

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R01064

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

April 6, 1995
STID 3640

Attn: Wyman Hong
Alameda County Flood Control District
Zone 7, Water Agency
5997 Parkside Dr.
Pleasanton CA 94588

DEPARTMENT OF ENVIRONMENTAL HEALTH
ALAMEDA COUNTY-ENV. HEALTH DEPT.
ENVIRONMENTAL PROTECTION DIV.
1131 HARBOR BAY PKWY., #250
ALAMEDA CA 94502-6577
(510)567-6700

RE: Oakland Acura site, 255-27th St., Oakland CA 94612

Dear Mr. Hong,

This office is in the process of closing this case. There are three groundwater monitoring wells which will be destroyed. Groundwater has been non-detect (ND) for the contaminants sought for the past 4 sampling events, with one exception. This exception is well OW-3, which has detected low levels of TPH-diesel and Oil & Grease (by method 418.1) within the past 4 sampling events. This well is located inside an automobile showroom. It may not be possible to get a drill rig inside this showroom. However, the levels of contamination are fairly low. For these reasons, I believe it would be proper to pressure grout this well, with the other 2 wells.

If you have any questions, please contact me at 510-567-6761.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Dennis Miller, Miller Engineering, 170-F Alamo Plaza, Suite
309, Alamo CA 94507
Kevin Graves, RWQCB
Ariu Levi/file

je.3640

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R01064

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

December 8, 1993
STID 3640

Dave Robb
Oakland Acura
277-27th St.
Oakland CA 94612

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

RE: Oakland Acura, 255-27th St., Oakland CA 94612

Dear Mr. Robb,

We are in receipt of the quarterly report prepared by IT Corp., dated 10/8/93. This report documents groundwater sampling from one of the three onsite wells, OW-3. Oil & Grease was detected at a concentration of 8,300 ppb on 9/13/93. Oil & Grease was also detected at a concentration of 48,000 ppb on 3/12/93, after six previous consecutive quarters of non-detect (ND). Please provide an explanation for this sudden, enormous increase in Oil & Grease.

In addition, **depth to water (DTW) measurements must be conducted with future quarterly sampling. Potentiometric maps must be submitted with future quarterly reports.** This information may aid in understanding increases and decreases in contaminant concentrations, as well as groundwater flow direction.

Please note that reports and documents no longer need to be copied to the Regional Water Quality Control Board. Kindly submit a cover letter with your consultant's reports. If you have any questions, please contact me at 510-271-4530.

Please notify me at least 2 business days in advance of field activities so that I may arrange to be onsite.

Sincerely,

Jennifer Eberle
Hazardous Materials Specialist

cc: Sydney Geels, IT Corp., 4585 Pacheco Blvd., Martinez CA
94553
Ed Howell/file

je

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R01064

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

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

March 4, 1993
STID 3640

Oakland Acura
ATTN: Dave Robb
277 - 27th St.
Oakland, CA 94612

RE: 255 - 27th St., Oakland, CA 94612

Dear Dave Robb:

This office has received and reviewed the Quarterly Sampling Report by I. T. Corp. dated January 18, 1993 concerning the above site. The following comments are to be considered:

1. The 710 ppb of diesel is an increase over the last 2 quarters. Although not typical for diesel, there is no explanation for its discovery in the monitoring well.
2. There is not really a conclusion to this report. The only one that can be reached is to continue quarterly monitoring unless a remediation plan is developed.

Thank you for your cooperation. If you have any questions, please contact this office at (510) 271-4530.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Thomas Peacock'.

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
Edgar Howell, Chief - files
Sydney Mills, IT Corp., 4585 Pacheco Blvd., Martinez, CA 94553

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

DAVID J. KEARS, Agency Director



R01064

RAFAT A. SHAHID, ASST. AGENCY DIRECTOR

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

November 16, 1992
STID 3640

Oakland Acura
ATTN: Dave Robb
277 - 27th St.
Oakland, CA 94612

RE: 255 - 27th St., Oakland, CA 94612

Dear dave Robb:

This office has received and reviewed the Quarterly Sampling Report by I. T. Corp. dated October 7, 1992 concerning the above site. The following comments are to be considered:

1. The 260 ppm od diesel is an increase over the last 2 quarters. Although not typical for diesel, there is no explanation for its discovery in the monitoring well.
2. There is not really a conclusion to this report. The only one that can be reached is to continue quarterly monitoring unless a remediation plan is developed.

Enclosed is a format the Regional Board would like followed for site closure. Thank you for your cooperation. If you have any questions, please contact this office at (510) 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Richard Hiett, RWQCB
Edgar Howell, Chief - files
Sydney Mills, IT Corp., 4585 Pacheco Blvd., Martinez, CA 94553
Enclosure

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



R01064
State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program

RAFAT A. SHAHID, Assistant Agency Director

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

July 17, 1992

Dave Robb
Oakland Acura
277 - 27th St.
Oakland, CA 94612

Re: 255 - 27th St., Oakland, CA 94612
STID # 3640

Dear Mr. Robb:

This office has reviewed the Quarterly Sampling Report dated 6 July 92 and written by International Technology Corporation. It appears that OW-1 and OW-2 have been clean for 4 quarters and further analysis is not needed at this time. Do not close these wells as analysis may be required in the future. OW-3 has declined to an acceptable level. If this is maintained for 4 consecutive quarters than site closure can be obtained. We look forward to the next quarterly monitoring report, which may deal with only this well if you choose. Attached is an extra copy of your report, which we did receive and a recommended list of information needed for case closure from the Regional Water Quality Control Board. This should probably be sent to your consultant so that case closure is easier.

If you have any questions please contact this office, at 271-4530.

Sincerely,

Thomas Peacock, Supervising HMS
Hazardous Material Division

cc: Lester Feldman, RWQCB

LETTER OF RECOMMENDATION FOR UST CASE CLOSURE

INTRODUCTION

SITE DESCRIPTION

PREVIOUS WORK

INVESTIGATIVE METHODS

- Drilling and Soil Borings
- Soil Sampling
- Construction of Monitoring Wells
- Well Development
- Groundwater Sampling
- Analytical Methods
 - Soil Samples
 - Groundwater Samples

EXTENT OF HYDROCARBON PRESENCE IN SOIL AND GROUNDWATER

- Hydrocarbons in Soil
- Hydrocarbons in Groundwater
 - Floating Product
 - Dissolved Hydrocarbons

HYDROLOGY

- Regional Hydrology
- Local Hydrology
- Groundwater Gradient
- Seasonal Variations of Groundwater
- Aquifer Characteristics

BENEFICIAL USES OF GROUNDWATER

- Well Inventory
- Contaminant Fate Transport
- Sources of Drinking Water Policy Determination

REMEDIATION ACTIVITIES AND EFFECTIVENESS

- Soil Remediation
- Groundwater Remediation
- Impact of Residual Hydrocarbons on Beneficial Uses

SUMMARY AND CONCLUSIONS

RECOMMENDATIONS

TABLES ATTACHED

- Results of Analysis of Soil Samples
- Cumulative Results of Groundwater Elevation and Flow Direction
- Cumulative Results of Analyses of Water Samples
- Wells within 1/2-Mile Radius of the Site



R01064

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Division
1000 Broadway, 10th Floor
Oakland, CA 94612
(510) 271-4000

May 26, 1992

Dave Robb
Oakland Acura
277 - 27th St.
Oakland, CA 94612

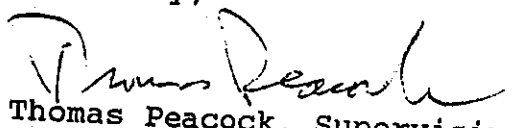
Re: 255 - 27th St., Oakland, CA 94612
STID # 3640

Dear Mr. Robb:

This office has reviewed the Quarterly Sampling Reports dated 4 Apr. 91, 2 Jan. 92, and 3 Apr. 92 and written by International Technology Corporation. As was mentioned in a letter from this office dated Apr. 17, 1991 and signed by Gil Wistar, it is acceptable to properly close out OW1. There has certainly been a decline in TPHd in the water of OW3 in the last 3 events, however, not enough to warrant closure. As Mr. Wistar mentioned in his letter, remediation or cleanup may be a faster way to proceed, especially with 8,000 ppb of TPHd in the water of OW3. However, the last analysis of 80 is a very sharp decline. OW2 is ND and this is down gradient from OW3, which is good. Another quarterly monitoring event will be due in June, 1992 and we can judge from those results. Although you have alleged that contamination may be coming from off-site, these numbers would suggest that any off-site water sources are solving your problem rather than causing it.

If you have any questions please contact this office, at 271-4530.

Sincerely,


Thomas Peacock, Supervising HMS
Hazardous Material Division

Remi cc: Lester Feldman, RWQCB

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R01064

April 23, 1991

Mr. John Skinner
180 Oak Springs Drive
San Anselmo, CA 94960

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Re: site search for 255 27th St Oakland, CA 94612

Dear Mr. Skinner,

I received your letter yesterday requesting information regarding Oakland Acura. Since I did not have your phone number on the correspondence from you I'm dropping you this note to inform you of the site search policy in Alameda County.

The hourly fee for site search is \$ 67.00/hr and \$ 1.00 per page for xeroxed information. Please specify the type of information needed. Also indicate a ceiling of the amount of time you authorize to spend and also how you would like the information i.e.. a report, verbal information or a meeting with this office to view the file.

Please re-submit a letter addressing the above mentioned items and mail it to the attention of Mr. Gil Wistar. He is overseeing the remediation at the above location.

If you have any questions please contact me at (415) 271-4320.

Sincerely,

A handwritten signature in cursive script that reads "Paul M. Smith".

Paul M. Smith
Hazardous Materials Specialist

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



R01064

April 17, 1991

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Mr. Dave Robb
Proformance Associates, Inc.
1766 Locust St.
Walnut Creek, CA 94596

**RE: Request for site closure at Oakland Acura, 255 - 27th St.,
Oakland**

Dear Mr. Robb:

After our discussion on the phone last week, I had a chance to review the most recent quarterly sampling report for the three groundwater monitoring wells at 255 - 27th St. You had requested site closure or some alteration to the quarterly sampling regime, based on the fact that your consultant has now completed about a year's worth of quarterly monitoring. However, the analytical data submitted does not warrant closure at this time. This is because water from monitoring wells OW-2 and OW-3 have shown consistent or rising levels of dissolved hydrocarbons, particularly TPH-diesel and oil & grease; this contamination appears to be confined to the area around the former motor oil tank. Based on these results, treatment of some sort should probably be initiated to remove the contaminated water from the ground. In any case, quarterly monitoring must be maintained until contaminant levels decrease to "ND."

We will permit monitoring well OW-1 to be closed according to requirements of the Alameda County Flood Control and Water Conservation District, since this well has never picked up any hydrocarbons from the former motor oil tank.

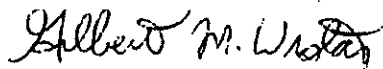
As indicated above, removal and treatment/disposal of groundwater in the vicinity of OW-2 and OW-3 may be the only way to move your case towards closure. Prior to such treatment, removal of additional contaminated soil, to the extent that this is possible, may speed the remediation process along. Even though the most obviously contaminated soil was excavated during tank removal in 1989, it is possible that residual soil contamination is acting as an ongoing source of groundwater degradation.

With respect to eventual closure and signoff of the site, only the Regional Water Quality Control Board has this authority; you or your consultant should first complete the information in the enclosed attachment, and submit this information, along with a formal closure request, to our office. Based on this information and our knowledge of the site's history, we will then recommend to the Water Board that they consider the site for closure (assuming, of course, that such a recommendation is warranted).

Mr. Dave Robb
April 17, 1991
Page 2 of 2

If you have any questions about this letter, please contact the undersigned at 271-4320.

Sincerely,



Gil Wistar
Hazardous Materials Specialist

enc.

Am

cc: Sydney Mills, IT Corp. w/enc. (4585 Pacheco Blvd., Martinez,
CA 94553)
Lester Feldman, RWQCB
Rafat A. Shahid, Asst. Agency Director, Environmental Health
files

ALAMEDA COUNTY
HEALTH CARE SERVICES



AGENCY

DAVID J. KEARS, Agency Director

R01064

August 28, 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

(15)

Byron T. Hobbs, Vice President
SOTA Environmental Technology, Inc.
16980 Via Tazon, Suite 130
San Diego, CA 92127

Dear Mr. Hobbs:

As requested, a file search has been conducted for the area of one mile radius with 1970 Broadway Oakland being the center. The area was defined as being between 2nd and 34th Streets, North and South, and between Lakeshore Ave. and Adeline St., East and West on a Thomas Bros Map. Our files were reviewed for reported releases of hazardous materials or waste. This included any emergency response, underground tank release report or Prop. 65 report made to this Department.

The following reports were made to this department:

	07/02/87	601 Webster St.	Tear Gas
(R0151)	04/08/87	1700 Jefferson	Tank Release Gasoline
(R0463)	06/22/87	2528 Adeline	Tank Release 160ppm TPH in soil
(R0344?)	02/19/87	4th and Broadway	Tank Removal 25 gal. fuel oil
	03/10/87	1221 Broadway	Tank Release fuel oil
	12/13/88	13th & Franklin	Tank Release 29 gal. gasoline
	12/07/88	30 Bay Place	Tank Release waste oil
	06/25/88	774 West Grand	Tank Release gasoline
	03/22/88	39 - 4th St.	10 gal. fixer/devel. spilled
	03/21/88	Grand & Harrison	spilled white foaming liquid into Lake Merritt
	06/09/88	11th and Webster	EDB found at construction site
	01/21/88	515 Bay St.	Tank Release gasoline
	03/02/89	1764 - 13th St.	Tank Release diesel
	03/02/89	600 Fallon St.	Tank Release diesel pipe leak
(R0391)	03/02/89	500 Grand Ave.	Tank Release gasoline in monitoring well
(R0358)	03/02/89	2225 Telegraph	Tank Release product in monitoring well
(R018)	01/24/89	1310 - 14th St.	Tank Release gasoline/diesel
	02/13/89	600 Fallon St.	Tank Release diesel
(R0385)	03/14/89	404 Market	Spill petroleum naptha
	02/14/89	1769 - 13th St.	Tank Release gas/diesel/waste oil
(R01064)	04/03/89	255 - 27th St.	Spill 110 gals. hazardous liquid
(R09)	04/21/89	2800 Telegraph	Tank Release gasoline
(R01139)	04/21/89	822 Alice	Tank Release diesel

Byron T. Hobbs, Vice President
SOTA Environmental Technology, Inc.
16980 Via Tazon, Suite 130
San Diego, CA 92127
Page 2 of 2
August 28, 1989

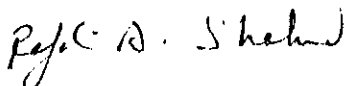
(R01082) 06/20/89	365 Hawthorne	Tank Release heating fuel
(R01033) 06/30/89	2735 Broadway	Tank Release waste oil
(R0954) 07/19/89	1 City Hall Plaza	Tank Release gasoline
(R01596) 08/11/89	2576 MLK, Jr. Way	Tank Release waste oil
(R0446) 08/21/89	330 Chestnut	Tank Release 75 ppm O&G in soil

This is limited to information available to this office and does not include any information available to other agencies or businesses which may be involved with these properties.

Please find enclosed, a copy of our invoice sent to our Billing Unit.

If you have any questions, please call Edgar Howell, Supv. Hazardous Materials Specialist at (415) 217-4320.

Sincerely,



Rafat A. Shahid, Chief
Hazardous Materials Program

RAS:mnc

cc: Edgar Howell, Alameda County Hazardous Materials
Files

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R01064

July 27, 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

Mr. Dave Robb
Performance Associates, Inc.
1766 Locust St.
Walnut Creek, CA 94596

Re: IT report on work completed and results received at the New
Oakland Acura Site, 255 - 27th St., Oakland

Dear Mr. Robb:

The Alameda County Department of Environmental Health, Hazardous Materials Division, has reviewed the IT report referenced above and discussed the case with Greg Millikan at IT. It appears that removal of contaminated soil, sludge, and water from the culvert running through the property has mitigated the problem in this area, and that no residual contamination remains beneath the culvert. In addition, soil samples taken from around the former waste oil tank and groundwater samples taken from the three monitoring wells indicate at most low levels of contamination. Therefore, we are not requiring further remedial action at this time, and we see no reason why construction cannot proceed at the site.

However, to ensure that leakage from the former underground tank and contamination in the culvert has not affected groundwater quality, we are requiring that you sample water from all of the monitoring wells on a quarterly basis for at least one year. During each sampling episode, water levels should be taken, and samples analyzed for TPH as diesel and gasoline; BTEX; oil & grease; halogenated volatile organics; and CAM metals. A report shall be prepared and sent to this office for review after each quarterly sampling. If the concentration of any groundwater contaminant increases to levels of concern, a groundwater remediation program may be necessary.

If you have any questions about this letter, please contact Gil Wistar, Hazardous Materials Specialist, at 271-4320.

Sincerely,

Rafat A. Shahid

Rafat A. Shahid, Chief
Hazardous Materials Division

RAS:GW:gw

cc: Randy Doty, Ehlers Construction
Howard Hatayama, DOHS
Larry Hudson, IT
Greg Millikan, IT
Dyan Whyte, San Francisco Bay RWQCB

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



R01064

Certified mailer #: P 833 981 368

DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Program
80 Swan Way, Rm. 200
Oakland, CA 94621
(415)

April 26, 1989

Mr. Dave Robb
Proformance Associates, Inc.
1766 Locust St.
Walnut Creek, CA 94596

Re: Unauthorized release from underground storage tank and from
drainage culvert, 255 - 27th St., Oakland

Dear Mr. Robb:

Analytical results from samples taken during the March 16, 1989 removal of an underground tank from the above site indicate soil and groundwater contamination. This contamination is evidence of releases in both the underground tank area and in the concrete-lined culvert that runs through the middle of the site. Title 23 of the California Code of Regulations requires all such unauthorized releases to be reported. An unauthorized release report has been filed with this office; in addition, you must initiate further investigation and/or cleanup activities at this site.

First, a preliminary assessment should be conducted to determine the extent of soil and groundwater contamination in both the tank and culvert areas. The information gathered by this investigation will be used to assess the need for additional actions at the site. The preliminary assessment should be designed to provide all of the information in the format shown in the attachment at the end of this letter. This format is based on the Regional Water Quality Control Board (RWQCB's) guidelines.

Until cleanup is complete, you will need to submit reports to this office and to the RWQCB every three months (or at a more frequent interval, if specified at any time by either agency). These reports should include information pertaining to further investigative results; the methods and costs of cleanup actions implemented to date; and the method and location of disposal of any contaminated material. To date, it is our understanding that contaminated water and sludge have been removed from the tank pit, and that excess soil was excavated from this pit following the tank's removal.

For all additional work, soils contaminated at hazardous waste concentrations should be transported by a licensed hazardous waste hauler and disposed of or treated at a facility approved by the

Mr. Dave Robb
April 26, 1989
Page 2 of 2

California Department of Health Services. Soils contaminated below the hazardous waste threshold may be managed as nonhazardous, but are still subject to the RWQCB's waste discharge requirements.

Your work plan should be submitted to this office by May 30, 1989. A report describing the results of the preliminary site assessment should be submitted by June 30, 1989. Copies of the proposal and report should also be sent to the RWQCB (attention: Dyan Whyte). You may implement remedial actions before approval of the work plan, but final concurrence by this office will depend on the extent to which the work done meets the requirements described in this letter.

You will need to submit an additional deposit of \$600 to cover costs that the Division of Hazardous Materials incurs during remediation oversight. If you have any questions about this letter or about remediation requirements established by the RWQCB, please contact Gil Wistar, Hazardous Materials Specialist, at 271-4320.

Sincerely,

Rafat A. Shahid

Rafat A. Shahid, Chief
Hazardous Materials Division

RAS:GW:gw

enclosure

cc: Randy Doty, Ehlers Construction
Bob Corsun, R.S. Eagan and Company
Howard Hatayama, DOHS (w/o enclosure)
Dyan Whyte, San Francisco Bay RWQCB (w/o enclosure)
Gil Jensen, District Attorney, Alameda County Consumer and
Environmental Protection Agency (w/o enclosure)
files

WORK PLAN FOR INITIAL SUBSURFACE INVESTIGATION

This outline should be followed by professional engineering or geologic consultants in preparing work plans to be submitted to the RWQCB and local agencies. Work plans should be signed by a California-registered engineer or geologist.

This outline should be referred to in context with the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks" (June 2, 1988).

PROPOSAL FORMAT

I. Introduction

A. State the scope of work

B. Provide information on site location, background, and history

1. Describe the type of business and associated activities that take place at the site, including the number and capacity of operating tanks.

2. Describe previous businesses at the site.

3. Provide other tank information:

- number of underground tanks, their uses, and construction material;

- filing status and copy of unauthorized release form, if not previously submitted;

- previous tank testing results and dates, including discussion of inventory reconciliation methods and results for the last three years.

4. Other spill, leak, and accident history at the site, including any previously removed tanks.

II. Site Description

A. Describe the hydrogeologic setting of the site vicinity

B. Prepare a vicinity map (including wells located on-site or on adjoining lots, as well as any nearby streams)

C. Prepare a site map

D. Summarize known soil contamination and results of excavation

1. Provide results in tabular form and indicate location of all soil samples (and water samples, if appropriate). Sample dates, the identity of the sampler, and signed laboratory data sheets need to be included, if not already in possession of the County.
2. Describe any unusual problems encountered.
3. Describe methods for storing and disposing of all contaminated soil.

III. Plan for Determining Extent of Soil Contamination

- A. Describe method for determining the extent of contamination within the tank excavation and within the culvert
- B. Describe sampling methods and procedures to be used
 1. If a soil gas survey is planned, then:
 - identify number of boreholes, locations, sampling depths, etc.;
 - identify subcontractors, if any;
 - identify analytical methods;
 - provide a quality assurance plan for field testing.
 2. If soil borings are to be used to determine the extent of soil contamination, then:
 - identify number, location (mapped), and depth of the proposed borings;
 - describe the soil classification system, soil sampling method, and rationale;
 - describe the drilling method for the borings, including decontamination procedures;
 - explain how borings will be abandoned.
- C. Describe how clean and contaminated soil will be differentiated, and describe how excavated soil will be stored and disposed of. If on-site soil aeration is to be used, then describe:
 1. The volume and rate of aeration/turning;
 2. The method of containment and cover;
 3. Wet-weather contingency plans;

4. Results of consultation with the Bay Area Air Quality Management District.

Other on-site treatments (such as bioremediation) require permits issued by the RWQCB. Off-site storage or treatment also requires RWQCB permits.

- D. Describe security measures planned for the excavated hole and contaminated soil

IV. Plan for Characterizing Groundwater Contamination

Construction and placement of wells should adhere to the requirements of the "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks."

- A. Explain the proposed locations of monitoring wells (including construction diagrams), and prepare a map to scale
- B. Describe the method of monitoring well construction and associated decontamination procedures
 1. Expected depth and diameter of monitoring wells.
 2. Date of expected drilling.
 3. Locations of soil borings and sample collection method.
 4. Casing type, diameter, screen interval, and pack and slot sizing technique.
 5. Depth and type of seal.
 6. Development method and criteria for determining adequate development.
 7. Plans for disposal of cuttings and development water.
 8. Surveying plans for wells (requirements include surveying to established benchmark to 0.01 foot).
- C. Groundwater sampling plans
 1. Water level measurement procedure.
 2. Well purging procedures and disposal protocol.
 3. Sample collection and analysis procedures.
 4. Quality assurance plan.
 5. Chain-of-custody procedures.

V. Prepare a Site Safety Plan