

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 12, 1999
StID # 3764

REMEDIAL ACTION COMPLETION CERTIFICATION

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

RE: Oakland Fire Station #6, located at 7080 Colton Blvd.,
Oakland, CA 94611

Dear Mr. Ojukwu:

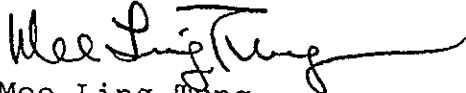
This letter confirms the completion of site investigations and remedial action for the former 285-gallon diesel fuel underground storage tank removed from the above described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground tank is greatly appreciated.

Based upon the available information and with provisions that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground storage tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721 (e) of the California Code of Regulations.

Please contact Juliet Shin at (510) 567-6763 if you have any questions regarding this matter.

Sincerely,


Mee Ling Tung
Director, Environmental Health

c: J. Shin, Hazardous Materials Division-files
Chuck Headlee, RWQCB
Mr. Dave Deaner, SWRCB Cleanup Fund
Mr. Leroy Griffin, City of Oakland OES, 505 14th St.,
Suite 702, Oakland CA 94612

pb#01-0635

ENVIRONMENTAL PROTECTION

99 APR 20 PM 1:23

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: February 23, 1999

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Juliet Shin** Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Oakland Fire Station #6**
Site facility address: **7080 Colton Blvd., Oakland, CA 94611**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **3764**
URF filing date: **04/21/89** SWEEPS No: **N/A**

| <u>Responsible Parties:</u> | <u>Addresses:</u> | <u>Phone Numbers:</u> |
|--|---|-----------------------|
| City of Oakland Contact: Odili Ojukwu | 250 Frank H. Ogawa Plaza, Ste 5301 Oakland, CA 94612 | (510) 238-7371 |

| <u>Tank No:</u> | <u>Size in gal.:</u> | <u>Contents:</u> | <u>Closed in-place or removed?:</u> | <u>Date:</u> |
|-----------------|----------------------|------------------|-------------------------------------|--------------|
| 1 | 285 | Diesel | Removed | 3/23/89 |

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency:
Monitoring Wells installed? **One temporary piezometer was installed within 3 feet downgradient of the former tank pit on June 05, 1989, and was screened from roughly 9- to 18-feet below ground surface.**
Proper screened interval? **YES**
Highest GW depth below ground surface: **9-feet below ground surface** Lowest depth: **It appears that the water was perched and that groundwater only went down a couple of feet to roughly 11-feet bgs, where fairly impermeable claystone was encountered.**
Flow direction: **Unknown**
Most sensitive current use: **Not Applicable**
Are drinking water wells affected? **No. According to the MapInfo Database, Version 3, there are no wells within 1,000 feet of the site.** Aquifer name: **Unknown**

Is surface water affected? **Surface waters do not appear to be affected based on no observed oily surface runoff or stained soil in the area of the former tank at the time of site inspection. The nearest surface waters are Temescal Creek, located roughly 2,000-feet north of the site, and Shepherd Creek, located roughly 3,000 feet southeast of the site.**

Off-site beneficial use impacts (addresses/locations): **No known beneficial use impacts.**

Report(s) on file? **YES** Where is report(s) filed? **Alameda County** **Oakland Fire Dept**
1131 Harbor Bay Pkwy and **505 14th St, Ste 510**
Alameda, CA 94502 **Oakland, CA 94612**

Treatment and Disposal of Affected Material:

| <u>Material</u> | <u>Amount (include units)</u> | <u>Action (Treatment or Disposal w/destination)</u> | <u>Date</u> |
|-----------------|-----------------------------------|---|-------------|
| Tank | One 285-gallon | H & H Ship Service Co. 220 China Basin Street San Francisco, CA 94107 | 03/23/89 |
| Soil | ~ 17 tons | Liquid Waste Management Corner Hwy 33 and Hwy 58 McKittrick, CA 93251 | 04/28/89 |

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

| Contaminant | Soil (ppm) | | Water (ppb) | |
|----------------|---------------------|------------------|-------------|--------------------|
| | Before ¹ | After | Before | After ³ |
| TPH (Gas) | ND ² | ND | ND | ND |
| TPH (Diesel) | ND | ND | ND | ND |
| Benzene | ND | ND | ND | ND |
| Toluene | ND | 1.0 ² | ND | ND |
| Ethylbenzene | ND | ND | ND | ND |
| Total Xylenes | ND | ND | ND | ND |
| MTBE | ND ⁴ | NA ⁵ | NA | NA |
| Oil and Grease | 230 | ND ² | 140,000 | ND |
| Kerosene | ND ² | | ND | |

NA-Not Analyzed

ND-Not Detected

- 1- Soil samples collected during the tank removal on March 23, 1989.
- 2- Soil samples collected from 4-, 10-, 14-, and 20-feet below ground surface from the temporary piezometer installed on June 09, 1989.
- 3- Groundwater sample collected from perched groundwater after overexcavation of the tank pit, from a piezometer located roughly 3 feet downgradient of the former tank pit.
- 4- From soil sample collected from 8-feet bgs adjacent to the former UST in June 1999.
- 5- The collection of groundwater was attempted in June 1999, but there was no groundwater down to 8.5-feet bgs. They encountered claystone at 8.5-feet bgs.

Comments (Depth of Remediation, etc.):

See Section VII, Additional Comments, etc...

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **YES**

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **YES**

Does corrective action protect public health for current land use? **YES**

Site management requirements: **A site safety plan addressing the potential contact with oil and grease-contaminated perched water must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual contamination.**

Should corrective action be reviewed if land use changes? **NO**


Monitoring wells Decommissioned: **The temporary piezometer still remains at the site and must be removed prior to granting closure certification to prevent a conduit to the subsurface.**

List enforcement actions taken: **None**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Juliet Shin**

Title: **Haz Mat Specialist**

Signature: 

Date: **03/01/99**

Reviewed by

Name: **Eva Chu**

Title: **Haz Mat Specialist**

Signature: 

Date: **3/1/99**

Name: **Thomas Peacock**

Title: **Supervisor**

Signature: 

Date: **3-12-99**

VI. RWQCB NOTIFICATION

Date Submitted to RB:

RB Response:

RWQCB Staff Name: **Chuck Headlee**

Title: **EG**

Signature: 

Date: **4/9/99**

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site is located at the southern corner of the intersection of Colton Boulevard, Skyline Boulevard and Snake Road in a predominantly residential area of the Oakland Hills (refer to attached Site plan). On March 23, 1989, one 285-gallon diesel underground storage tank and associated piping was removed from the site. According to a County Inspection Report, dated March 23, 1989, no holes were noted in the tank, and the tank was covered with tar. No groundwater was encountered in the tank pit during the tank removal. According to the report, the tank pit appeared to be clean and no odors emanated from the pit, however, the excavated soil emanated a slight odor (refer to attached copies of tank manifest and County Inspection report). One soil sample was collected from the sidewall of the tank pit at an unknown depth, and one three-point composite soil sample was collected from the excavated stockpiled soil. These samples were analyzed for Total Petroleum Hydrocarbons as Diesel (TPHD), Oil and Grease using Standard Method 503E, and benzene, toluene, ethylbenzene, and total xylenes. Analysis of these samples identified 230 parts per million (ppm) Oil and Grease in the sidewall sample, and 430ppm Oil and Grease and 24ppm TPHD in the stockpile soil sample (refer to attached copies of laboratory analysis results and Unauthorized Release Leak Report Form).

Based on the levels of Oil and Grease identified in the initial tank removal samples, the tank pit was overexcavated on April 18, 1989. One additional soil sample was collected. According to statements from the City of Oakland, this sample was collected from the bottom of the excavation. However, the depth is unknown. This sample was analyzed for Oil and Grease using Standard Method 503E, and no Oil and Grease was identified above detection limits. According to disposal receipts, a total of 17 tons of excavated soil was generated from the tank pit and hauled off site to Liquid Waste Management in McKittrick, California (refer to attached copy of disposal receipt).



One exploratory boring was installed at the site on June 5, 1989, roughly 3 feet downgradient of the former tank pit to assess the downgradient extent of soil and/or groundwater contamination. The downgradient direction was determined to be downslope based on the steep 3:1 slope of the hill where the former tank was located. Four soil samples were collected from the boring from 4-, 10-, 14-, and 20-feet below ground surface (bgs), and analyzed for Total Petroleum Hydrocarbons as Gasoline (TPHG), kerosine, TPHD, Oil and Grease, and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Analysis of these samples did not identify any contaminants above detection limits.

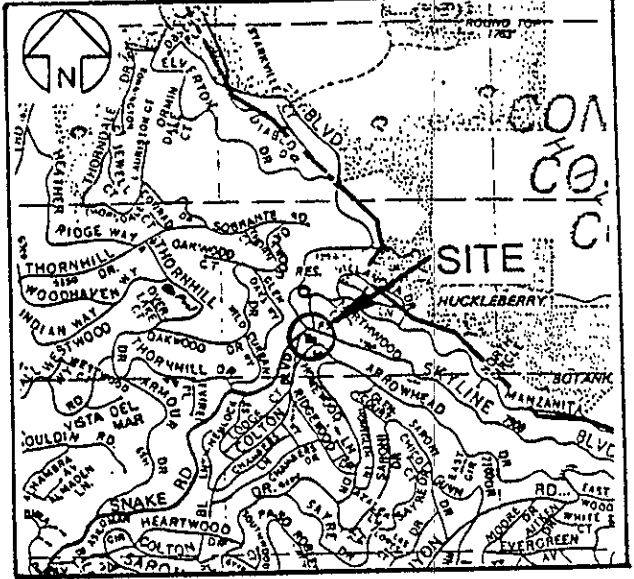
During the installation of the boring, groundwater was encountered first at roughly 9-feet bgs. The boring was finished as a temporary piezometer, with a screened interval of 9- to 18-feet bgs. One "grab" groundwater sample was collected from the piezometer prior to purging (refer to attached copy of boring log). This sample was analyzed for all the same constituents as the above soil samples collected from the same location. Analysis of the groundwater sample identified up to 140,000 parts per billion (ppb) Oil and Grease and no other contaminants were identified above detection limits. Four subsequent attempts were made to sample the groundwater from this piezometer on October 31, 1989, February 02, 1990, May 01, 1990, and August 01, 1990. The piezometer was recorded as being completely dry on each of these dates, therefore no additional groundwater samples could be collected. Based on this information and the soil types at the site, it appears that the groundwater initially encountered was perched groundwater.

In June 1999, Subsurface Consultants, Inc. attempted to collect a groundwater sample at the former UST and analyze it for MTBE, and BTEX. They bored down to 8.5-feet bgs, and encountered claystone and no groundwater, so only one soil sample was collected from native lean clay at 8-feet bgs and analyzed for the constituents of concern. No contaminants were identified.

This office is recommending that this site be closed for the following reasons:

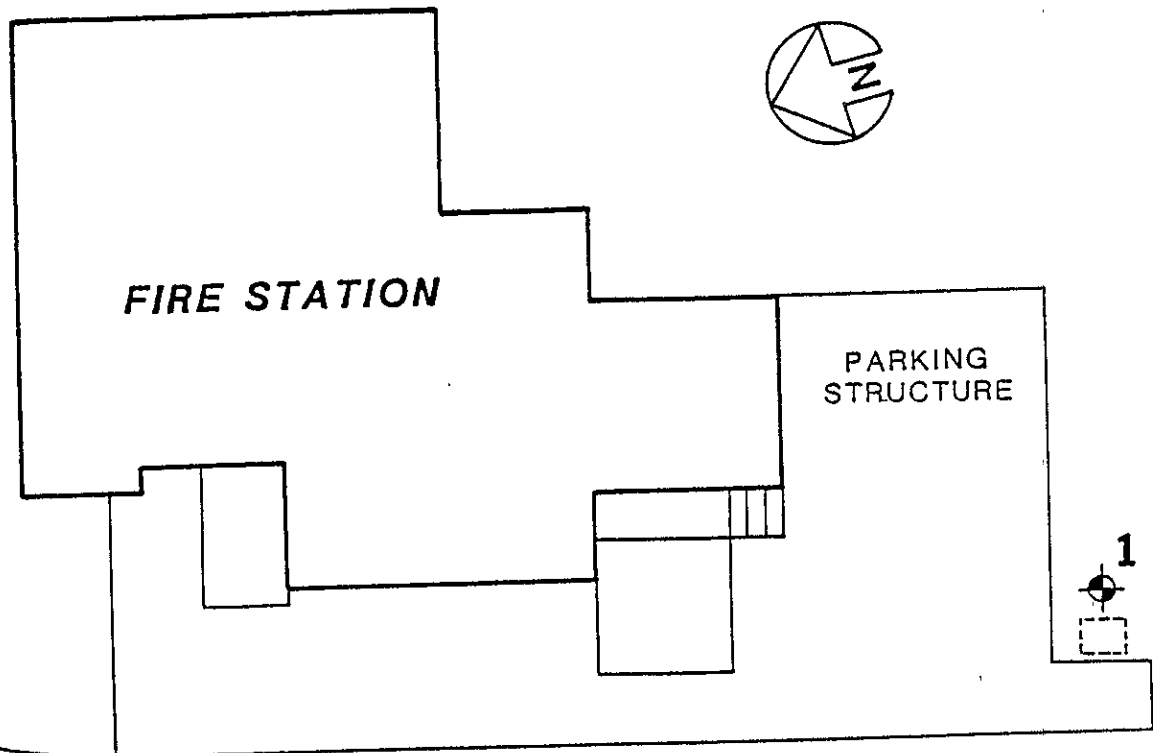
- **The initial soil samples collected from around the former 285-gallon diesel underground storage tank did not identify any BTEX and only low levels of TPHD at 24ppm and Oil and Grease at 230ppm and 430ppm. This contamination was subsequently overexcavated and hauled off site. Confirmatory soil samples collected from the tank pit after the overexcavation were all Non Detect for Oil and Grease and TPHG, TPHD, BTEX, and kerosine.**
- **Although 140,000ppb of Oil and Grease was identified in perched groundwater encountered in the temporary piezometer, it is unlikely that surface water is infiltrating this "perched zone" due to evidence that the piezometer never recharged after a one-time purging in June 1989. Additionally, the soil types and extensive vegetation in the area of the former tank would be likely to retard future infiltration in this area.**
- **The nearest surface waters to the site appear to be Temescal Creek, located roughly 2,000 feet north of the site, and Shepherd Creek, located roughly 3,000 feet from the site.**
- **No groundwater wells are located within 1,000 feet of the site.**

 TEST BORING/WELL
 APPROXIMATE PREVIOUS TANK LOCATION



VICINITY MAP

ARROWHEAD DRIVE



COLTON BOULEVARD



SITE SKETCH

Subsurface Consultants

FIRE STATION 6 - OAKLAND, CA

JOB NUMBER
364.013

DATE
6/15/89

APPROVED
[Signature]

PLATE

1

white -env.health
 yellow -facility
 pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

80 Swan Way, #200
 Oakland, CA 94621
 (415) 271-4320

Hazardous Materials Inspection Form

Warehouse 6 II, III
 Today's Date 3/23/89

Site ID # _____ Site Name City of Oakland

Site Address 7080 Colton Blvd.
 City Oakland Zip 94611 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

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

Comments:

Small (about 350-gal.) diesel tank in verdant hillside next to fire station

Tank appears to have no holes in it, but is covered w/ tar

Hole looks clean, no smell of diesel or soil staining. However, excavation spoils (all sand) have a slight smell of diesel - so, one composite sample taken from three portions of the excavation pile.

Native soil appears to be a sandy, silty clay

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. MATLS

- 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? 25536

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
- 6. Method
- 1) Monthly Test
- 2) Daily Vadose
Semi-annual groundwater
One time soils
- 3) Daily Vadose
One time soils
Annual tank test
- 4) Monthly Groundwater
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 testing
- 8) Annual Tank Testing
Daily Inventory
- 9) Other _____
- 7. Precs Tank Test 2643
Date: _____
- 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 2711
Date: _____
- 14. As Built 2635
Date: _____

Rev 8/88

Contact: _____
 Title: _____
 Signature: Jim Nichols

Inspector: Gilbert M. Wister
 Signature: _____

Please print or type. (Form designed for use on electric typewriter).

88227511
 IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CAC0001A51571215111**
 Manifest Document No.

2. Page 1 of 1
 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
TIM MURRAY
MUNI. BLDGS. 7101 EDGEWATER DRIVE
OAKLAND, CA 94621

A. State Manifest Document Number
88227511
 B. State Generator's ID
HYHQ36022699

4. Generator's Phone
415 273-3462

C. State Transporter's ID
003767
 D. Transporter's Phone
415 543-4835

5. Transporter Company Name
H+H SHIP SERVICE CO
 6. US EPA ID Number
EAD010477111018

E. State Transporter's ID
 F. Transporter's Phone

7. Transporter 2 Company Name
 8. US EPA ID Number
 9. Designated Facility Name and Site Address
H+H SHIP SERVICE CO INC
220 China Basin St
SAN FRANCISCO CA 94107
 10. US EPA ID Number
EAD010477111018

G. State Facility's ID
 H. Facility's Phone
415 543-4835

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type
 13. Total Quantity
 14. Unit Wt/Vol
 1. Waste No.

a. **WASTE EMPTY DIESEL TANK**
COMBUSTIBLE Liquid NA 1993

001 TD
111 V
300
415 gal
 State **512**
 EPA/Other **N/A**

b.
 c.
 d.

State
 EPA/Other
 State
 EPA/Other
 State
 EPA/Other

J. Additional Descriptions for Materials Listed Above
EMPTY UNDERGROUND GASOLINE, DIESEL STORAGE TANK WITH LESS THAN ONE GALLON RESIDUAL LIQUID IN TANK

K. Handling Codes for Wastes Listed Above
 b.
 c.
 d.

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
 If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name **TIM MURRAY** Signature **Tim Murray** Month Day Year **03 23 89**

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name **JOSE MORENO** Signature **Jose Moreno** Month Day Year **03 23 89**

18. Transporter 2 Acknowledgement of Receipt of Materials
 Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
 Printed/Typed Name Signature Month Day Year

Do Not Write Below This Line

Blue: GENERATOR SENDS THIS COPY TO DOHS WITHIN 30 DAYS
 To: P.O. Box 400, Sacramento, CA 95812-0400

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

| | | |
|--|--|---|
| EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO | FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE. SIGNED: <u>Gilbert M. Wistar</u> DATE: <u>4/27/89</u> |
| REPORT DATE <u>04/21/89</u> | CASE # | |

| | | | | |
|-------------|---|--|--------------------------------|--|
| REPORTED BY | NAME OF INDIVIDUAL FILING REPORT <u>TIM MURRAY</u> | PHONE <u>(415) 273 3462</u> | SIGNATURE <u>Tim Murray</u> | |
| | REPRESENTING <input type="checkbox"/> LOCAL AGENCY <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> OTHER | COMPANY OR AGENCY NAME <u>CITY OF OAKLAND/MUNICIPAL BUILDINGS</u> | | |
| | ADDRESS <u>7101 EDGEWATER DRNE OAKLAND CA 94621</u> | | | |

| | | | |
|-------------------|---|--|------------------------------|
| RESPONSIBLE PARTY | NAME <u>MUNICIPAL BUILDINGS</u> <input type="checkbox"/> UNKNOWN | CONTACT PERSON <u>Building Services Manager</u> | PHONE <u>415/273 3462</u> |
| | ADDRESS <u>7101 EDGEWATER DRIVE OAKLAND CA 94621</u> | | |

| | | | | |
|---------------|--|---------------------------------------|---|---|
| SITE LOCATION | FACILITY NAME (IF APPLICABLE) <u>FIREHOUSE #6</u> | OPERATOR <u>FIREMEN AT STATION</u> | PHONE <u>415/273 3331</u> | |
| | ADDRESS <u>7080 COLTON BLVD. OAKLAND ALAMEDA</u> | | | |
| | CROSS STREET <u>SKYLINE BLVD. SNAKE ROAD #</u> | | TYPE OF AREA <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input checked="" type="checkbox"/> RURAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> OTHER | TYPE OF BUSINESS <input type="checkbox"/> FARM <input checked="" type="checkbox"/> OTHER <u>EMERG. SVCS.</u> |

| | | | | |
|-----------------------|--|---|-------------------------------------|------------------------------|
| IMPLEMENTING AGENCIES | LOCAL AGENCY <u>Alameda County Health Care Services</u> | AGENCY NAME <u>Alameda County Health Care Services</u> | CONTACT PERSON <u>Gil Wistar</u> | PHONE <u>415/271-4320</u> |
| | REGIONAL BOARD | | | |

| | | |
|---------------------|---|--|
| SUBSTANCES INVOLVED | (1) NAME <u>Heavy Oil & Grease</u> | QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN |
| | (2) <input type="checkbox"/> UNKNOWN | |

| | | | | | |
|---------------------|---|--|--|--|--|
| DISCOVERY/ABATEMENT | DATE DISCOVERED <u>04/14/89</u> | HOW DISCOVERED <input type="checkbox"/> TANK TEST <input checked="" type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input checked="" type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER | | | |
| | DATE DISCHARGE BEGAN <input checked="" type="checkbox"/> UNKNOWN | | METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input checked="" type="checkbox"/> REPLACE TANK <input checked="" type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input checked="" type="checkbox"/> OTHER <u>New above ground tank</u> | | |
| | HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE <u>04/04/89</u> | | | | |

| | | | | | |
|--------------|--|--|--|---|--|
| SOURCE/CAUSE | SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input checked="" type="checkbox"/> PIPING LEAK <input checked="" type="checkbox"/> OTHER | TANKS ONLY CAPACITY <u>285</u> GAL. | MATERIAL <input type="checkbox"/> FIBERGLASS <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> OTHER | CAUSE(S) <input checked="" type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> CORROSION <input type="checkbox"/> UNKNOWN <input type="checkbox"/> SPILL <input type="checkbox"/> OTHER | |
| | AGE <input checked="" type="checkbox"/> UNKNOWN | | | | |
| | | | | | |

| | |
|-----------|--|
| CASE TYPE | CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED) |
|-----------|--|

| | |
|----------------|---|
| CURRENT STATUS | CHECK ONE ONLY <input type="checkbox"/> SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) <input checked="" type="checkbox"/> CLEANUP IN PROGRESS <input type="checkbox"/> SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> NO FUNDS AVAILABLE TO PROCEED <input type="checkbox"/> EVALUATING CLEANUP ALTERNATIVES |
|----------------|---|

| | | | | |
|---|--|--|--|--|
| REMEDIAL ACTION | CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) | | | |
| <input type="checkbox"/> CAP SITE (CD) <input checked="" type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) | | | | |
| <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) | | | | |
| <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> OTHER (OT) | | | | |

COMMENTS
 Leak report filed because of oil + grease contamination above 100 ppm found in soil samples



DATE: 4/6/89
 LOG NO.: 7173
 DATE SAMPLED: 3/23/89
 DATE RECEIVED: 3/23/89

CUSTOMER: R.S. Eagan and Company
 REQUESTER: Bob Eagan
 PROJECT: No. 9-154 Fire Station, No. 6, 7080 Colton Boulevard

| Method and Constituent | Units | Sample Type: Soil | | | |
|--|-------|-------------------|-----------------|------------------|-----------------|
| | | No. 1 Side Wall | | No. 2 Stock Pile | |
| | | Concentration | Detection Limit | Concentration | Detection Limit |
| DHS Method: | | | | | |
| Total Petroleum Hydrocarbons as Diesel | mg/kg | < 3 | 3 | 24 | 3 |
| Modified EPA Method 8020: | | | | | |
| Benzene | mg/kg | < 0.02 | 0.02 | < 0.02 | 0.02 |
| Toluene | mg/kg | < 0.02 | 0.02 | < 0.02 | 0.02 |
| Xylenes | mg/kg | < 0.05 | 0.05 | < 0.05 | 0.05 |
| Ethyl Benzene | mg/kg | < 0.04 | 0.04 | < 0.04 | 0.04 |
| Standard Method 503E, Hydrocarbons: | | | | | |
| Oil and Grease | mg/kg | 230 | 10 | 430 | 10 |

Dan Farah

Dan Farah, Ph.D.
 Supervisory Chemist

DF:mln

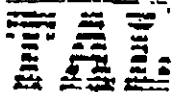
7/68

CHAIN OF CUSTODY RECORD

| PROJ. NO. | | PROJECT NAME | | | NO. OF CONTAINERS | REMARKS | | | | | | |
|------------------------------|------|--------------------------------|---|------|------------------------------|--------------|-------------|--------------------------|--|--|--|--|
| 7090 | | FIREHOUSE NO 6 COLTON BLVD. | | | | | | | | | | |
| SAMPLERS: (Signature) | | | | | NO. OF CONTAINERS | REMARKS | | | | | | |
| Mammal Flores | | | | | | | | | | | | |
| STA. NO. | DATE | TIME | COND. | GRAB | STATION LOCATION | REG. TAT = ? | | | | | | |
| 1 | 3/23 | 2:45 | ✓ | | SIDEPARK | X | X | | | | | |
| 2 | ↓ | 3:15 | ✓ | | STOCK PILE | X | X | | | | | |
| | 1989 | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Relinquished by: (Signature) | | Date / Time | Received by: (Signature) | | Relinquished by: (Signature) | | Date / Time | Received by: (Signature) | | | | |
| Relinquished by: (Signature) | | Date / Time | Received by: (Signature) | | Relinquished by: (Signature) | | Date / Time | Received by: (Signature) | | | | |
| Relinquished by: (Signature) | | Date / Time | Received for Laboratory by: (Signature) | | Date / Time | Remarks | | | | | | |

Trace Analysis Laboratory, Inc
3423 Investment Boulevard, #8 • Hayward, California 94545

(415) 783-6960



DATE: 4/25/89
LOG NO.: 7280
DATE SAMPLED: 4/18/89
DATE RECEIVED: 4/18/89

CUSTOMER: R.S. Eagan and Company

REQUESTER: Bob Eagan

PROJECT: No. 9-154, Fire Station No. 6, 7080 Colton Boulevard, Oakland, CA

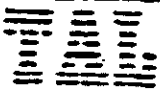
Sample Type: Soil

| <u>Method and Constituent</u> | <u>Units</u> | <u>No. 1</u> | |
|--|--------------|----------------------------|----------------------------|
| | | <u>Concen- tration</u> | <u>Detection Limit</u> |
| Standard Method 503E, Hydrocarbons: Oil and Grease | mg/kg | < 10 | 10 |

Dan Farah

Dan Farah, Ph.D.
Supervisory Chemist

DF:mln



7280

CHAIN OF CUSTODY RECORD

| PROJ. NO. | | PROJECT NAME | | | | | NO. OF CONTAINERS | REMARKS |
|------------------------------|---------|--------------------------|---|------|------------------|--------------------------|-------------------|-------------|
| STA. NO. | DATE | TIME | COMP. | GRAB | STATION LOCATION | | | |
| | | 7080 Colton Blvd Oakland | | | | | 200 X | Turn around |
| SAMPLERS: (Signatures) | | [Signatures] | | | | | | |
| No. 1 | 4/15/79 | 11:30 | X | | So. 1 | | | |
| | 1979 | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Relinquished by: (Signature) | | Date / Time | Received by: (Signature) | | Date / Time | Received by: (Signature) | | |
| Relinquished by: (Signature) | | Date / Time | Received by: (Signature) | | Date / Time | Received by: (Signature) | | |
| Relinquished by: (Signature) | | Date / Time | Received for Laboratory by: (Signature) | | Date / Time | Remarks | | |

FORM 100-10 (REV. 1-79)

LAB NUMBER: 17561
CLIENT: SUBSURFACE CONSULTANTS
PROJECT # : 364.013/FIRE STATION 6

DATE RECEIVED: 06/09/89
DATE ANALYZED: 06/13/89
DATE REPORTED: 06/26/89
PAGE 2 OF 6

ANALYSIS: OIL AND GREASE
METHOD: SMWW 503E

| LAB ID | SAMPLE ID | RESULT | UNITS | DETECTION LIMIT |
|---------|-----------|--------|-------|-----------------|
| 17561-1 | 1 @ 4' | ND | mg/Kg | 50 |
| 17561-2 | 1 @ 10' | ND | mg/Kg | 50 |
| 17561-3 | 1 @ 14' | ND | mg/Kg | 50 |
| 17561-4 | 1 @ 20' | ND | mg/Kg | 50 |
| 17561-5 | NW 1 | 140 | mg/L | 20 |

ND = NONE DETECTED.

QA/QC SUMMARY

RPD, % 2
RECOVERY, % 94

LABORATORY NUMBER: 17561
CLIENT: SUBSURFACE CONSULTANTS
JOB #: 364.013
LOCATION: FIRE STATION 6

DATE RECEIVED: 06/09/89
DATE ANALYZED: 06/19/89
DATE REPORTED: 06/26/89
PAGE 3 OF 6

Extractable Petroleum Hydrocarbons in Soils & Wastes
EPA 8015 (Modified)
Extraction Method: EPA 3550

| LAB ID | CLIENT ID | GASOLINE (mg/Kg) | KEROSINE (mg/Kg) | DIESEL (mg/Kg) | OTHER (mg/Kg) |
|---------|-----------|---------------------|---------------------|-------------------|------------------|
| 17561-1 | 1 @ 4' | ND(10) | ND(10) | ND(10) | ND(10) |
| 17561-2 | 1 @ 10' | ND(10) | ND(10) | ND(10) | ND(10) |
| 17561-3 | 1 @ 14' | ND(10) | ND(10) | ND(10) | ND(10) |
| 17561-4 | 1 @ 20' | ND(10) | ND(10) | ND(10) | ND(10) |

ND = Not Detected; Limit of detection in parentheses.

QA/QC SUMMARY

Duplicate: Relative % Difference
Spike: % Recovery

<1
84

LABORATORY NUMBER: 17561
CLIENT: SUBSURFACE CONSULTANTS
PROJECT #: 364.013
LOCATION: FIRE STATION 6

DATE RECEIVED: 05/09/89
DATE ANALYSED: 05/16/89
DATE REPORTED: 05/26/89
PAGE 4 OF 6

Extractable Petroleum Hydrocarbons in Aqueous Solutions
EPA 8015 (Modified)
Extraction Method: EPA 3510

| LAB ID | CLIENT ID | GASOLINE (mg/L) | KEROSINE (mg/L) | DIESEL (mg/L) | OTHER (mg/L) |
|---------|-----------|--------------------|--------------------|------------------|-----------------|
| 17561-5 | MW 1 | ND(0.5) | ND(0.5) | ND(0.5) | ND(0.5) |

ND = Not Detected; Limit of detection in parentheses.

QA/QC SUMMARY

| | |
|-------------------|-----|
| RPD, ↓ | <1 |
| Spike: & Recovery | 101 |

LABORATORY NUMBER: 17561
 CLIENT: SUBSURFACE CONSULTANTS
 JOB NUMBER: 364.013
 JOB LOCATION: FIRE STATION 6

DATE RECEIVED: 06/09/89
 DATE ANALYSED: 06/12/89
 DATE REPORTED: 06/26/89
 PAGE 5 OF 6

Benzene, Toluene, Ethyl Benzene, Xylenes by EPA 8020
 Extraction by EPA 5030 Purge and Trap

| LAB ID | CLIENT ID | BENZENE (ug/kg) | TOLUENE (ug/kg) | TOTAL XYLENES (ug/kg) | ETHYL BENZENE (ug/kg) |
|---------|-----------|--------------------|--------------------|-----------------------------|-----------------------------|
| 17561-1 | 1 @ 4' | ND(5) | 18 | ND(5) | ND(5) |
| 17561-2 | 1 @ 10' | ND(5) | 220 | ND(5) | ND(5) |
| 17561-3 | 1 @ 14' | ND(5) | 110 | ND(5) | ND(5) |
| 17561-4 | 1 @ 20' | ND(5) | 1,000 | ND(5) | ND(5) |

ND = Not Detected; Limit of detection in parentheses.

QA/QC SUMMARY

| | |
|-----------|-----|
| %RPD | 10 |
| %RECOVERY | 108 |

LABORATORY NUMBER: 17561
CLIENT: SUBSURFACE CONSULTANTS
JOB NUMBER: 364.013
JOB LOCATION: FIRE STATION 6

DATE RECEIVED: 06/09/89
DATE ANALYSED: 06/12/89
DATE REPORTED: 06/26/89
PAGE 6 OF 6

Benzene, Toluene, Ethyl Benzene, Xylenes by EPA 8020
Extraction by EPA 5030 Purge and Trap

| LAB ID | CLIENT ID | BENZENE (ug/L) | TOLUENE (ug/L) | TOTAL XYLENES (ug/L) | ETHYL BENZENE (ug/L) |
|---------|-----------|-------------------|-------------------|----------------------------|----------------------------|
| 17561-5 | MW 1 | ND(1) | ND(1) | ND(1) | ND(1) |

ND = Not Detected; Limit of detection in parentheses.

QA/QC SUMMARY

| | |
|-----------|-----|
| %RSD | 10 |
| %RECOVERY | 106 |

LIQUID WASTE MANAGEMENT, INC.
STAR RTE. BOX 4, CORNER HWY. 33 AND HWY. 58
MCKITTRICK, CA 93251
(805) 762-7607

29418

Lease _____
Well # _____
Ph # 6.0

Scale Ticket #

02974

Approved Disposal Site
MCKITTRICK

Operator
LIQUID WASTE MANAGEMENT, INC.

LIQUID WASTE DISCHARGE REPORT

A. Liquid Waste Source:

Company

City of Oakland

Address _____

Description:

Soil

Brine

Drilling Mud

Other _____

B. Licensed Waste Hauler

Company

M. P. Vacuum

Address _____

Truck #

96

C. Delivery Date:

Date:

4-28-89

Quantity

16.96 Tons

15 yds bbls

Cost Per Ton _____

D. Invoice: _____ Hauler

Waste Source

R. S. Egan Co

Wash Out: _____

@ \$ _____ ea.

Total Cost _____

"I certify that the above described waste was hauled to this approved disposal site and was an acceptable waste as established by Order No. 72-256 of the California Regional Water Quality Control Board."

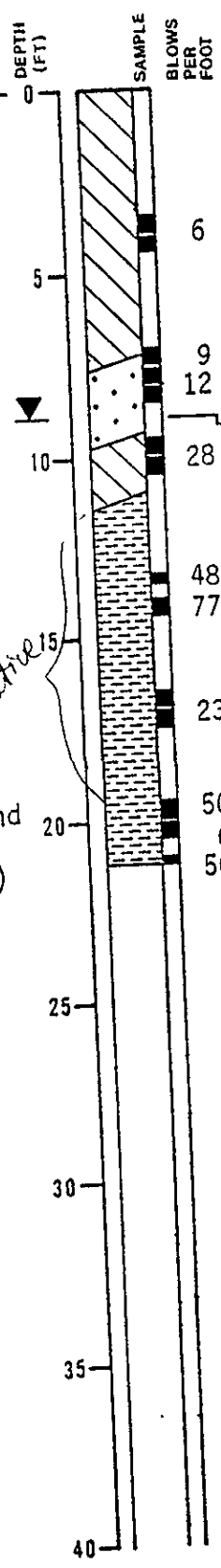
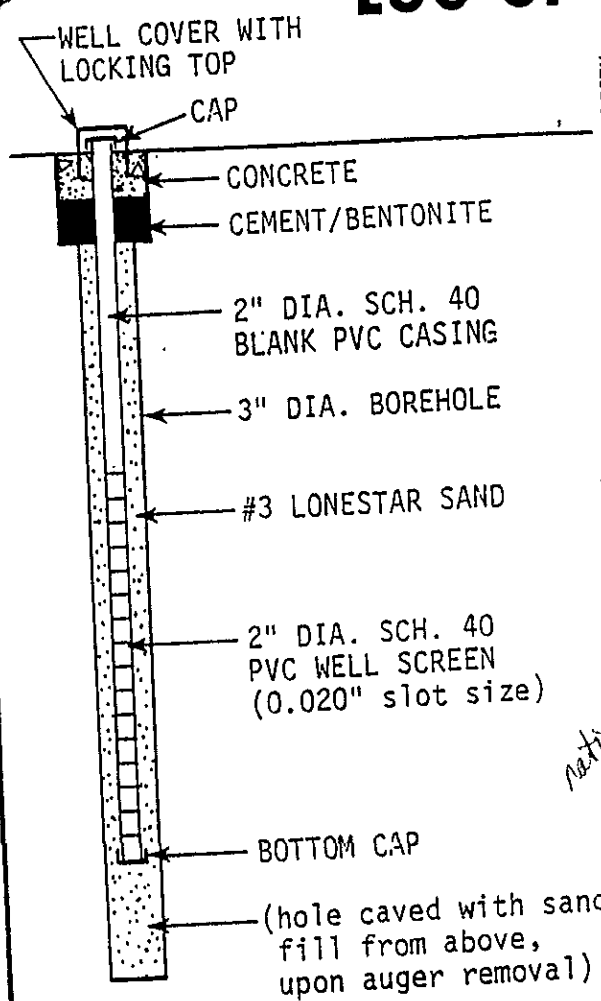
Martha Dale
Signature of Disposal Site Operator

HAULER

William L. Chapman
Signature of Licensed Hauler

LOG OF TEST BORING 1

EQUIPMENT 3" Solid Flight Auger
 DATE DRILLED 6/5/89
 ELEVATION --



MOTTLED DARK AND LIGHT BROWN SILTY CLAY (CL)
 medium stiff, moist, with rock fragments (fill)

6

9 BLACK AND BROWN SAND (SP)
 medium dense, moist (fill)

12

GROUNDWATER LEVEL DURING DRILLING

28 MOTTLED ORANGE AND BROWN SILTY CLAY (CL)
 stiff, moist, with rock fragments

48 GRAY CLAYSTONE
 intensely fractured, low hardness, friable, deep weathering

77

23 (drilling rate from 15-19 feet: 5.5 min./foot)


50/6" (drilling rate from 19-21 feet: 10 min./foot)

50/2" (auger refusal at 21 feet)

NO GROUNDWATER ENCOUNTERED ON 6/8/89

SAMPLER TYPE:
 CALIFORNIA DRIVE
 O.D.: 2.5 inches
 I.D.: 2.0 inches

HAMMER WEIGHT: 140 pounds
 HAMMER DROP: 30 inches

| | | | |
|------------------------|------------------------------|-----------------|---|
| Subsurface Consultants | FIRE STATION 6 - OAKLAND, CA | | PLATE |
| | JOB NUMBER 364.013 | DATE 6/15/89 | APPROVED  2 |