☐ FACILITY # ☐☐☐☐☐☐ TANK # ☐☐☐☐☐☐

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

INSTRUCTIONS FOR COMPLETING FORM "B"

GENERAL INSTRUCTIONS

Section 2711 of Title 23, Division 3, Chapter 16, California Code of Regulations and sections 25286, 25287, and 25289 of Chapter 6.7, Division 20, Health and Safety Code require tank owners to apply for an UST operating permit.

1. One FORM "B" shall be completed for each tank for all NEW PERMITS, PERMIT CHANGES, REMOVALS and/or any other TANK INFORMATION CHANGE.
2. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
3. Please type or print clearly all requested information.
4. Use a hard point writing instrument, you are making 3 copies.
5. Tank owners must submit a plot plan to the local agency showing the location of the USTs with respect to buildings and landmarks [2711 (a)(8) CCR].
6. Tank owners must submit documentation showing compliance with state financial responsibility requirements to the local agency for petroleum USTs [2711 (a)(11) CCR].

TOP OF FORM: MARK ONLY ONE ITEM

1. Mark an (X) in the box next to the item that best describes the reason the form is being completed.
2. Indicate the DBA or Facility name where the tank is installed.

I. TANK DESCRIPTION - COMPLETE ALL ITEMS - IF UNKNOWN - SO SPECIFY

A. Indicate owners tank ID # - If there is a tank number that is used by the owner to identify the tank (ex. AB70789).
B. Indicate the name of the company that manufactured the tank (ex. ACME TANK MFG).
C. Indicate the year the tank was installed (ex. 1987).
D. Indicate the tank capacity in gallons (ex. 25,000 or 10,000 etc.).

II. TANK CONTENTS

A. 1. IF MOTOR VEHICLE FUEL, check box 1 and complete items B & C.
2. If not MOTOR VEHICLE FUEL, check the appropriate box in section A and complete items B & D.
B. Check the appropriate box.
C. Check the type of MOTOR VEHICLE FUEL (if box 1 is checked in A).
D. Print the chemical name of the hazardous substance stored in the tank and the C.A.S.#. (Chemical Abstract Service number), if box 1 is NOT checked in A.

III. TANK CONSTRUCTION - MARK ONE ITEM ONLY IN BOX A, B, C & D

1. Check only one item in TYPE OF SYSTEM, TANK MATERIAL, INTERIOR LINING and CORROSION PROTECTION.
2. If OTHER, print in the space provided.

IV. PIPING INFORMATION

1. Circle "A" if above ground circle "U" if underground, and circle both if applicable.
2. If UNKNOWN circle; or if OTHER, print in space provided.
3. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirement for the piping.

V. TANK LEAK DETECTION

1. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirements for the tank.

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED - MONTH/YEAR (January, 1988 or 01/88)
2. ESTIMATED QUANTITY of HAZARDOUS SUBSTANCE remaining in the tank (in Gallons).
3. WAS TANK FILLED WITH INERT MATERIAL? Check "Yes" or "No".

TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED [see section 2711 (a)(13) CCR]

INSTRUCTION FOR THE LOCAL AGENCIES

The state underground storage tank identification number is composed of the two digit county number, the three digit jurisdiction number, the six digit facility number and the six digit tank number. The county and jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4303. The facility number must be the same as shown in form "A". The tank number may be assigned by the local agency, however, this number must be numerical and cannot contain an alphabet. If the local agency prefers the State Board to assign the tank number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINAL AND YELLOW COPIES. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM A

COMPLETE THIS FORM FOR EACH FACILITY/SITE

MARK ONLY ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY SITE CLOSURE ☒ 7 PERMANENTLY CLOSED SITE

I. FACILITY/SITE INFORMATION & ADDRESS - (MUST BE COMPLETED)

DBA OR FACILITY NAME	NAME OF OPERATOR	
City of Oakland	Jeffrey S. Krohn	
ADDRESS: 7101 Edgewater Drive	NEAREST CROSS STREET	PARCEL # (OPTIONAL)
CITY NAME: Oakland	STATE: CA / ZIP CODE: 94621	SITE PHONE # WITH AREA CODE: (510) 615-5515

✔ BOX TO INDICATE: ☐ CORPORATION ☐ INDIVIDUAL ☐ PARTNERSHIP ☒ LOCAL-AGENCY DISTRICTS ☐ COUNTY-AGENCY * ☐ STATE-AGENCY * ☐ FEDERAL-AGENCY *

* If owner of UST is a public agency, complete the following: name of supervisor of division, section or office which operates the UST _____

TYPE OF BUSINESS	✔ IF INDIAN RESERVATION OR TRUST LANDS	# OF TANKS AT SITE	E. P. A. I. D. # (optional)
☐ 1 GAS STATION ☐ 2 DISTRIBUTOR ☐ 3 FARM ☐ 4 PROCESSOR ☒ 5 OTHER	☐	9	CAD981424609

EMERGENCY CONTACT PERSON (PRIMARY)		EMERGENCY CONTACT PERSON (SECONDARY) - optional	
DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	DAYS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE
Krohn, Jeffrey S.	(510) 615-5515		
NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE	NIGHTS: NAME (LAST, FIRST)	PHONE # WITH AREA CODE

II. PROPERTY OWNER INFORMATION - (MUST BE COMPLETED)

NAME	CARE OF ADDRESS INFORMATION		
City of Oakland	Jeffrey S. Krohn		
MAILING OR STREET ADDRESS: 7101 Edgewater Drive	✔ box to indicate ☐ INDIVIDUAL ☒ LOCAL-AGENCY ☐ STATE-AGENCY ☐ CORPORATION ☐ PARTNERSHIP ☐ COUNTY-AGENCY ☐ FEDERAL-AGENCY		
CITY NAME: Oakland	STATE: CA / ZIP CODE: 94621	PHONE # WITH AREA CODE: (510) 615-5515	

III. TANK OWNER INFORMATION - (MUST BE COMPLETED)

NAME OF OWNER	CARE OF ADDRESS INFORMATION		
City of Oakland	Jeffrey S. Krohn		
MAILING OR STREET ADDRESS: 7101 Edgewater Drive	✔ box to indicate ☐ INDIVIDUAL ☒ LOCAL-AGENCY ☐ STATE-AGENCY ☐ CORPORATION ☐ PARTNERSHIP ☐ COUNTY-AGENCY ☐ FEDERAL-AGENCY		
CITY NAME: Oakland	STATE: CA / ZIP CODE: 94621	PHONE # WITH AREA CODE: (510) 615-5515	

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER - Call (916) 322-9669 if questions arise.

TY (TK) HQ 44-037622

V. PETROLEUM UST FINANCIAL RESPONSIBILITY - (MUST BE COMPLETED) – IDENTIFY THE METHOD(S) USED

✔ box to indicate ☐ 1 SELF-INSURED ☐ 2 GUARANTEE ☐ 3 INSURANCE ☐ 4 SURETY BOND ☐ 5 LETTER OF CREDIT ☐ 6 EXEMPTION ☐ 7 STATE FUND ☐ 8 STATE FUND & CHIEF FINANCIAL OFFICER LETTER ☐ 9 STATE FUND & CERTIFICATE OF DEPOSIT ☐ 10 LOCAL GOVT. MECHANISM ☐ 99 OTHER_____

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Legal notification and billing will be sent to the tank owner unless box I or II is checked.

CHECK ONE BOX INDICATING WHICH ABOVE ADDRESS SHOULD BE USED FOR LEGAL NOTIFICATIONS AND BILLING: I. ☐ II. ☒ III. ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE)	TANK OWNER'S TITLE	DATE MONTH/DAY/YEAR
Jeffrey S. Krohn Jeff Krohn	Maint. Architect.	4/16/97

LOCAL AGENCY USE ONLY

COUNTY #	JURISDICTION #	FACILITY #

LOCATION CODE - *OPTIONAL*	CENSUS TRACT # - *OPTIONAL*	SUPVISOR - DISTRICT CODE - *OPTIONAL*

THIS FORM MUST BE ACCOMPANIED BY AT LEAST (1) OR MORE PERMIT APPLICATION - FORM B, UNLESS THIS IS A CHANGE OF SITE INFORMATION ONLY.

OWNER MUST FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

INSTRUCTIONS FOR COMPLETING FORM "A"

GENERAL INSTRUCTIONS:

SECTION 2711 OF TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS AND SECTIONS 25286, 25287, AND 25289 OF CHAPTER 6.7, DIVISION 20, CALIFORNIA HEALTH AND SAFETY CODE REQUIRE OWNERS TO APPLY FOR AN UST OPERATING PERMIT.

1. One FORM "A" shall be completed for all NEW PERMIT CHANGES or any FACILITY/SITE INFORMATION CHANGES.
2. SUBMIT ONLY ONE (1) FORM "A" for a Facility/Site, regardless of the number of tanks located at the site.
3. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
4. Please type or print clearly all requested information.
5. Use a hard point writing instrument, you are making 3 copies.
6. Tank owner must submit a facility plot plan to the local agency as part of the application showing the location of the USTs with respect to buildings and landmarks [Section 2711 (a)(8), CCR].
7. Tank owner must submit documentation showing compliance with state financial responsibility requirements to the local agency as part of the application for petroleum USTs [Section 2711 (a)(11), CCR].

TOP OF FORM: "MARK ONLY ONE ITEM"

Mark an (X) in the box next to the item that best describes the reason the form is being completed.

I. FACILITY/SITE INFORMATION & ADDRESS (MUST BE COMPLETED)

1. Record name and address (physical location) of the underground tank(s).
   NOTE: Address MUST have a valid physical location including city, state, and zip code.
   P.O. BOX NUMBERS ARE NOT ACCEPTABLE.
   Include nearest cross street and name of the operator.
2. Phone number must have an area code. If the night number is the same, write "SAME" in proper location.
3. Check the appropriate box for TYPE OF BUSINESS OWNERSHIP (ex. CORPORATION, INDIVIDUAL, etc.).
4. Check the appropriate box for TYPE OF BUSINESS.
5. If Facility/Site is located within an Indian reservation or other Indian trust lands, check the box marked "YES".
6. Indicate the NUMBER of TANKS at this SITE.
7. Record the E.P.A. ID # or write "NONE" in the space provided.

II. PROPERTY OWNER INFORMATION & ADDRESS (MUST BE COMPLETED)

Complete all items in this section, unless all items are the same as SECTION I; If the same, write "SAME AS SITE" across this section. Be sure to check PROPERTY OWNERSHIP TYPE box.

III. TANK OWNER INFORMATION & ADDRESS (MUST BE COMPLETED)

Complete all items in this section, unless all items are the same as SECTION 1; If the same, write "SAME AS SITE" across this section. Be sure to check TANK OWNERS TYPE box.

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER (MUST BE COMPLETED. SEE ARTICLE 5, CHAPTER 6.75, DIVISION 20, CALIFORNIA HEALTH AND SAFETY CODE.)

Enter your Board of Equalization (BOE) UST storage fee account number which is required before your permit application can be processed. Registration with the BOE will ensure that you will receive a quarterly storage fee return in reporting the per gallon fee due on the number of gallons placed in your USTs. The BOE will code persons exempt from paying the storage fee so returns will not be sent. If you do not have an account number with the BOE or if you have any questions regarding the fee or exemptions, please call the BOE at 916-322-9669 or write to the BOE at the following address Board of Equalization, Fuel Taxes Division, P.O. Box 942879, Sacramento, CA 94279-0001.

V. PETROLEUM UST FINANCIAL RESPONSIBILITY (MUST BE COMPLETED FOR PETROLEUM USTs ONLY. SEE SECTIONS 2711 (a)(11) OF TITLE 23, CHAPTER 16, CALIFORNIA CODE OF REGULATIONS.)

Identify the method(s) used by the owner and/or operator, in meeting the Federal and State financial responsibility requirements. USTs owned by any Federal or State agency as well as non-petroleum USTs are exempt from this requirement.

VI. LEGAL NOTIFICATION AND BILLING ADDRESS

Check ONE BOX for the address that will be used for BOTH LEGAL AND BILLING NOTIFICATIONS.
TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED. [SEE SECTIONS 2711 (a)(13) OF TITLE 23 CHAPTER 16, CALIFORNIA CODE OF REGULATIONS.]

INSTRUCTION FOR THE LOCAL AGENCIES

The county and jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4303. The facility number may be assigned by the local agency; however, this number must be numerical and cannot contain any alphabetical characters. If the local agency prefers the State Board to assign the facility number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THIS APPLICATION CANNOT BE PROCESSED IF THE BOE ACCOUNT NUMBER IS NOT FILLED IN. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINAL AND YELLOW COPIES. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONLY ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY TANK CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☒ 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: 7101 Edgewater Drive

I. TANK DESCRIPTION
COMPLETE ALL ITEMS – SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown
B. MANUFACTURED BY: Unknown
C. DATE INSTALLED (MO/DAY/YEAR) Unknown
D. TANK CAPACITY IN GALLONS: 8,000

II. TANK CONTENTS
IF A-1 IS MARKED, COMPLETE ITEM C.

A. ☐ 1 MOTOR VEHICLE FUEL ☐ 2 PETROLEUM ☐ 3 CHEMICAL PRODUCT ☐ 4 OIL ☐ 80 EMPTY ☒ 95 UNKNOWN

B. ☐ 1 PRODUCT ☐ 2 WASTE

C. ☐ 1a REGULAR UNLEADED ☐ 1b PREMIUM UNLEADED ☐ 1c MIDGRADE UNLEADED ☐ 2 LEADED ☐ 3 DIESEL ☐ 4 GASAHOL ☐ 5 JET FUEL ☐ 6 AVIATION GAS ☐ 7 METHANOL ☐ 8 M85 ☐ 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED — C. A. S. # :

III. TANK CONSTRUCTION
MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: ☐ 1 DOUBLE WALL ☒ 2 SINGLE WALL ☐ 3 SINGLE WALL WITH EXTERIOR LINER ☐ 4 SINGLE WALL IN A VAULT ☐ 5 INTERNAL BLADDER SYSTEM ☐ 95 UNKNOWN ☐ 99 OTHER

B. TANK MATERIAL (Primary Tank): ☒ 1 BARE STEEL ☐ 2 STAINLESS STEEL ☐ 3 FIBERGLASS ☐ 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC ☐ 5 CONCRETE ☐ 6 POLYVINYL CHLORIDE ☐ 7 ALUMINUM ☐ 8 100% METHANOL COMPATIBLE W/FRP ☐ 9 BRONZE ☐ 10 GALVANIZED STEEL ☐ 95 UNKNOWN ☐ 99 OTHER

C. INTERIOR LINING OR COATING: ☐ 1 RUBBER LINED ☐ 2 ALKYD LINING ☐ 3 EPOXY LINING ☐ 4 PHENOLIC LINING ☐ 5 GLASS LINING ☐ 6 UNLINED ☒ 95 UNKNOWN ☐ 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: ☐ 1 POLYETHYLENE WRAP ☐ 2 COATING ☐ 3 VINYL WRAP ☐ 4 FIBERGLASS REINFORCED PLASTIC ☐ 5 CATHODIC PROTECTION ☐ 91 NONE ☒ 95 UNKNOWN ☐ 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____
DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION
CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A (U) 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE
A U 5 ALUMINUM A U 6 CONCRETE A U 7 STEEL W/ COATING A U 8 100% METHANOL COMPATIBLE W/FRP
A U 9 GALVANIZED STEEL A U 10 CATHODIC PROTECTION A U 95 UNKNOWN A U 99 OTHER

D. LEAK DETECTION: ☐ 1 MECHANICAL LINE LEAK DETECTOR ☐ 2 LINE TIGHTNESS TESTING ☐ 3 CONTINUOUS INTERSTITIAL MONITORING ☐ 4 ELECTRONIC LINE LEAK DETECTOR ☐ 5 AUTOMATIC PUMP SHUTDOWN ☐ 99 OTHER

V. TANK LEAK DETECTION

☐ 1 VISUAL CHECK ☐ 2 MANUAL INVENTORY RECONCILIATION ☐ 3 VADOZE MONITORING ☐ 4 AUTOMATIC TANK GAUGING ☐ 5 GROUND WATER MONITORING ☐ 6 ANNUAL TANK TESTING ☐ 7 CONTINUOUS INTERSTITIAL MONITORING ☐ 8 SIR ☐ 9 WEEKLY MANUAL TANK GAUGING ☐ 10 MONTHLY TANK TESTING ☐ 95 UNKNOWN ☐ 99 OTHER

VI. TANK CLOSURE INFORMATION (PERMANENT CLOSURE IN-PLACE)

1. ESTIMATED DATE LAST USED (MO/DAY/YR)
2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING ___ GALLONS
3. WAS TANK FILLED WITH INERT MATERIAL? YES ☐ NO ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE) Jeffrey J. Krohn Jeffrey Krohn — DATE 4/16/97

LOCAL AGENCY USE ONLY
THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# — COUNTY # ☐☐ JURISDICTION # ☐☐☐ FACILITY # ☐☐☐☐☐ TANK # ☐☐☐☐☐

PERMIT NUMBER	PERMIT APPROVED BY/DATE	PERMIT EXPIRATION DATE

THIS FORM MUST BE ACCOMPANIED BY A PERMIT APPLICATION - FORM A, UNLESS A CURRENT FORM A HAS BEEN FILED. FORM C MUST BE COMPLETED FOR INSTALLATIONS. THIS FORM SHOULD BE ACCOMPANIED BY A PLOT PLAN. FILE THIS FORM WITH THE LOCAL AGENCY IMPLEMENTING THE UNDERGROUND STORAGE TANK REGULATIONS

INSTRUCTIONS FOR COMPLETING FORM "B"

GENERAL INSTRUCTIONS

Section 2711 of Title 23, Division 3, Chapter 16, California Code of Regulations and sections 25286, 25287, and 25289 of Chapter 6.7, Division 20, Health and Safety Code require tank owners to apply for an UST operating permit.

1. One FORM "B" shall be completed for each tank for all NEW PERMITS, PERMIT CHANGES, REMOVALS and/or any other TANK INFORMATION CHANGE.
2. This form should be completed by either the PERMIT APPLICANT or the LOCAL AGENCY UNDERGROUND TANK INSPECTOR.
3. Please type or print clearly all requested information.
4. Use a hard point writing instrument, you are making 3 copies.
5. Tank owners must submit a plot plan to the local agency showing the location of the USTs with respect to buildings and landmarks [2711 (a)(8) CCR].
6. Tank owners must submit documentation showing compliance with state financial responsibility requirements to the local agency for petroleum USTs [2711 (a)(11) CCR].

TOP OF FORM: MARK ONLY ONE ITEM

1. Mark an (X) in the box next to the item that best describes the reason the form is being completed.
2. Indicate the DBA or Facility name where the tank is installed.

I. TANK DESCRIPTION - COMPLETE ALL ITEMS - IF UNKNOWN - SO SPECIFY

A. Indicate owners tank ID # - If there is a tank number that is used by the owner to identify the tank (ex. AB70789).
B. Indicate the name of the company that manufactured the tank (ex. ACME TANK MFG).
C. Indicate the year the tank was installed (ex. 1987).
D. Indicate the tank capacity in gallons (ex. 25,000 or 10,000 etc.).

II. TANK CONTENTS

A. 1. IF MOTOR VEHICLE FUEL, check box 1 and complete items B & C.
2. If not MOTOR VEHICLE FUEL, check the appropriate box in section A and complete items B & D.
B. Check the appropriate box.
C. Check the type of MOTOR VEHICLE FUEL (if box 1 is checked in A).
D. Print the chemical name of the hazardous substance stored in the tank and the C.A.S.#. (Chemical Abstract Service number), if box 1 is NOT checked in A.

III. TANK CONSTRUCTION - MARK ONE ITEM ONLY IN BOX A, B, C & D

1. Check only one item in TYPE OF SYSTEM, TANK MATERIAL, INTERIOR LINING and CORROSION PROTECTION.
2. If OTHER, print in the space provided.

IV. PIPING INFORMATION

1. Circle "A" if above ground circle "U" if underground, and circle both if applicable.
2. If UNKNOWN circle; or if OTHER, print in space provided.
3. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirement for the piping.

V. TANK LEAK DETECTION

1. Indicate the LEAK DETECTION system(s) used to comply with the monitoring requirements for the tank.

VI. INFORMATION ON TANK PERMANENTLY CLOSED IN PLACE

1. ESTIMATED DATE LAST USED - MONTH/YEAR (January, 1988 or 01/88)
2. ESTIMATED QUANTITY of HAZARDOUS SUBSTANCE remaining in the tank (in Gallons).
3. WAS TANK FILLED WITH INERT MATERIAL? Check "Yes" or "No".

TANK OWNER OR AUTHORIZED REPRESENTATIVE MUST SIGN AND DATE THE FORM AS INDICATED [see section 2711 (a)(13) CCR]

INSTRUCTION FOR THE LOCAL AGENCIES

The state underground storage tank identification number is composed of the two digit county number, the three digit jurisdiction number, the six digit facility number and the six digit tank number. The county and jurisdiction numbers are predetermined and can be obtained by calling the State Board (916) 227-4303. The facility number must be the same as shown in form "A". The tank number may be assigned by the local agency, however, this number must be numerical and cannot contain an alphabet. If the local agency prefers the State Board to assign the tank number, please leave it blank.

IT IS THE RESPONSIBILITY OF THE LOCAL AGENCY THAT INSPECTS THE FACILITY TO VERIFY THE ACCURACY OF THE INFORMATION. THE LOCAL AGENCY IS RESPONSIBLE FOR THE COMPLETION OF THE "LOCAL AGENCY USE ONLY" INFORMATION BOX. THE LOCAL AGENCY SHOULD RETAIN THE ORIGINAL AND YELLOW COPIES. THE PINK COPY SHOULD BE RETAINED BY THE TANK OWNER.

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

UNDERGROUND STORAGE TANK PERMIT APPLICATION - FORM B

COMPLETE A SEPARATE FORM FOR EACH TANK SYSTEM.

MARK ONE ITEM: ☐ 1 NEW PERMIT ☐ 2 INTERIM PERMIT ☐ 3 RENEWAL PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY TANK CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☒ 8 TANK REMOVED

DBA OR FACILITY NAME WHERE TANK IS INSTALLED: 7101 Edgewater Drive

I. TANK DESCRIPTION
COMPLETE ALL ITEMS -- SPECIFY IF UNKNOWN

A. OWNER'S TANK I. D. # Unknown
B. MANUFACTURED BY: Unknown
C. DATE INSTALLED (MO/DAY/YEAR) Unknown
D. TANK CAPACITY IN GALLONS: 1,000

II. TANK CONTENTS
IF A-1 IS MARKED, COMPLETE ITEM C.

A. ☐ 1 MOTOR VEHICLE FUEL ☐ 2 PETROLEUM ☐ 3 CHEMICAL PRODUCT ☒ 4 OIL ☐ 80 EMPTY ☐ 95 UNKNOWN

B. ☐ 1 PRODUCT ☒ 2 WASTE

C. ☐ 1a REGULAR UNLEADED ☐ 1b PREMIUM UNLEADED ☐ 1c MIDGRADE UNLEADED ☐ 2 LEADED ☐ 3 DIESEL ☐ 4 GASAHOL ☐ 5 JET FUEL ☐ 6 AVIATION GAS ☐ 7 METHANOL ☐ 8 M85 ☐ 99 OTHER (DESCRIBE IN ITEM D. BELOW)

D. IF (A.1) IS NOT MARKED, ENTER NAME OF SUBSTANCE STORED C. A. S. # :

III. TANK CONSTRUCTION
MARK ONE ITEM ONLY IN BOXES A, B, AND C, AND ALL THAT APPLIES IN BOX D AND E

A. TYPE OF SYSTEM: ☐ 1 DOUBLE WALL ☒ 2 SINGLE WALL ☐ 3 SINGLE WALL WITH EXTERIOR LINER ☐ 4 SINGLE WALL IN A VAULT ☐ 5 INTERNAL BLADDER SYSTEM ☐ 95 UNKNOWN ☐ 99 OTHER

B. TANK MATERIAL (Primary Tank): ☒ 1 BARE STEEL ☐ 2 STAINLESS STEEL ☐ 3 FIBERGLASS ☐ 4 STEEL CLAD W/ FIBERGLASS REINFORCED PLASTIC ☐ 5 CONCRETE ☐ 6 POLYVINYL CHLORIDE ☐ 7 ALUMINUM ☐ 8 100% METHANOL COMPATIBLE W/FRP ☐ 9 BRONZE ☐ 10 GALVANIZED STEEL ☐ 95 UNKNOWN ☐ 99 OTHER

C. INTERIOR LINING OR COATING: ☐ 1 RUBBER LINED ☐ 2 ALKYD LINING ☐ 3 EPOXY LINING ☐ 4 PHENOLIC LINING ☐ 5 GLASS LINING ☐ 6 UNLINED ☒ 95 UNKNOWN ☐ 99 OTHER
IS LINING MATERIAL COMPATIBLE WITH 100% METHANOL ? YES ___ NO ___

D. EXTERIOR CORROSION PROTECTION: ☐ 1 POLYETHYLENE WRAP ☐ 2 COATING ☐ 3 VINYL WRAP ☐ 4 FIBERGLASS REINFORCED PLASTIC ☐ 5 CATHODIC PROTECTION ☐ 91 NONE ☒ 95 UNKNOWN ☐ 99 OTHER

E. SPILL AND OVERFILL, etc. SPILL CONTAINMENT INSTALLED (YEAR) _____ OVERFILL PREVENTION EQUIPMENT INSTALLED (YEAR) _____
DROP TUBE YES ___ NO ___ STRIKER PLATE YES ___ NO ___ DISPENSER CONTAINMENT YES ___ NO ___

IV. PIPING INFORMATION
CIRCLE A IF ABOVE GROUND OR U IF UNDERGROUND, BOTH IF APPLICABLE

A. SYSTEM TYPE: A (U) 1 SUCTION A U 2 PRESSURE A U 3 GRAVITY A U 4 FLEXIBLE PIPING A U 99 OTHER

B. CONSTRUCTION: A (U) 1 SINGLE WALL A U 2 DOUBLE WALL A U 3 LINED TRENCH A U 95 UNKNOWN A U 99 OTHER

C. MATERIAL AND CORROSION PROTECTION: A (U) 1 BARE STEEL A U 2 STAINLESS STEEL A U 3 POLYVINYL CHLORIDE (PVC) A U 4 FIBERGLASS PIPE
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2. ESTIMATED QUANTITY OF SUBSTANCE REMAINING ___0___ GALLONS
3. WAS TANK FILLED WITH INERT MATERIAL ? YES ☐ NO ☐

THIS FORM HAS BEEN COMPLETED UNDER PENALTY OF PERJURY, AND TO THE BEST OF MY KNOWLEDGE, IS TRUE AND CORRECT

TANK OWNER'S NAME (PRINTED & SIGNATURE) Jeffrey S. Krohn Jeffrey S. Krohn DATE 4/16/97

LOCAL AGENCY USE ONLY THE STATE I.D. NUMBER IS COMPOSED OF THE FOUR NUMBERS BELOW

STATE I.D.# COUNTY # JURISDICTION # FACILITY # TANK #

PERMIT NUMBER | PERMIT APPROVED BY/DATE | PERMIT EXPIRATION DATE

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

February 25, 1997
StID # 3978

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

Mr. Joseph Cotton
City of Oakland
Office of Public Works
1333 Broadway, Suite 300
Oakland CA 94614

Re: City of Oakland Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Cotton:

Our office has received and reviewed the October 10, 1996 Baseline report for the August 1996 sampling of monitoring wells and Woodward-Clyde's January 8, 1997 letter recommending a change in monitoring frequency and analyses. Based on historic groundwater monitoring data, Woodward-Clyde has recommended considerable changes in sampling as stated in Table 3 of the January 8, 1997 letter. Also included are Tier 1 Cleanup Standards for saltwater ecological protection as established for the SF International Airport. These levels are considered conservative and serve as standards until additional levels are generated by the Water Board or your consultant.

The letter also refers to the recent additional groundwater characterization at the site. Twelve borings were advanced along the San Leandro Bay boundary of the MSC site. Three of these borings were proposed to be completed into monitoring wells as stated by Mr. George Muehleck of Woodward-Clyde and discussed with yourself. Upon the condition that the three borings; B35, B39 and B44 are completed into monitoring wells and monitored on a **quarterly basis**, the proposed changes in monitoring are accepted.

Please submit the **Additional Groundwater Characterization Report and documentation of monitoring well installations within 30 days or by March 26, 1997.** Please also propose a list of analytes for these three wells and justification for any analyte omission. You should also be aware that based upon the results of the **Additional Groundwater Characterization Report,** more requirements may be necessary.

Our office also acknowledges and approves your November 18, 1996 revised schedule for the removal of underground tanks and piping. Accordingly, your Phase I Task for the removal of Tanks 1,2,3,4,5,10,11,12 and 13 should be initiated by May 1997.

Failure to submit the requested reports or meet the deadlines of the accepted proposed schedule may cause this site to be referred to the District Attorney's office for enforcement.

You may reach me at (510) 567-6765 for comments or questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

c: Mr. G. Muehleck, WCC, 500 12th St., Suite 100, Oakland CA 94607-4014
D. Heinze, Port of Oakland Environmental Dept., 530 Water St. P.O. Box 2064, Oakland CA 94607-2064
D. Hwang, ACEH
B. Chan, files

mon7101

#3978

CITY OF OAKLAND

ENVIRONMENTAL SERVICES • 1333 BROADWAY, SUITE 330 • OAKLAND, CALIFORNIA 94612

Public Works Agency

(510) 238-6688
FAX (510) 238-7286
TDD (510) 238-7644

November 18, 1996

Mr.Barney M. Chan
Alameda County Department of Environmental Health
Hazardous Materials Division
1131 Harbor Bay Parkway, Suite 200
Alameda, CA 94502

Re: Revised Tank Removal Schedule for City of Oakland Municipal Service Center, 7101 Edgewater Drive Oakland, California

Dear Mr. Chan:

The City of Oakland Public Works Agency Environmental Services Division has prepared this revised schedule for underground storage tank (UST) removal and fuel distribution pipeline closure at the Municipal Service Center. This revised schedule replaces a previous tank removal schedule submitted to your office on April 22, 1996. The timetable for tank removal operations was rescheduled due to delays associated with the City's contractor procurement policy. As mentioned in the initial tank removal schedule, the primary focus of the planned work is to remove inactive USTs; decommission the fuel distribution line; remediate affected soil; and replace the single-walled USTs currently in operation with double-walled USTs.

Phased Approach to Underground Storage Tank and Fuel Distribution Line Closure

Planned closure activities will be conducted in three separate phases of operation, as listed below.

Phase of Operation	Tasks	Start Date
Phase I	Removal of Tanks 1, 2, 3, 4, 5, 10, 11,12 and 13	May 1997
Phase II	Closure of Fuel Distribution System	October 1997
Phase III	Removal and Replacement of Tanks 7,8 and 9	March 1998

Ground Water Monitoring

Quarterly groundwater monitoring of select wells will continue until it is deemed appropriate to modify the existing groundwater monitoring schedule. Modifications to the existing groundwater monitoring schedule must be approved by Alameda County Department of Environmental Health (ACDEH).

Interim Tank Evaluation

Measures will be taken to evaluate and monitor the present condition of each inactive UST to ensure that tanks are not contributing to additional soil or groundwater contamination at the site. Dipstick measurements will be collected from all inactive tanks to evaluate the potential presence of residual fuel in the tanks. If encountered, residual fuel will be purged from tanks, placed in appropriate storage containers, profiled and disposed of accordingly.

Additional Interim Tasks

All permit requirements associated with closure of the inactive USTs and operation of active USTs will be completed and submitted to Kevin Tinsley. This includes submittal of a tank closure plan for tanks 1 through 5 and 10 through 13. A spill response plan and statistical inventory reconciliation documents for the three USTs currently in operation will be submitted to ACDEH for review and approval.

The subsurface investigation along the western site boundary has been completed and laboratory results are pending. The results will be submitted to you immediately upon receipt.

Should you have any questions or require additional information please do not hesitate to contact Andrew Clark-Clough at (510) 238-6361 or myself at 238-6259.

Sincerely,

Joseph A. Cotton
Environmental Program Specialist

cc: Harry Schrauth
Ellis Brown
Andrew Clark-Clough

CITY OF OAKLAND
PWA/ENVIRONMENTAL SERVICES DIVISION

1333 BROADWAY, SUITE 330A
OAKLAND, CA 94612
(510) 238-~~6688~~ 7286

FAX

3978

DATE: 11-18-96

TO: Alameda City Dep. Env. Hea FAX#: 337-9335
Mr. Barney Chan

FROM: City of Oakland FAX#: (510) 238-7286
Joseph Cotton

Number of pages including this page: 3

Comments:

ewpwinssfaxcvr.form

Kevin: FYI

CITY OF OAKLAND

ENVIRONMENTAL SERVICES • 1333 BROADWAY, SUITE 330 • OAKLAND, CALIFORNIA 94612

Public Works Agency

(510) 238-6688
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November 18, 1996

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Sincerely,

Joseph A. Cotton
Environmental Program Specialist

cc: Harry Schrauth
Ellis Brown
Andrew Clark-Clough

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

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

October 30, 1996
StID # 3978

Mr. Andrew Clark-Clough
City of Oakland
Office of Public Works
1333 Broadway, Suite 300
Oakland CA 94614

NOTICE OF VIOLATION

Re: City of Oakland Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Clark-Clough:

Our office last corresponded with you in my June 24, 1996 letter. This letter conditionally approved the June 17, 1996 Woodward-Clyde work plan for additional groundwater characterization at the above site. A number of hydropunch temporary well points were to be advanced along the boundary of the site on Regional Park property. Groundwater samples, groundwater gradient and samples necessary for fate and transport estimation would be taken. Obviously, should contamination concentration from the grab groundwater samples exceed conservative RBCA risk values, permanent wells and additional corrective action will be necessary. I am aware that after some delay dealing with permit issues, this work is currently being done.

My June 24, 1996 letter also commented on Woodward-Clyde's April 22, 1996 letter which provided a phased schedule for the removal of the thirteen underground storage tanks at this site. Phase I of the schedule proposed the removal of nine USTs in September 1996. Phase II scheduled the closure of the existing fuel distribution lines for the spring of 1997 and Phase III called for the removal of the remaining USTs in the summer of 1997. Recall, this schedule was copied to Mr. Don Hwang of our office to show the City's good intentions and to prevent potential enforcement due to these unpermitted or improperly closed USTs. To date, our office has not received the UST closure applications as scheduled.

Please submit a revised schedule for the removal of the USTs and the piping system to our office **within 15 days or by November 15, 1996.** This schedule should be realistically able to be met yet show your committment to properly close these tanks in a timely fashion.

Failure to submit the requested schedule or meet the deadlines of the accepted proposed schedule may cause this site to be referred to the District Attorney's office for enforcement.

You may reach me at (510) 567-6765 for comments or questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

c: Mr. G. Muehleck, WCC, 500 12th St., Suite 100, Oakland CA 94607-4014
D. Heinze, Port of Oakland Environmental Dept., 530 Water St. P.O. Box 2064, Oakland CA 94607-2064
K. Tinsley, ACEH
B. Chan, files

nov7101

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO

HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED ? ☐ YES ☐ NO

REPORT DATE: 10/9/96 | CASE #: St Id #3978

FOR LOCAL AGENCY USE ONLY
I HEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.
SIGNED: Barney Chan DATE: 11/25/96

REPORTED BY
NAME OF INDIVIDUAL FILING REPORT: Joseph Cotton | PHONE: (510) 238-6259 | SIGNATURE: Joseph Cotton 10/10/96
REPRESENTING ☒ OWNER/OPERATOR ☐ REGIONAL BOARD ☐ LOCAL AGENCY ☐ OTHER
COMPANY OR AGENCY NAME: City of Oakland Public Works Agency Environmental Svs.
ADDRESS: 1333 Broadway, Suite 330A (STREET) | OAKLAND (CITY) | CA (STATE) | 94612 (ZIP)

RESPONSIBLE PARTY
NAME: City of Oakland - PWA Municipal Bldgs. ☐ UNKNOWN | CONTACT PERSON: Joseph Cotton | PHONE: (510) 238 6259
ADDRESS: 7101 Edgewater Dr. (STREET) | Oakland (CITY) | CA (STATE) | 94621 (ZIP)

SITE LOCATION
FACILITY NAME (IF APPLICABLE): CITY OF OAKLAND - PWA Municipal Service Center | OPERATOR: CITY OF OAKLAND - PWA EQUIPMENT SERVICES | PHONE: (510) 238 6259
ADDRESS: 7101 Edgewater (STREET) | Oakland (CITY) | ALAMEDA (COUNTY) | 94621 (ZIP)
CROSS STREET: Hegenberger Road

IMPLEMENTING AGENCIES
LOCAL AGENCY / AGENCY NAME: Alameda City Dep. Env. Health | CONTACT PERSON: Barney Chan | PHONE: (510) 567 6880
REGIONAL BOARD: Regional Water Quality Control Board | NAME: Not Designated | PHONE: ( )

SUBSTANCES INVOLVED
(1) Gasoline — QUANTITY LOST (GALLONS): ☒ UNKNOWN
(2) Diesel — ☒ UNKNOWN

DISCOVERY/ABATEMENT
DATE DISCOVERED: 10/4/89 | HOW DISCOVERED: ☐ TANK TEST ☐ INVENTORY CONTROL ☒ SUBSURFACE MONITORING ☐ NUISANCE CONDITIONS ☐ TANK REMOVAL ☐ OTHER
DATE DISCHARGE BEGAN: ☒ UNKNOWN
HAS DISCHARGE BEEN STOPPED ? ☒ YES ☐ NO IF YES, DATE:
METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY)
☒ REMOVE CONTENTS ☐ CLOSE TANK & REMOVE ☐ REPAIR PIPING ☐ REPAIR TANK ☐ CLOSE TANK & FILL IN PLACE ☐ CHANGE PROCEDURE ☐ REPLACE TANK ☒ OTHER & HALT USE OF PIPING

SOURCE/CAUSE
SOURCE OF DISCHARGE: ☒ TANK LEAK ☐ UNKNOWN ☒ PIPING LEAK ☐ OTHER
CAUSE(S): ☐ OVERFILL ☐ RUPTURE/FAILURE ☐ SPILL ☐ CORROSION ☒ UNKNOWN ☐ OTHER

CASE TYPE
CHECK ONE ONLY
☒ UNDETERMINED ☐ SOIL ONLY ☐ GROUNDWATER ☐ DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS
CHECK ONE ONLY
☐ NO ACTION TAKEN ☐ PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED ☐ POLLUTION CHARACTERIZATION
☐ LEAK BEING CONFIRMED ☒ PRELIMINARY SITE ASSESSMENT UNDERWAY ☐ POST CLEANUP MONITORING IN PROGRESS
☐ REMEDIATION PLAN ☐ CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) ☐ CLEANUP UNDERWAY

REMEDIAL ACTION
CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)
☐ CAP SITE (CD) ☐ EXCAVATE & DISPOSE (ED) ☐ REMOVE FREE PRODUCT (FP) ☐ ENHANCED BIO DEGRADATION (IT)
☐ CONTAINMENT BARRIER (CB) ☐ EXCAVATE & TREAT (ET) ☐ PUMP & TREAT GROUNDWATER (GT) ☐ REPLACE SUPPLY (RS)
☐ VACUUM EXTRACT (VE) ☐ NO ACTION REQUIRED (NA) ☐ TREATMENT AT HOOKUP (HU) ☐ VENT SOIL (VS)
☐ OTHER (OT)

COMMENTS

HSC 05 (8/90)

INSTRUCTIONS

EMERGENCY
Indicate whether emergency response personnel and equipment were involved at any time. If so, a Hazardous Material Incident Report should be filed with the State Office of Emergency Services (OES) at 2800 Meadowview Road, Sacramento, CA 95832. Copies of the OES report form may be obtained at your local underground storage tank permitting agency. Indicate whether the OES report has been filed as of the date of this report.

LOCAL AGENCY ONLY
To avoid duplicate notification pursuant to Health and Safety code Section 25180.5, a government employee should sign and date the form in this block. A signature here does not mean that the leak has been determined to pose a significant threat to human health or safety, only that notification procedures have been followed if required.

REPORTED BY
Enter your name, telephone number, and address. Indicate which party you represent and provide company or agency name.

RESPONSIBLE PARTY
Enter name, telephone number, contact person, and address of the party responsible for the leak. The responsible party would normally be the tank owner.

SITE LOCATION
Enter information regarding the tank facility. At a minimum, you must provide the facility name and full address.

IMPLEMENTING AGENCIES
Enter names of the local agency and Regional Water Quality Control Board involved.

SUBSTANCES INVOLVED
Enter the name and quantity lost of the hazardous substance involved. Room is provided for information on two substances if appropriate. If more than two substances leaked, list the two of most concern for cleanup.

DISCOVERY/ABATEMENT
Provide information regarding the discovery and abatement of the leak.

SOURCE/CAUSE
Indicate source(s) of leak. Check box(es) indicating cause of leak.

CASE TYPE
Indicate the case type category for this leak. Check one box only. Case type is based on the most sensitive resource affected. For example, if both soil and ground water have been affected, case type will be "Drinking Water". Indicate "Drinking Water" only if one or more municipal or domestic water wells have actually been affected. A "Ground Water" designation does not imply that the affected water cannot be, or is not, used for drinking water, but only that water wells have not yet been affected. It is understood that case type may change upon further investigation.

CURRENT STATUS
Indicate the category which best describes the current status of the case. Check one box only. The response should be relative to the case type. For example, if case type is "Ground Water", then "Current Status" should refer to the status of the ground water investigation or cleanup, as opposed to that of soil. Descriptions of options follow:

No Action Taken - No action has been taken by responsible party beyond initial report of leak.
Leak Being Confirmed - Leak suspected at site, but has not been confirmed.
Preliminary Site Assessment Workplan Submitted - workplan/proposal requested of/submitted by responsible party to determine whether ground water has been, or will be, impacted as a result of the release.
Preliminary Site Assessment Underway - implementation of workplan.
Pollution Characterization - responsible party is in the process of fully defining the extent of contamination in soil and ground water and assessing impacts on surface and/or ground water.
Remediation Plan - remediation plan submitted evaluating long term remediation options. Proposed and implementation schedule for appropriate remediation options also submitted.
Cleanup Underway - implementation of remediation plan.
Post Cleanup Monitoring in Progress - periodic ground water or other monitoring at site, as necessary, to verify and/or evaluate effectiveness of remedial activities.
Case Closed - regional board and local agency in concurrence that no further work is necessary at the site.

IMPORTANT: THE INFORMATION PROVIDED ON THIS FORM IS INTENDED FOR GENERAL STATISTICAL PURPOSES ONLY AND IS NOT TO BE CONSTRUED AS REPRESENTING THE OFFICIAL POSITION OF ANY GOVERNMENTAL AGENCY

REMEDIAL ACTION
Indicate which action have been used to cleanup or remediate the leak. Descriptions of options follow:

Cap Site - install horizontal impermeable layer to reduce rainfall infiltration.
Containment Barrier - install vertical dike to block horizontal movement of contaminant.
Excavate and Dispose - remove contaminated soil and dispose in approved site.
Excavate and Treat - remove contaminated soil and treat (includes spreading or land farming).
Remove Free Product - remove floating product from water table.
Pump and Treat Groundwater - generally employed to remove dissolved contaminants.
Enhanced Biodegradation - use of any available technology to promote bacterial decomposition of contaminants.
Replace Supply - provide alternative water supply to affected parties.
Treatment at Wellhead - install water treatment devices at each dwelling or other place of use.
Vacuum Extract - use pumps or blowers to draw air through soil.
Vent Soil - bore holes in soil to allow volatilization of contaminants.
No Action Required - incident is minor, requiring no remedial action.

COMMENTS - Use this space to elaborate on any aspects of the incident.

SIGNATURE - Sign the form in the space provided.

DISTRIBUTION
If the form is completed by the tank owner or his agent, retain the last copy and forward the remaining copies intact to your local tank permitting agency for distribution.

1. Original - Local Tank Permitting Agency
2. State Water Resources Control Board, Division of Clean Water Programs, Underground Storage Tank Program, P.O. Box 944212, Sacramento, CA 94244-2120
3. Regional Water Quality Control Board
4. Local Health Officer and County Board of Supervisors or their designee to receive Proposition 65 notifications.
5. Owner/responsible party.

* Although no soil samples are proposed to be analyzed in the temporary borings, soil samples will be field screened with a FID instrument. Should significant readings be detected in any of the soil samples, it was acknowledged that the soil sample would be analyzed also by a certified laboratory.

* This work plan is a necessary part of the site characterization/site corrective action phase. The items in the City's **April 22, 1996 Planned Work/...** for this site is equally important. Significant source removal is expected during the closure and removal of existing USTs and fuel distribution lines. Contaminated soil and groundwater may be encountered during this activity. Please keep our office updated on your progress in each Phase proposed in your **Planned Work**. Accordingly, our office expects tank closure applications for approximately 9 USTs by September 2, 1996. Hopefully, actual tank removal would occur soon thereafter.

Please contact me **at least 72 hours prior to your field work** so I may arrange to be onsite if possible. You may reach me at (510) 567-6765 for comments or questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

c: Mr. G. Muehleck, WCC, 500 12th St., Suite 100, Oakland CA 94607-4014
D. Heinze, Port of Oakland Environmental Dept., 530 Water St. P.O. Box 2064, Oakland CA 94607-2064
G. Coleman, files

wpap7101

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

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

June 24, 1996
StID # 3978

Mr. Andrew Clark-Clough
City of Oakland
Office of Public Works
1333 Broadway, Suite 300
Oakland CA 94614

Re: City of Oakland Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Clark-Clough:

Our office has received and reviewed the June 17, 1996 Woodward-Clyde (WCC) Work Plan for Additional Groundwater Characterization for the above referenced site. This work plan addresses evaluating the potential extent of groundwater contamination from the various tank and fuel line sources at this site. As such, it is considered only a initial step of developing a Corrective Action Plan for the site. I have spoken with Mr. George Muehleck of WCC regarding the specific details of the work plan and in general, our office agrees with its approach.

I would like to clarify some of the items mentioned in my conversation with Mr. Muehleck for your edification:

* All temporary borings will be outside of the property boundaries of the MSC. As such, the potential of offsite contaminant sources exists ie offsite surface releases, utility releases and surface water infiltration. It is understood, however, any contamination detected in the temporary borings is assumed to be from onsite sources unless demonstrated otherwise.

* The work plan requests that the analyte TPHd not be run in proposed borings 41-46. This was based on TPHd not being reported in previous groundwater sampling in this area. It appears, however, that TPHd has **not** been analyzed in this area. Mr. Muehleck recommends and I concurr with analyzing water samples from borings 41 and 42 for TPHd given the past contamination detected in hydropunch 10 and hydropunch 7.

* Based on the detection of TPH contamination in groundwater from the borings, permanent monitoring wells should be proposed. Further, either a site specific or previously accepted default risk assessment must be provided with recommended cleanup levels for the detected chemicals of concern. It is recognized that the ecological risk may outweigh the risk to human health.

Oakland
All-America City
1993

RO293

ENVIRONMENTAL PROTECTION

CITY OF OAKLAND

95 AUG -7 PM 4:14

ENVIRONMENTAL AFFAIRS • 1333 BROADWAY, SUITE 330 • OAKLAND, CALIFORNIA 94612

Office of Public Works

(510) 238-6688
FAX (510) 238-7286
TDD (510) 838-7644

July 31, 1995

Mr. Barney M. Chan
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Response to Request for Technical Reports, City of Oakland, Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Chan:

This letter is in response to your July 17, 1995 letter to me regarding the above referenced site. I have included here some of the information you requested in that letter and in your June 16, 1995 Notice of Violation (NOV) letter. As we discussed on the phone, I have initiated work to address other issues you listed. For clarity, I will address topics by the item number from the NOV.

1. **June 1994 excavation clarification** - We believe that new underground storage tanks (UST) were installed in the same excavation from which a former UST was removed in 1984. We have been unable, however, to locate adequate documentation regarding soil sampling in conjunction with the UST removals and installations. As I discuss below, we will plan an investigation of the soil and groundwater in the vicinity of the former USTs.

2. The following environmental technical reports have been prepared and submitted:

   Environmental Site Assessment Oakland Building 7, Woodward-Clyde Consultants, December, 1989.

   Preliminary Geotechnical and Environmental Site Assessment Alternative Sites A and B, Woodward-Clyde Consultants, May 13, 1992.

   Groundwater Monitoring Event - April, 1995, Baseline Environmental Consulting, July 13, 1995.

   In addition to the activities described in these reports, in early 1993, groundwater was investigated by a hydropunch program, and the on-site monitoring wells were sampled. In April, 1995, soil samples were analyzed in conjunction with the proposed construction of the new "911" Building at the site. The results of these investigations have not been compiled into formal documents. We are currently, however, in the process of incorporating this information into a comprehensive report, as I will discuss below.

3. **Quarterly Monitoring** - Thank you for your comments regarding the July 13, 1995 groundwater monitoring report for the site. The deficiencies you noted in this report will be corrected in subsequent quarterly monitoring reports. These will commence with the report documenting our latest round of monitoring well sampling, which took place on July 27, 1995. Specifically, the wells have now been surveyed, so groundwater elevation and gradient information will be included (which will allow us to better address concerns from adjacent property owners); and a summary table with all previous groundwater monitoring results will be prepared.

4. **UST Status** - I have received a memo regarding existing USTs at the site from Mr. Okey Ozoh, City of Oakland, Office of General Services (OGS), and have attached a copy of it to this letter. Unfortunately, we know surprisingly little about the history of USTs at the site, and we are currently unable to sufficiently document the purported USTs. Please be assured that we are quite aware of the necessity of compliance with California underground tank permitting requirements. As you can read in OGS's memo, they are currently preparing a contract for a UST contractor. We will implement appropriate technical measures (such as a geophysical search) as necessary to locate the tanks. In the event that unpermitted tanks are discovered, we will clean and properly remove or abandon them, depending on their proximity to building foundations. This will be followed by an environmental investigation in the vicinity of the tanks.

Comprehensive Summary Report

I have instructed Woodward-Clyde Consultants to prepare a comprehensive summary report documenting the environmental investigation that has taken place at the site since 1989. This report will include the 1993 groundwater analyses, as mentioned above. The compilation of this data will allow for a better understanding of the environmental conditions at the site.

If you have any questions, please phone me at (510) 238-6361 or Jo Beth Folger of Woodward-Clyde at (510) 874-3138. Thank you for your assistance with this site. I look forward to working with you in the future.

Sincerely,

Andrew Clark-Clough, R.G.
Environmental Program Supervisor

ACC/eh

Attachment

cc: George Oakes, OGS
Harry Schrauth, OPW
Okey Ozoh, OGS
Jo Beth Folger, Woodward-Clyde

CITY OF OAKLAND

Memorandum

TO: OPW Environmental Affairs Division
ATTN: Andrew Clark-Clough
FROM: OGS Municipal Buildings Division
DATE: July 27-1995

RE: STATUS OF UNDERGROUND TANKS AT MUNICIPAL SERVICE CENTER

THE PURPOSE OF THIS LETTER IS TO UPDATE YOU ON THE CURRENT STATUS AND THE FUTURE PLANS OF THESE UNDERGROUND STORAGE TANKS AT MSC.

Attached is the list of underground storage tanks at the Municipal service center. The status of these tanks are based on information from our records and a site investigation I performed for confirmation of the current status.

Based on the site investigation, and lack of records, the exact location cannot be determined for some of the tanks. I did group the tanks into five categories.

1. **Fuel tanks that might have been abandoned**

2. **Fuel tanks that might have been removed and have no records.**

3. **Fuel tanks that have records and are in compliance.**

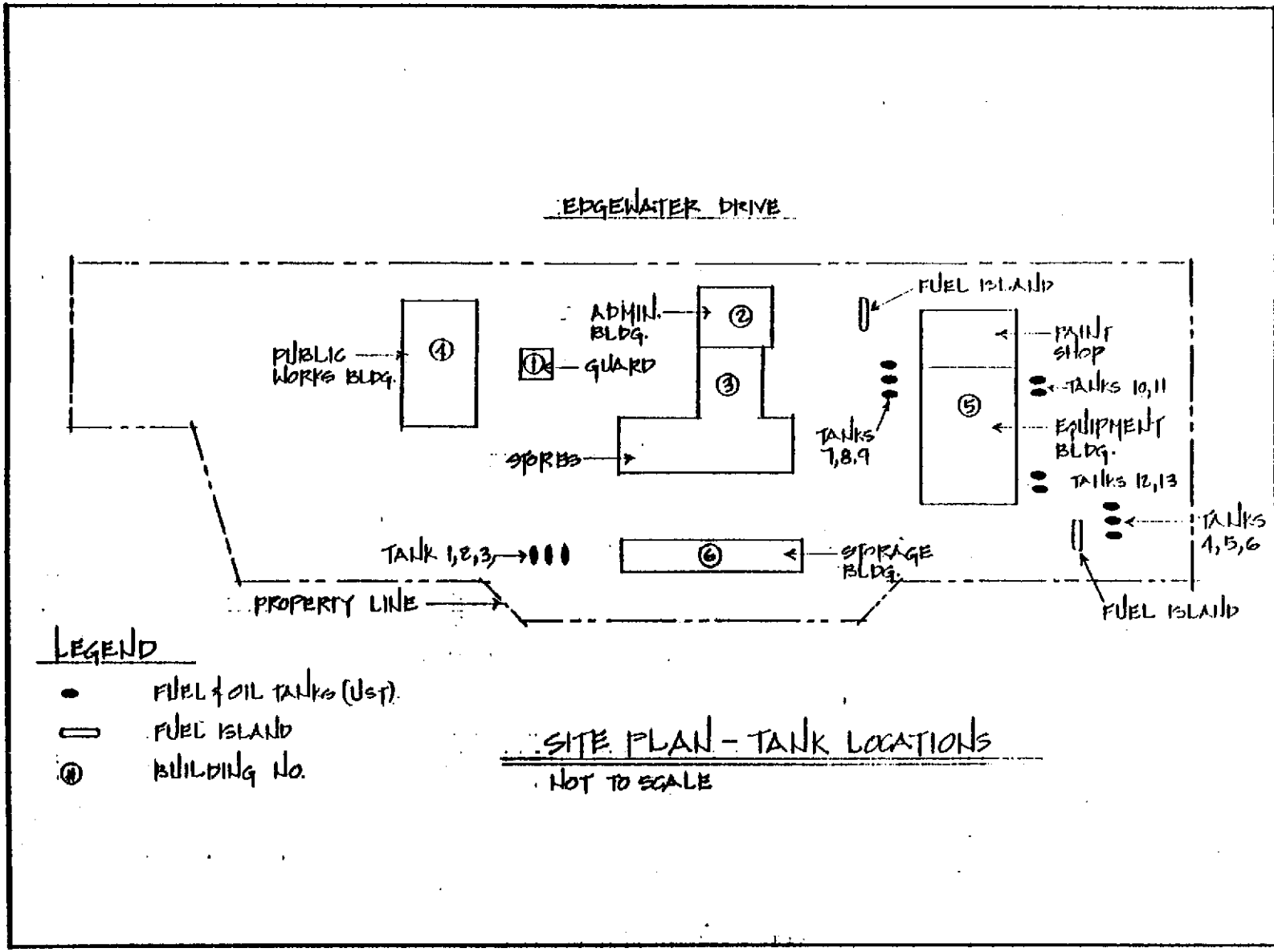
4. **Waste oil tanks that might have been abandoned**

5. **Waste latex tank that does not exist, or may have been removed, and does not have records.**

Office of General Services, Municipal Buildings Division has completed the bid process for an underground storage tank term contractor. The final stage of the contract is in progress, and once its completed we do have an option to conduct further investigation to determine the content and exact location of these tanks. A comprehensive plan may also be required for further site investigation and remedial process.

If you have any questions please feel free to call me at 615-5514.

Okey Ozoh.
Okey Ozoh
Architectural Assistance


EDGEWATER DRIVE
PUBLIC WORKS BLDG.
④
ADMIN. BLDG.
②
①
GUARD
③
SHOPS
FUEL ISLAND
PAINT SHOP
⑤
TANKS 10,11
EQUIPMENT BLDG.
TANKS 12,13
TANKS 7,8,9
TANKS 1,5,6
TANK 1,2,3
⑥
STORAGE BLDG.
PROPERTY LINE
FUEL ISLAND
LEGEND
FUEL & OIL TANKS (UST)
FUEL ISLAND
BUILDING NO.
SITE PLAN - TANK LOCATIONS
NOT TO SCALE
CITY OF OAKLAND • OFFICE OF GENERAL SERVICES
DRAWN BY
DIKEY
DWG. NO.
DATE
8-2-95
SHEET NO.
OF
MUNICIPAL SERVICE CENTER
UST LOCATION PLAN
APPROVED
APPROVED

UNDERGROUND STORAGE TANKS SUMMERY
MUNICIPAL SERVICE CENTER
7101 EDGEWATER DRIVE OAKLAND

TANK ID	APPROXIMATE YEAR INSTALLED	TANK SIZE GALLONS	CONTENTS	CURRENT OPERATING STATUS	OWNER
UNDERGROUND FUELING SYSTEM - MAY HAVE BEEN ABANDONED					
1.....	1970	5,000	Diesel	Not used	Unknown
2.....	1970	5,000	Leaded	Not used	Unknown
3.....	1970	5,000	Unleaded	Not used	Unknown
UNDERGROUND FUELING SYSTEM - MAY HAVE BEEN REMOVED AND NO RECORDS					
4.....	Unknown	8,000	Unknown	Removed	Unknown
5.....	Unknown	Unknown	Unknown	Not used	Unknown
6.....	1979	12,000	Unleaded	Not used	City Oakland
UNDERGROUND FUELING SYSTEM - HAVE RECORDS AND ARE IN COMPLIANCE					
7.....	1985	12,000	Leaded	Operating	City Oakland
8.....	1985	20,000	Unleaded	Operating	City Oakland
9.....	1985	20,000	Diesel	Operating	City Oakland
UNDERGROUND FUELING SYSTEM					
10.....	1960	1,000	Lube oil	Not used	Unknown
11.....	1960	500	Waste oil	Not used	Unknown
12.....	1960	1,000	Lube oil	Not used	Unknown
13.....	1960	500	Waste oil	Not used	Unknown
UNDERGROUND FUELING SYSTEM - MAY HAVE BEEN REMOVED AND NO RECORD					
14.....	1973	500	Waste, latex joint sealer	Not used	Unknown

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

RAFAT A. SHAHID, Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
Environmental Protection Division
1131 Harbor Bay Parkway, #250
Alameda, CA 94502-6577
(510) 567-6700

July 17, 1995
StID # 3978

Mr. Andrew Clark-Clough
City of Oakland
1333 Broadway, Suite 330
Oakland CA 94612

Re: Request for Technical Reports for City of Oakland, Municipal Service Center, 7101 Edgewater Dr., Oakland CA 94621

Dear Mr. Clark-Clough:

Thank you for the submission of the the July 13, 1995 Baseline groundwater monitoring report for the above referenced site. Our office received and reviewed this report on July 14, 1995. Although this report provides some information regarding the groundwater contamination at this site, it fails to address **all** items requested in my June 16, 1995 Notice of Violation letter. You are referred to this letter if clarification is required.

Not only are all the requested items not provided, but our office finds the contents of this monitoring report insufficient. Since this monitoring event occurred in April 1995, your next monitoring event should be scheduled for some time this month. Please insure that your next monitoring report (due within 45 days) includes the following:

1. Groundwater elevation and gradient tables;

2. A summary table with all previous groundwater monitoring results;

3. A recommendation section which discusses what work is scheduled for the next quarter and proposes additional work for further site characterization; and

4. Indicates when your Remedial Action Plan (RAP) will be provided for this site.

In reference to my June 16, 1995 letter you have failed to address items 1,2 and 4. Item 1 requested clarification as to what remediation was performed after contaminated soils were uncovered in a June 1984 excavation. Item 2 requested that you submit a comprehensive list of **all** technical reports existing for this site. Rather than this list, our office received additional reports and analytical results which we are unable to identify as all of the existing reports. Lastly, item 4 requested

clarification for **all** existing underground tanks at this site. Based on the information we have available, only three underground tanks are permitted at this site and up to 12 tanks exist. Please provide the following information:

1. A site map indicating the location and contents of all permitted and non-permitted tanks. Please describe whether each tank is empty, contains waste or product or if it has been closed and filled with an inert material;

2. A schedule for the permitting or removal of all non-permitted tanks. Based on the County's information, this UST situation has existed since at least December 1992, over 2 1/2 years ago.

Please be aware that significant petroleum contamination has been detected in soil and groundwater in an adjacent site, 7303-7307 Edgewater Dr. Claims have been made implicating the City of Oakland site, therefore, gradient determination and full delineation of contamination is essential to clarify this claim.

Please submit the requested technical information **within 30 days or by August 21, 1995.**

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

cc: G. Jensen, Alameda County District Attorney Office
Mr. O. Ozoh, City of Oakland, OGS, 7101 Edgewater Dr., Oakland, CA 94621
Ms. L. Huang, Baseline Environmental Consulting, 5900 Hollis St., Suite D, Emeryville, CA 94608
T. Peacock, files

rep7101

D. Schoenholz, Port of Oakland 530 Water St, Oak 94607

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

RAFAT A. SHAHID, DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
(510) 567-6700

June 16, 1995
StID # 3978

Mr. Andrew Clark-Clough
City of Oakland
1333 Broadway, Suite 330
Oakland CA 94612

NOTICE OF VIOLATION

Re: Request for Technical Report for 7101 Edgewater Dr., Oakland 94621, City of Oakland Consolidated Services Center

Dear Mr. Clark-Clough:

This letter is to notify you that the technical reports and information requested in my February 9,1995 letter have yet to be provided. I am writing this next letter to you in hopes that you are familiar with this site and can respond to my previous request. In speaking with Mr. Ozoh of the City of Oakland, he seemed to be unaware of the May 13, 1992 Woodward Clyde report which describes certain environmental problematic areas on this site. I have left a copy of this report at our office, however, it has yet to be picked up. Please clarify if Mr. Ozoh or you will be the contact for this site.

I refer you to my February 9, 1995 letter which requested certain technical reports along with requesting additional information. In summary our office requests the following information:

1. Clarification as to what, if any, remediation was performed subsequent to uncovering petroleum contaminated soils in a June 1984 excavation in preparation for a UST installation.

2. Provide a comprehensive list of all technical reports existing for this site so we may verify that we have all relevant information.

3. Groundwater monitoring of the existing wells was requested to be initiated in this letter. Please submit a quarterly monitoring report for the wells at this site along with all other available documents. Should there be no evidence of a hydrocarbon release ie Alternative site 1, no monitoring in that area is required.

4. Please clarify the status of all underground storage tanks at this site. As mentioned in the February 1995 letter, our records indicate that there are only three permitted tanks at this site while records indicate as many as 12 underground tanks at this site. You must either permit or properly close all tanks exclusive of the three permitted tanks. Significant civil liability exists for each tank and for every day this tank is not properly closed. Should you choose to remove the tanks in question you may contact me directly. Otherwise you may contact Mr. Don Hwang of our office at (510) 567-6746 to obtain the information and forms to properly permit the tanks.

Please submit the requested technical reports/information **within 30 days or by July 17, 1995.**

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M Chan

Barney M. Chan
Hazardous Materials Specialist

cc: G. Jensen, Alameda County District Attorney Office
Mr. O. Ozoh, City of Oakland, OGS,7101 Edgewater Dr., Oakland 94621
D. Hwang, ACEH Hazardous Materials Division
M. Ling Tung, files

NOV7101

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

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR
DEPARTMENT OF ENVIRONMENTAL HEALTH

February 9, 1995
StID # 3978

ALAMEDA COUNTY CC4580
DEPT. OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIV.
1131 HARBOR BAY PKWY., #250
ALAMEDA CA 94502-6577

Mr. Okey Ozoh
City of Oakland
Office of General Services
7101 Edgewater Drive
Oakland CA 94621

Re: Request for Technical Reports for 7101 Edgewater Dr., Oakland 94621, City of Oakland Consolidated Services Center

Dear Mr. Ozoh:

This letter serves to recount our conversation of February 8, 1995. I noted that our office had recently been given a May 13, 1992 report prepared by Woodward-Clyde Consultants. The Regional Water Quality Control Board (RWQCB) had recently relinquished their oversight of the above referenced site to our office.

Enclosed with this report were notes which indicated that a release of gasoline was discovered in June 1984 during the excavation of soils preparing for the installation of storage tanks. An Unauthorized Leak Report (ULR) was completed as a result. The exact location of the release and the specific actions taken to remediate the release were, however, never stated to our office. **Please clarify this issue with a site map and other supportive documents.**

The Woodward-Clyde report was performed to evaluate alternative locations for Building 5 at the Edgewater facility. Four locations , alternative sites 1,2, A and B were evaluated through the installation of seven monitoring wells. Both soil and groundwater samples were analyzed. Alternative site number 1 was deemed "clean" based on analytical results. It is located on the east side of Edgewater Drive, next to the Grand Auto facility. This report states that gasoline and BTEX contamination was found in soil and groundwater samples taken from monitoring wells 1 and 2. This information is found in a 1989 Woodward-Clyde report. **Please provide copies of this report to our office. We would also request any and all additional environmental reports concerning this site.**

The soil and groundwater were sampled from monitoring wells 5,6 and 7 which were installed in assumed downgradient directions next to three underground tank complexes. Considerable petroleum contamination was detected in both soil and groundwater samples from MW5. To a lesser degree was contamination in MW-6 while MW-7 detected the least amount. Based on these results, Woodward-Clyde recommended additional site characterization and

Assessors Records:
City of Oakland
505 14th St #609 94612

establishing site specific gradient. Our office is unaware of any reports beyond this initial one.

Please be aware that quarterly groundwater monitoring must be initiated immediately. Until this site is closed by the RWQCB, reports should be submitted to our office every three months or sooner if requested by the RWQCB or our office. Your quarterly reports should include: cumulative groundwater gradient and elevation data, tabulated analytical results and recommendations for the future quarter's work.

Please submit the requested technical reports to our office **within 30 days or by March 13, 1995.** This is a formal request pursuant to the California Water Code Section 13267 (b). Failure to submit the requested reports may cause this case to be referred to the District Attorney Office or the RWQCB for enforcement.

You should also be aware that only three underground tanks are permitted at this facility. Records indicate the existence of up to 12 underground tanks. California underground tank regulations require that all tanks be either permitted or properly closed. To this end, you should contact Mr. Don Hwang of our office at (510) 567-6746 to obtain the appropriate forms to complete your permitting or closure requirements. Based on the pre-existence of a petroleum fuel release, the Local Oversight Program (LOP) may be the lead when tanks are removed. Please be aware that substantial civil liability exists for the improper closure of underground tanks.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan

Barney M. Chan
Hazardous Materials Specialist

cc: G. Jensen, Alameda County District Attorney Office
A. Clark-Clough, City of Oakland, 1333 Broadway, Suite 330, Oakland CA 94612
Mr. Michael McGuire, Woodward-Clyde Consultants, 500 12th St., Suite 100, Oakland CA 94607-4014
D. Hwang, ACEH Hazardous Materials Division
E. Howell, files
wprp7101

Assessors Records:
City of Oakland
505 14th St #609 94612

establishing site specific gradient. Our office is unaware of any reports beyond this initial one.

Please be aware that quarterly groundwater monitoring must be initiated immediately. Until this site is closed by the RWQCB, reports should be submitted to our office every three months or sooner if requested by the RWQCB or our office. Your quarterly reports should include: cumulative groundwater gradient and elevation data, tabulated analytical results and recommendations for the future quarter's work.

Please submit the requested technical reports to our office **within 30 days or by March 13, 1995.** This is a formal request pursuant to the California Water Code Section 13267 (b). Failure to submit the requested reports may cause this case to be referred to the District Attorney Office or the RWQCB for enforcement.

You should also be aware that only three underground tanks are permitted at this facility. Records indicate the existence of up to 12 underground tanks. California underground tank regulations require that all tanks be either permitted or properly closed. To this end, you should contact Mr. Don Hwang of our office at (510) 567-6746 to obtain the appropriate forms to complete your permitting or closure requirements. Based on the pre-existence of a petroleum fuel release, the Local Oversight Program (LOP) may be the lead when tanks are removed. Please be aware that substantial civil liability exists for the improper closure of underground tanks.

You may contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan
Hazardous Materials Specialist

cc: G. Jensen, Alameda County District Attorney Office
A. Clark-Clough, City of Oakland, 1333 Broadway, Suite 330, Oakland CA 94612
Mr. Michael McGuire, Woodward-Clyde Consultants, 500 12th St., Suite 100, Oakland CA 94607-4014
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CITY OF OAKLAND

MUNICIPAL SERVICE CENTER • 7101 EDGE WATER DRIVE • OAKLAND, CALIFORNIA 94621

Office of General Services

510-238-3236
TDD 839-6451

December 1, 1992

Mr. Ariu Levi
Alameda County
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

RE: Request for a One Year Extension of Time To Comply With Underground Storage Tank Regulations

Dear Mr. Levi:

The California State Regulations for Underground Storage Tanks require owners and operators of existing Underground Storage Tanks to check for leaks on a routine basis and comply with Title 23 and Chapter 16 of the Underground Storage Tank Regulations.

We are aware of the January 1, 1993 cut off date for manual stick readings (metering) where the ground water is less than 20 feet below the bottom of the tank.

The Municipal Building's Design Section is preparing a comprehensive plan for the removal or replacement of the underground fuel tanks owned by the City of Oakland. Although "statistical inventory reconciliation" and other leak detection methods have been recommended, alternatively, we would like a one year extension on the stick monitoring system.

A contractor and a consultant will oversee the removal of 13 underground tanks during Fiscal Year 1992-93 (list enclosed). The removal or replacement of the remaining underground storage tanks will continue during the 93/94 fiscal year.

If you have any questions, please call Okey Ozoh, Architectural Assistant, at 238-6329.

ELLIS BROWN
Building Services Manager (Acting)

OO:caw

cc: Dupsi Brown-Kuria Keihan Ehsanipour Okey Ozoh

CITY OF OAKLAND

CITY HALL • ONE CITY HALL PLAZA • OAKLAND, CALIFORNIA 94612
(415) 273-3601
TTY 839-6451

Office of the City Attorney
Jayne W. Williams
City Attorney

May 18, 1992

Alameda County Department of
Environmental Health
80 Swan Way, Room 210
Oakland, CA 94621

San Francisco Regional
Water Quality Control
Board
2101 Webster St., 4th Flr.
Oakland, CA 94612

Re: 7101 Edgewater Drive
Oakland, CA 94621

TO WHOM IT MAY CONCERN:

In connection with the above referenced property, which I am informed has previously been reported to your agencies, please find enclosed a copy of the City's Preliminary Geotechnical Evaluation and Environmental Site Assessment.

Should you have any questions regarding this matter, please call the undersigned at 238-3496.

Very truly yours,

JAYNE W. WILLIAMS,
City Attorney

By

DONNELL W. CHOY,
Assistant to the City Attorney

Enclosure

cc: (without enclosure)

Craig Kocian, Assistant City Manager
Julie Carver, Environmental Programs Supervisor, Real Estate
George Oakes, Equipment Services Manager, Office of General Services