

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 22, 1999

Bruce Burrows
Burrows Co.
318 Diablo Blvd.
Danville, CA 94526

Re: Robert & Ruth Burrows Trust, 260-30th St., Oakland, CA 94611
StID 1147

LANDOWNER NOTIFICATION AND PARTICIPATION REQUIREMENTS

Dear Mr. Burrows:

This letter is to inform you of new legislative requirements pertaining to cleanup and closure of sites where an unauthorized release of hazardous substance, including petroleum, has occurred from an underground storage tank (UST). Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code requires the primary or active responsible party to notify all current record owners of fee title to the site of: 1) a site cleanup proposal, 2) a site closure proposal, 3) a local agency intention to make a determination that no further action is required, and 4) a local agency intention to issue a closure letter. Section 25297.15(b) requires the local agency to take all reasonable steps to accommodate responsible landowners' participation in the cleanup or site closure process and to consider their input and recommendations.

For purposes of implementing these sections, you have been identified as the primary or active responsible party. Please provide to this agency, within twenty (20) calendar days of receipt of this notice, a complete mailing list of all current record owners of fee title to the site. You may use the enclosed "list of landowners" form (sample letter 2) as a template to comply with this requirement. If the list of current record owners of fee title to the site changes, you must notify the local agency of the change within 20 calendar days from when you are notified of the change.

If you are the sole landowner, please indicate that on the landowner list form. The following notice requirements do not apply to responsible parties who are the sole landowner for the site.

Mr. Burrows
Page 2 of 2
September 22, 1999

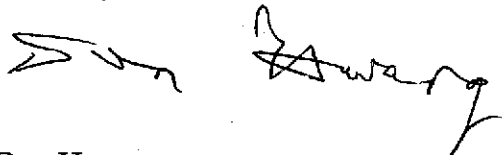
In accordance with Section 25297.15(a) of Ch. 6.7 of the Health & Safety Code, you must certify to the local agency that all current record owners of fee title to the site have been informed of the proposed action before the local agency may do any of the following:

- 1) consider a cleanup proposal (corrective action plan)
- 2) consider a site closure proposal
- 3) make a determination that no further action is required
- 4) issue a closure letter

You may use the enclosed "notice of proposed action" form (sample letter 3) as a template to comply with this requirement. Before approving a cleanup proposal or site closure proposal, determining that no further action is required, or issuing a closure letter, the local agency will take all reasonable steps necessary to accommodate responsible landowner participation in the cleanup and site closure process and will consider all input and recommendations from any responsible landowner.

Please call me at (510) 567-6746 should you have any questions about the content of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Hwang". The signature is written in a cursive style with a large, stylized "D" and "H".

Don Hwang
Hazardous Materials Specialist

Enclosures

C: file

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 26, 1999

Bruce Burrows
Burrows Co.
318 Diablo Blvd.
Danville, CA 94526

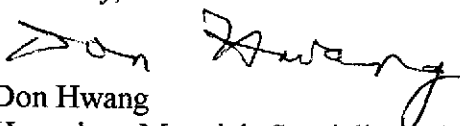
Re: Robert & Ruth Burrows Trust, 260-30th St., Oakland, CA 94611
StID 1147

"Underground Storage Tank Closure Report for 260-30th St., Oakland, CA, September 22, 1997, Burrows Project #SF026-043, Faultline Associates, Inc." was reviewed. A 1,000 gallon underground storage tank which formerly contained waste oil was closed in place. Soil borings were collected beneath the tank. The borings found total petroleum hydrocarbons as gasoline (TPH-G) up to 9,600 mg/kg, total petroleum hydrocarbons as diesel (TPH-D) up to 4,500 mg/kg, oil and grease up to 18,000 mg/kg, benzene was NonDetect (ND), toluene up to 21 mg/kg, ethyl benzene up to 54 mg/kg, xylene up to 89 mg/kg (BTEX), and methyl-tert-butyl ether (MTBE) was ND. When the underground tank was closed in place, the soil samples were not analyzed for cadmium, chromium, lead, zinc, and nickel. Also, a groundwater sample was not collected.

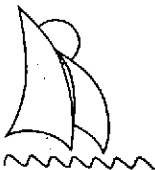
Please submit a workplan to determine if groundwater has been impacted by the fuel release. Include analyses for cadmium, chromium, lead, zinc, and nickel.

If you have any questions, please call me at (510) 567-6746.

Sincerely,


Don Hwang
Hazardous Materials Specialist

C: file
D. C. Solis, Faultline Associates, Inc., 1630 N. Main St. #331, Walnut Creek, CA 94596



TAC Environmental Services

Technology, Assessment and Compliance

Madhulla
FYI

February 5, 1996

Mr. Kevin Tinsley
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 230
Alameda, CA 94502

RE: UNDERGROUND STORAGE TANK, 260 30TH STREET, OAKLAND, CA
SITE ID #3936

ENVIRONMENTAL
PROTECTION
96 FEB -6 PM 12:15

94611

Dear Mr. Tinsley:

TAC Environmental Services has been retained by Mr. Bruce Burrows of the Burrows Company to handle the UST issue at the above mentioned site.

Initial discussions regarding closure of the subject tank were conducted with Ms. Madula Logan of the ACDEH as we were told that she was the assigned project manager for this site. However, it now appears that you are the assigned over-sight manager. In an effort to bring this site into compliance we respectfully submit this request for "In-place" closure directly to you.

Upon inspection of the site by TAC personnel, it was observed that the building located directly adjacent to the tank was not structurally sound. It was observed that the lower portion of the brick facing was decaying and/or slipping. Photographs of the structure are attached. Initial evaluation of the site indicated that any disruption to the soils surrounding the structure caused by tank exhumation activities will potentially undermine the structural integrity to the building as well as create a health and safety risk to personnel working on the project. With this in mind, a structural engineer was enlisted to also inspect the site. The attached report provided by Mr. John Tong confirms the structural issue concerns.

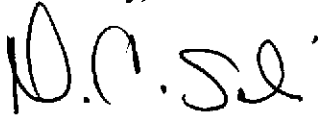
As discussed in the report, two options exist; 1). Underpin the foundation prior to tank removal, 2). Close the tank in-place. Underpinning the foundation will exceed the cost of the tank removal by 200% and will still not without seismic bracing, provide the assurance of structural integrity required for a safe work environment.

We are at this time and on behalf of Mr. Burrows, requesting your consideration and approval of an in-place closure of the subject UST. Once approval has been received, a work plan for closure activities will be submitted to the ACDEH within 10 working days.

Page 2 of 2
February 5, 1996
Mr. Kevin Tinsely
UST Closure Request

We are aware of the Notice of Violation letter that was submitted to Mr. Burrows and will make every attempt to bring this project to a concise and expedient closure. Thank you for your consideration. Please contact me at your earliest convenience if you have any questions concerning this letter or require any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "D.C. Solis". The signature is written in a cursive, somewhat stylized font.

David C. Solis, P.E.
Sr. Project Manager

cc; Mr. Bruce Burrows, The Burrows Company



TONG & CHANG CONSULTANTS, INC.

January 15, 1996
File No. TCC-010
Page 1 of 2

Mr. Dave Solis
TAC Environmental
212 9th Street, Suite 401
Oakland, CA 94607

RE: Site Inspection Report
260 30th Street
Oakland, CA

Dear Dave:

Pursuant to your request, we have made a brief visual inspection of the property at the referenced address. The purpose of our inspection was to assess the integrity of the building and foundation with respect to the proposed excavation. The proposed excavation will be within 6 feet of the building foundation and may be extended to as deep as 15 feet or so.

Observation

The referenced building is a single story brick structure. The building has not retrofitted to meet seismic safety code. Based on our experience, it is very likely the building is supported by shallow conventional foundation. In the wall facing the underground storage tank, we observed separations in the brick wall.

Conclusions

Based on the brief inspection of our engineer, it is our opinion that at the current building condition, excavation which is within 6 feet of the building and more than 5 feet deep will pose a great danger to the building and personnel.

Due to the proximity to the building, it may be impossible to make any excavation deeper than 5 feet without first underpinning the building foundation. Underpinning the building foundation will be very costly and may be economically unfeasible. Therefore, we recommend that you look into the option of closing the underground storage tank in place.



January 15, 1996
File No. TCC-010
Page 2 of 2

We trust the information provided in this letter meet your need at this time. If you have any question or need additional information, please feel free to call my office.

Very truly yours,

TONG & CHANG CONSULTANTS, INC.

A handwritten signature in cursive script, appearing to read 'John K.F. Tong', is written over the typed name.

John K.F. Tong, P.E.
Principal Engineer
GE 833

KT/PLC/C:\PHIL\TCC\010.WPD

**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**

Project Specialist

ACCEPTED

Underground Storage Tank Closure Permit Application
 for 318 Diablo Blvd. City of Danville
 318 Harbor Bay Parkway, Suite 250
 Alameda, CA 94502-6577

2. Underground tanks have been tested and found to be empty and assembly found the requirements of the Environmental Protection Division of Hazardous Materials are met. Changes to your closure plan are required to ensure compliance with the project process. A copy of the project process is attached to this permit. Any required testing should be completed prior to the start of the project. Plans must be on the job and approved by the Department of Environmental Health. All work must be done in accordance with the requirements of the Department of Environmental Health. The Department of Environmental Health will be conducting a final inspection of the site prior to the start of the project. The Department of Environmental Health will be conducting a final inspection of the site prior to the start of the project.

Michael Burrows
 Michael Burrows (Print) and Piping
 Sampling
 Final Inspection

5/12/97

of a permit to operate, b) permanent site closure is dependent on compliance with accepted plans and applicable laws and regulations.

THESE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:

Project Specialist

UNDERGROUND TANK CLOSURE PLAN

* * * Complete according to attached instructions * * *

1. Name of Business Robert and Ruth Burrows Trust
 Business Owner or Contact Person (PRINT) Bruce Burrows
2. Site Address 260 30th Street
 City Oakland Zip 94611 Phone 510-743-1854
3. Mailing Address 318 Diablo Blvd.
 City Danville Zip 94526 Phone 510-743-1854
4. Property Owner Robert and Ruth Burrows Trust
 Business Name (if applicable) _____
 Address 318 Diablo Blvd.
 City, State Danville, CA Zip 94526
5. Generator name under which tank will be manifested Ruth Burrows

EPA ID# under which tank will be manifested C A _____

1147

6. Contractor No Applicable - Tank will be closed in place
Address _____
City _____ Phone _____
License Type* _____ 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) TAC Environmental Services
Address 151 link Road
City, State Cordelia, CA Phone 707-864-4760

8. Main Contact Person for Investigation (if applicable)
Name David Solis, P.E. Title Sr. Project Manager
Company TAC Environmental Services
Phone 707-864-4760

9. Number of underground tanks being closed with this plan 1
Length of piping being removed under this plan 10 ft. grouted in place
Total number of underground tanks at this facility (**confirmed with owner or operator) 1

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 Universal Environmental EPA I.D. No. _____
Hauler License No. _____ License Exp. Date _____
Address P.O. Box 996
City Benicia State CA Zip 94510

b) Product/Residual Sludge/Rinsate Disposal Site

Name Evergreen EPA ID# _____
Address 6880 Smith Ave.
City Newark State CA Zip 94560

c) Tank and Pipe Transporter

Name Not Applicable EPA I.D. No. _____
Hauler License No. _____ License Exp. Date _____
Address _____
City _____ State _____ Zip _____

d) Tank and Piping Disposal Site

Name Not Applicable EPA I.D. No. _____
Address _____
City _____ State _____ Zip _____

11. Sample Collector

Name David C. Solis, P.E.
Company TAC Environmental Services
Address 151 Link Rd.
City Cordelia State CA Zip 94585 Phone 707-864-4760

12. Laboratory

Name Mc Campbell Analytical
Address 110 2nd Ave., south, #D7
City Pacheco State CA Zip 94553
State Certification No. _____

13. Have tanks or pipes leaked in the past? Yes[] No[] Unknown[X]

If yes, describe. _____

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

Tank will be rinsed, applied with dry ice and pressure grouted

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)		
1,000 gal	Waste Motor Oil 1975	See TAC Work Plan	See TAC Work plan <i>Changes to workplan!</i> ① At least 2 soil samples at different depths (one close to g.w.) should be analyzed from ^{each} borings

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.

② One of the borings should be angled under the tank.

Excavated/Stockpiled Soil

<p>Stockpiled Soil Volume (estimated)</p>	<p align="center">Sampling Plan</p> <p align="center">See TAC Work Plan</p>
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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
See TAC Work	Plan		

18. Submit Worker's Compensation Certificate copy

Name of Insurer _____

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 TAC Environmental services

Name of Individual David Solis, P.E.

Signature *D. Solis* Date 3/7/97

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business Robert and Ruth Burrows Trust

Name of Individual Bruce Burrows - Client Representative

Signature *Bruce Burrows* Date 3/7/97

General Instructions

- * Three (3) copies of this plan plus attachments and a deposit must be submitted to this Department.
- * Any cutting into tanks requires local fire department approval.
- * One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.
- * State of California Permit Application Forms A and B are to be submitted to this office. One Form A per site, one Form B for each removed tank.

Line Item Specific Instructions2. SITE ADDRESS

Address at which closure is taking place.

5. EPA I.D. NO. under which the tanks will be manifested

EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781.

6. CONTRACTOR

Prime contractor for the project.

10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES

- a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
- c) Tanks must be hauled as hazardous waste.
- d) This is the place where tanks will be taken for cleaning.

15. TANK HISTORY AND SAMPLING INFORMATION

Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, and the date when the tank was last used.

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS

See attached Table 2.

17. SITE HEALTH AND SAFETY PLAN

A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:

- a) The name and responsibilities of the site health and safety officer;
- b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;
- c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;
- d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;
- e) Description of the work habit changes triggered by the above action levels or physical conditions;
- f) Frequency and types of air and personnel monitoring - along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
- g) Confined space entry procedures (if applicable);
- h) Decontamination procedures;
- i) Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);
- j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;
- k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and
- l) A page for employees to sign acknowledging that they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale;
- b) North Arrow;
- c) Property Lines;
- d) Location of all Structures;
- e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
- f) Streets;
- g) Underground conduits, sewers, water lines, utilities;
- h) Existing wells (drinking, monitoring, etc.);
- i) Depth to ground water; and
- j) All existing tank(s) and piping in addition to the tank(s) being removed.

20. DEPOSIT

A deposit, payable to "County of Alameda" for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from this office or from the San Francisco Bay Regional Water Quality Control Board (510/286-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.

22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;

- c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;
- d) Detailed description of sampling methods; i.e. backhoe bucket, drive sampler, bailer, bottle(s), sleeves.
- e) Description of any remedial measures conducted at the time of tank removal;
- f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;
- g) Chain of custody records;
- h) Copies of signed laboratory reports;
- i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and
- j) Documentation of the disposal of/and volume and final destination of all non-manifested contaminated soil disposed offsite.

TABLE #2
RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR
UNDERGROUND TANK LEAKS

<u>HYDROCARBON LEAK</u>	<u>SOIL ANALYSIS</u>		<u>WATER ANALYSIS</u>	
Unknown Fuel	TPH G TPH D BTX&E TPH AND BTX&E 8260	GCFID(5030) GCFID(3550) 8020 or 8240 8260	TPH G TPH D BTX&E	GCFID(5030) GCFID(3510) 602, 624 or 8260
Leaded Gas	TPH G BTX&E TPH AND BTX&E 8260 TOTAL LEAD AA -----Optional-----	GCFID(5030) 8020 OR 8240 8260 AA DHS-LUFT DHS-AB1803	TPH G BTX&E TOTAL LEAD AA	GCFID(5030) 602 or 624 AA DHS-LUFT DHS-AB1803
Unleaded Gas	TPH G BTX&E TPH AND BTX&E 8260	GCFID(5030) 8020 or 8240 8260	TPH G BTX&E	GCFID(5030) 602, 624 or 8260
Diesel, Jet Fuel and Kerosene	TPH D BTX&E TPH AND BTX&E 8260	GCFID(3550) 8020 or 8240 8260	TPH D BTX&E	GCFID(3510) 602, 624 or 8260
Fuel/Heating Oil	TPH D BTX&E TPH AND BTX&E 8260	GCFID(3550) 8020 or 8240 8260	TPH D BTX&E	GCFID(3510) 602, 624 or 8260
Chlorinated Solvents	CL HC BTX&E CL HC AND BTX&E 8260	8010 or 8240 8020 or 8240 8260	CL HC BTX&E CL HC AND BTX&E 8260	601 or 624 602 or 624 8260
Non-chlorinated Solvents	TPH D BTX&E TPH AND BTX&E 8260	GCFID(3550) 8020 or 8240 8260	TPH D BTX&E TPH and BTX&E 8260	GCFID(3510) 602 or 624 8260
Waste and Used Oil or Unknown (All analyses must be completed and submitted)	TPH G TPH D TPH AND BTX&E 8260 O & G BTX&E CL HC	GCFID(5030) GCFID(3550) 8260 5520 D & F 8020 or 8240 8010 or 8240	TPH G TPH D O & G BTX&E CL HC	GCFID(5030) GCFID(3510) 5520 B & F 602, 624 or 8260 601 or 624
ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni METHOD 8270 FOR SOIL OR WATER TO DETECT: PCB* PCP* PNA CREOSOTE				

* If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary
 Evaluation and Investigation of Underground Tank Sites,
 10 August 1990

EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS

1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.
2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.
3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.
4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.
5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydrocarbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.
6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring).
7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTX&E) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).
8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.
9. PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:

	<u>SOIL PPM</u>	<u>WATER PPB</u>
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of Laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE	MODIFIED PROTOCOL
≤ 10 ppm (42%)	≤ 10 ppm (10%)
≤ 5 ppm (19%)	≤ 5 ppm (21%)
≤ 1 ppm (35%)	≤ 1 ppm (60%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

- LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.
- IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chromatogram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

- REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

4 EPILOGUE

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.

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)

Name of Site

260 30th Street

Street Address

Oakland, CA

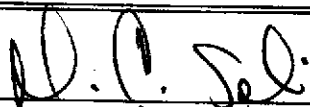
City, State & Zip Code

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

David C. Solis
Name

151 Link Road
Street Address

Cordelia, CA 94585
City, State & Zip Code



Signature of Payor

3-9-91

Date

David C. Solis

Name of Payor
(PLEASE PRINT CLEARLY)

TAC Environmental

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*