

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

REMEDIAL ACTION COMPLETION CERTIFICATION

January 8, 1998

Ms. Katy Meador, Trustee
740A 14th Street, Suite #250
San Francisco, CA 94607

STID: 42

RE: Gardiner Mfg. Co., 1920 Union St., Oakland, CA 94607

Dear Ms. Meador:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at 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 storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

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

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung
Director of Environmental Health Services

cc: Chief, Hazardous Materials Division - files
Larry Seto, ACDEH
Kevin Graves, RWQCB
Lori Casias, SWRCB (w/ Case Closure Summary)
Leroy Griffin, Oakland Fire
Eugene Teasley, Estate of Gardiner Manufacturing

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: **October 20, 1997**

Agency name: **Alameda County-HazMat**
City/State/Zip: **Alameda, CA 94502**
Responsible staff person: **Larry Seto**

Address: **1131 Harbor Bay Pkwy.**
Phone: **(510) 567-6774**
Title: **Senior HMS**

II. CASE INFORMATION

Site facility name: Gardiner Mfg. Co.

Site facility address: 1920 Union St., Oakland, CA 94607

RB LUSTIS Case No: NA

Local Case No./LOP: 42

URF filing date: 10-10-97

SWEEPS No: N/A

Responsible Parties:

Addresses:

Phone Numbers:

Ms. Katy Meador, Trustee

740A 14th Street, Suite #250
San Francisco, CA 94117

Estate of Gardiner Manufacturing
Mr. Eugene Teasley

1920 Union Street
Oakland, CA 94607

<u>Tank No</u>	<u>Size in Gallons</u>	<u>Contents:</u>	<u>Closed in-place or Removed?</u>	<u>Date:</u>
1	550	Gasoline	Removed	1-17-90

Leaking Underground Fuel Storage Tank Program

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: gasoline - spill and/or overfill

Monitoring Wells installed? No Number: NA

Site characterization complete? Yes

Date approved by oversight agency: September 16,1997

Proper screened interval? NA

Highest GW depth below ground surface: 4.5 feet Lowest depth: 6.0 feet

Flow direction: NA

Most sensitive current use: Unknown

Are drinking water wells affected? Unknown Aquifer Name:

Is surface water affected? Unknown Nearest affected SW name: ---

Off-site beneficial use impacts (addresses/locations): Unknown

Report(s) on file? Yes Where is report(s) filed? **Alameda County**
1131 Harbor Bay Pkwy.
Alameda, CA 94502

Leaking Underground Fuel Storage Tank Program

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount (include units)</u>	<u>Action (Treatment or Disposal /destination)</u>	<u>Date</u>
Underground Tank	550 gallons	Disposal , Erickson Inc. 255 Park Blvd., Richmond, CA	1-17-97

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued) Maximum Documented Contaminant Concentrations - - Before and After Cleanup

<u>Contaminant</u>	<u>Soil (ppm)</u>		<u>Water (ppb)</u>	
	<u>Before¹</u>	<u>After³</u>	<u>Before²</u>	<u>After⁴</u>
TPH (Gas)	4,000	670	640,000	1,500
TPH (Diesel)	NA	1.4	NA	ND
Benzene	3.3	1.2	3,300	2.9
Toluene	8.3	1.9	18,000	2.8
Total Xylenes	170	1.0	31,000	1.8
Ethylbenzene	62	1.0	6,400	22
MTBE	NA	ND	NA	9.8
Methylene Chloride	NA	0.028	NA	<5.0
Other VOC's	NA	<0.005 - <0.05	NA	<5 - <50

1- Samples were collected subsequent to tank removal

2- Initial groundwater samples collected from the excavation pit

3- Soil samples collected in April '97 from borings BH-A, BH-B & BH-C

4- Groundwater samples collected in April 1997 from borings BH-A, BH-B & BH-C

Leaking Underground Fuel Storage Tank Program

Comments (Depth of Remediation, etc.): See "Additional Comments" section.

IV. CLOSURE

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

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

Does corrective action protect public health for current land use? Yes

Site management requirements: Approved only for commercial use. For a residential or other conservative scenario, this case needs to be re-evaluated.

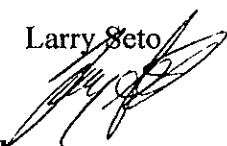
Should corrective action be reviewed if land use changes? Yes, if the site is ever used for residential purposes, a risk assessment must be prepared to address the potential threat of the residual soil and groundwater contaminant concentrations to the occupants of that residence.

List enforcement actions taken: None

List enforcement actions rescinded: None

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Larry Seto


Signature: 

Title: Senior HMS

Date: 10-16-97

Reviewed by

Name: Madhulla Logan

Signature: 

Title: Hazardous Materials Specialist

Date: 10-16-97

Name: Thomas Peacock

Signature: 

Title: Supervising HMS

Date: 10-31-97

Leaking Underground Fuel Storage Tank Program

VI. RWQCB NOTIFICATION

Date Submitted to RB:
RWQCB Staff Name: Kevin Graves

RB Response: *Approved*
Title: San. Engineering Asso. Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

[Signature] 11-19-97

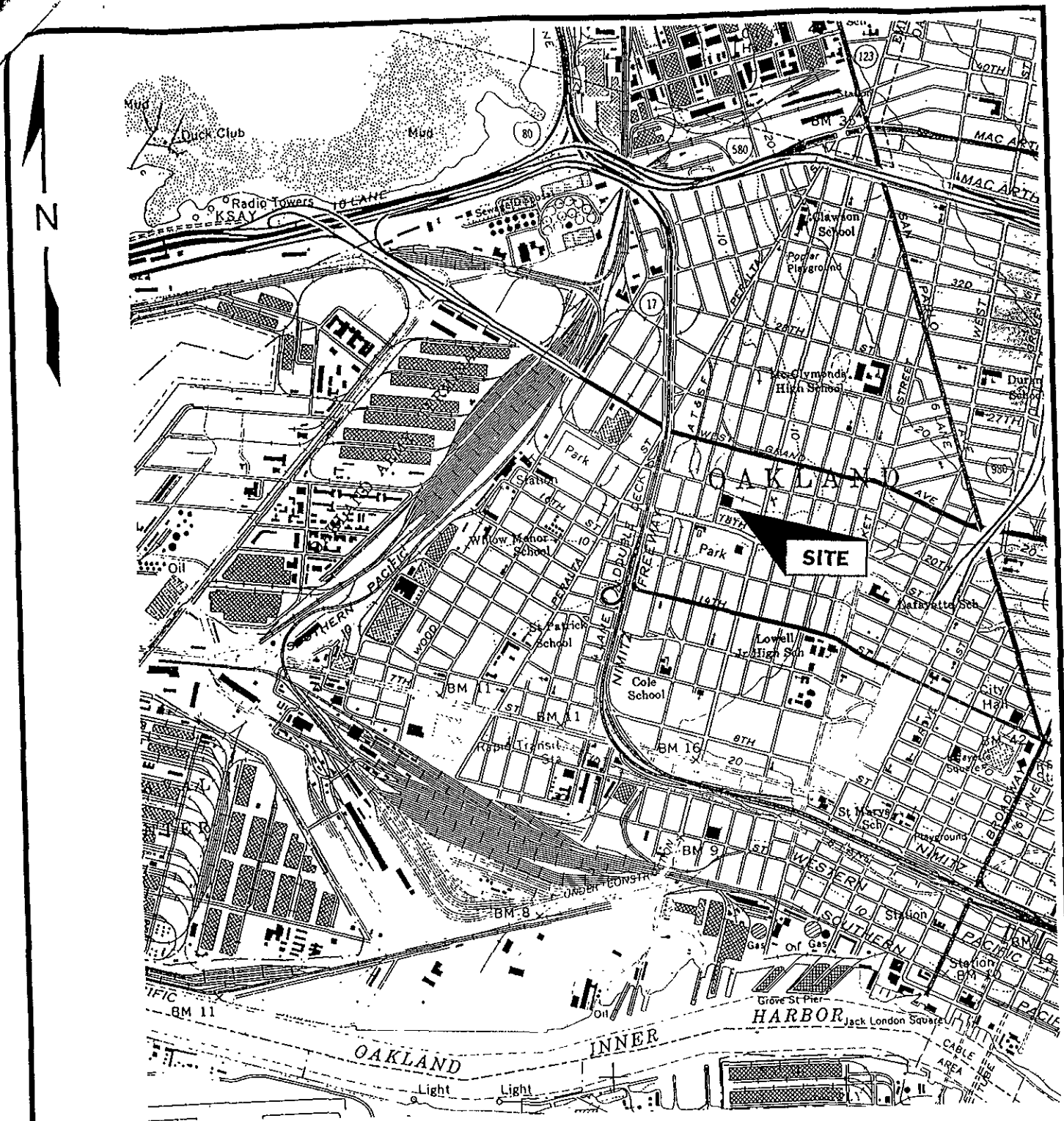
A 550 gallon gasoline underground storage tank was removed from the site on January 17, 1997. Soil samples collected subsequent to tank removal contained BTEX in concentrations up to 3.3, 8.3, 62 and 170 ppm respectively, and gasoline up to 4,000 ppm.

A groundwater sample collected from the excavation pit indicated the presence of BTEX up to 3.3, 18, 6.4 & 31 and gasoline up to 640 ppm. A composite sample from the stockpile soil exhibited high concentration of BTEX and gasoline. This department was informed that following the excavation, all the stockpiled soil was used to backfill the excavation.

In April 1997, 3 soil borings were drilled near the former underground storage tank area. A soil and groundwater sample was collected from each boring, and analyzed for gasoline, diesel, motor oil, BTEX and VOC. The laboratory results of the soil samples identified gasoline, BTEX, and Diesel in concentrations of up to 670, 1.2, 1.9, 1.0, 1.0 and 1.4 ppm respectively. Groundwater samples contained gasoline and BTEX up to 1,500, 2.9, 2.8, 22.0 and 1.8 ppm respectively. MTBE was present in groundwater at insignificant concentrations. The average benzene concentrations observed in the most recent sampling, 0.40 ppm (average of BH-A, BH-B & BH-C) was less than the ASTM RBCA's, Tier 1 levels for a commercial scenario. Note: the site needs to be re-evaluated if used for residential purposes.

In summary, this office is recommending that this case be closed for the following reasons:

Resampling of soil and groundwater indicates that natural attenuation has occurred. The residual soil and groundwater contamination do not pose a risk to public health or the environment (for a commercial scenario) based on RBCA tier 1 clean-up levels.



SITE LOCATION MAP	
Gardiner Manufacturing 1920 Union Street Oakland, California	
Aqua Science Engineers, Inc.	Figure 1

BASE: USGS Oakland West 7.5 minute quadrangle topographic map, dated 1980, scale 1:24,000.

5-5
BH-A

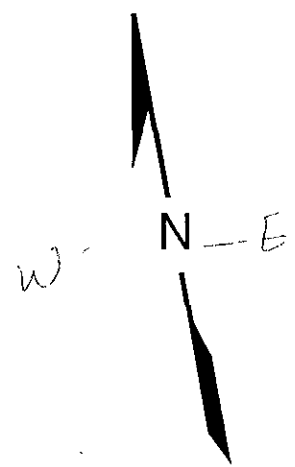
Union Street

Sidewalk

Former UST

BH-B
A-D

Building



Not to Scale

● Boring Location

PROPOSED BORING
LOCATION MAP

Gardiner Manufacturing
1920 Union Street
Oakland, California

Aqua Science Engineers, Inc. | Figure 2

The soil sample collected from 5.5-foot bgs in boring BH-A contained 670 parts per million (ppm) TPH-G and BTEX concentrations below United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goals (PRGs) for industrial soil. Only 1.4 ppm TPH-D was detected in soil samples collected from boring BH-C. No hydrocarbons were detected in the soil sample collected from 5.5-foot bgs in boring BH-B. Methylene chloride was detected in the soil sample collected from boring BH-A; however, methylene chloride is a common laboratory contaminant and would not be expected to be detected at the site.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples were analyzed by Chromalab for TPH-G by modified EPA Method 5030/8015, TPH-D and TPH-MO by modified EPA Method 3510/8015, BTEX and MTBE by EPA Method 8020 and VOCs by EPA Method 8010. The analytical results are tabulated in Tables Three and Four, and the certified analytical report and chain of custody forms are included in Appendix C.

TABLE THREE
Summary of Chemical Analysis of **GROUNDWATER** Samples
TPH-G, BTEX and MTBE
All results are in parts per billion

Boring	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	1,500	2.9	2.8	22	1.8	9.8
BH-B	<50	<0.5	<0.5	<0.5	0.66	<5
BH-C	<50	<0.5	<0.5	<0.5	<0.5	<5
DTSC MCL	NE	1.0	100*	680	1,750	NE

Notes:

DTSC MCL is the California Department of Toxic Substances Control maximum contaminant level for drinking water.

NE = DTSC MCLs are not established.

* = DTSC recommended action level for drinking water; MCL is not established.

TABLE FOUR
 Summary of Chemical Analysis of **GROUNDWATER** Samples
 TPH-D, TPH-MO and VOCs
 All results are in parts per billion

Boring	TPH Diesel	TPH Motor Oil	Methylene Chloride	Other VOCs
BH-A	<62	<620	<5	<0.5 - <5
BH-B	<83	<830	<5	<0.5 - <5
BH-C	<50	<500	<5	<5 - <50
DTSC MCL	NE	1.0	100*	680

Notes:

DTSC MCL is the California Department of Toxic Substances Control maximum contaminant level for drinking water.

NE = DTSC MCLs are not established.

* = DTSC recommended action level for drinking water; MCL is not established.

1,500 parts per billion (ppb) TPH-G, 2.9 ppb benzene and low toluene, ethylbenzene, total xylene and MTBE concentrations, below California Department of Toxic Substances Control (DTSC) maximum contaminant levels (MCLs) for drinking water, were detected in groundwater samples collected from boring BH-A. No hydrocarbons or VOCs were detected in groundwater samples collected from borings BH-B and BH-C, except for a trace concentration to total xylenes in boring BH-B.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The soil sample collected from 5.5-foot bgs in boring BH-A contained 670 parts per million (ppm) TPH-G and low BTEX concentrations below United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goals (PRGs) for industrial soil. Only 1.4 ppm TPH-D were detected in soil samples collected from boring BH-C. No hydrocarbons were detected in the soil sample collected from 5.5-foot bgs in boring BH-B. The methylene chloride detected in the soil sample collected from boring BH-A is possibly a laboratory contaminant and should not be of concern. *resample?*

TABLE ONE
 Summary of Chemical Analysis of **SOIL** Samples
 TPH-G, BTEX and MTBE
 All results are in **parts per million**

Boring	Depth Sampled	TPH Gasoline	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE
BH-A	5.5'	670	1.2	1.9	1.0	1.0	<2.5
BH-B	5.5'	<1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-C	4.0'	<1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
PRG		NE	1.4	880	230	320	NE

Notes:

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Detectable concentrations are in **bold**.

PRG is the United States Environmental Protection Agency (US EPA) Region IX Preliminary Remediation Goal (PRG) for industrial soil.

TABLE TWO
 Summary of Chemical Analysis of **SOIL** Samples
 TPH-D, TPH-MO and VOCs
 All results are in **parts per million**

Boring	Depth Sampled	TPH Diesel	TPH Motor Oil	Methylene Chloride	Other VOCs
BH-A	5.5'	<1	<50	0.028	< 0.005 - < 0.05
BH-B	5.5'	<1	<50	< 0.0050	< 0.005 - < 0.05
BH-C	4.0'	1.4	<50	< 0.0050	< 0.005 - < 0.05

Notes:

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.

Detectable concentrations are in **bold**.

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT 1 • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 51591
CLIENT: SEMCO
CLIENT JOB NO.: GARDINER MF.

DATE RECEIVED: 01/17/90
DATE REPORTED: 01/26/90

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 5030 and 8015

LAB #	Sample Identification	Concentration Gasoline Range
1	PIT WATER 6'6"	640 (mg/L)
2	NE SIDE 5'9" F.E	190 (mg/kg)
3	SE SIDE 5'9"	4000 (mg/kg)
4	COMP SPOILS	850 (mg/kg)

(mg/L) ; (mg/kg) - parts per million (ppm)

Minimum Detection Limit for Gasoline in Soil: 1mg/kg
Minimum Detection Limit for Gasoline in Water: 0.1mg/L

QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = <15%
MS/MSD Average Recovery = 95%: Duplicate RPD = 5%

Richard Srna, Ph.D.

Onyx A. Nwogu (for)
Laboratory Director

OUTSTANDING QUALITY AND SERVICE

SUPERIOR ANALYTICAL LABORATORY, INC.

1555 BURKE, UNIT 1 • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 51591
CLIENT: SEMCO
CLIENT JOB NO.: GARDINER MF.

DATE RECEIVED: 01/17/90
DATE REPORTED: 01/26/90

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration ^{ppb}			
		Benzene	Toluene	Ethyl Benzene	Xylenes
1	PIT WATER 6'6"	3300	18000	6400	31000 (ug/L)
2	NE SIDE 5'9" F.E	3300	3700	2900	11000 (ug/k)
3	SE SIDE 5'9" "	ND<300	8300	62000	170000 (ug/k)
4	COMP SPOILS	1100	12000	7100	38000 (ug/k)

(ug/L) ; (ug/kg) - parts per billion (ppb)

Minimum Detection Limit in Soil: 3.0ug/kg

Minimum Detection Limit in Water: 0.3ug/L

QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%

MS/MSD Average Recovery = 89% : Duplicate RPD = 2%

Richard Srna, Ph.D.

Onyiah A. Nwogu (for)
Laboratory Director

OUTSTANDING QUALITY AND SERVICE