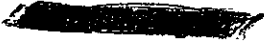


FAX

Date 3/9/98

Number of pages including cover sheet 8

To: 
Alameda County Env. Health
Env. Protection Div.

Phone: 510.567.6764

Fax: 510.337.9335

From: Cynthia Avakian
Hygienetics Environmental
7677 Oakport Street
Suite 1150
Oakland, California 9-621

Phone: 510.430.2843

Fax: 510.430.9268

cc: Larry Hjulberg, Compass

REMARKS: Urgent For your review Reply ASAP Please Comment

Attached is the Case Closure Summary for 1345 Doolittle Drive, in San Leandro, California. We are anxious to have this site closed as soon as possible.

If you have any questions, please give me a call.

Sincerely,



Cynthia P. Avakian
Project Scientist

STID 4446

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: March 9, 1998

Agency name: Alameda County EPD

Address: 1131 Harbor Bay Pkwy #250

City/State/Zip: Alameda, CA 94502

Phone: (510) 567-6700

Responsible staff person: Madhulla Logan

Title:

II. CASE INFORMATION

Site facility name:

Site facility address: 1345 Doolittle Drive, San Leandro, California

RB LUSTIS Case No: N/A

Local Case No./LOP Case No.:

URF Filing date:

SWEEPS No: N/A

Responsible Parties:**Address:****Phone Numbers:**

Equitable Real Estate

One Bush Street, 12th Floor

(415) 541-4100

Investment Management, Inc.

San Francisco, CA 94104

<u>Tank No:</u>	<u>Size in gal:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	N/A			
2				
3				
4				

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Soil sample analyses beneath a loading dock located behind the First Western Graphics facility indicated concentrations of diesel and total oil and grease (TOG). The vertical and horizontal extent of the soil contamination was limited; it was excavated and disposed of at an off-site Class I landfill. After soil excavation, five monitoring wells were installed to evaluate the site's groundwater quality. Groundwater samples collected from monitoring well MW-3 in April of 1989, indicated elevated concentrations of volatile organic compounds (VOCs) and consequentially, quarterly monitoring of the wells by ENSR was initiated in August of 1989.

Site characterization complete? YES

Date approved by oversight agency:

Monitoring Wells installed? YES

Number: 5

Proper screened interval? YES

Highest GW depth below ground surface: 3.43 feet bgs

Lowest depth: 9.77 feet bgs

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Flow direction: **southeast**

Gradient: **0.0013-0.0036 feet/foot**

Most sensitive current use:

Are drinking water wells affected? **NO**

Aquifer name: **San Leandro Alluvial Cone**

Is surface water affected? **NO**

Nearest affected SW name: **San Leandro Creek/San Francisco Bay**

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

none within 0.5 miles

Reports(s) on file? **yes**

Where is report(s) filed?

Alameda County Environmental Health Services
 1131 Harbor Bay Pkwy #250
 Alameda, CA 94502-6577
 California Environmental Protection Agency
 Department of Toxic Substances Control
 700 Heinz Avenue, Suite 200
 Berkeley, CA 94710

San Francisco Bay Region, RWQCB
 2101 Webster Street, Suite 500
 Oakland, CA 94612

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u> (include units)	<u>Action (Treatment of Disposal</u> <u>of Disposal w/destination)</u>	<u>Date</u>
N/A			

Maximum Documented Contaminant Concentrations --Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TCE	NA	NA	9	5.6
PCE	NA	NA	44	ND
1,1-DCE	NA	NA	4.2	ND
1,2-DCE	NA	NA	19	ND
cis 1,2-DCE	NA	NA	21	18
1,1-DCA	NA	NA	1	ND
Vinyl Chloride	NA	NA	1.5	ND
TPH as diesel	NA	NA	94,000	ND
Benzene	NA	NA	7.3	ND
Oil & Grease	NA	NA	2,000	ND

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IV. CLOSURE

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

Site management requirements: **NA**

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

Monitoring wells Decommissioned: **pending closure**

Number Decommissioned: **none**

Number Retained: **5 pending closure**

Leaking Underground Fuel Storage Tank Program

VII: ADDITIONAL COMMENTS, DATA, ETC.

Quarterly Groundwater Analytical Results
[All Units in Parts Per Billion (ppb)]

MW	Sample Date	Consultant	TCE	PCP	1,1-DCE	1,2 DCE (total)	cis 1,2-DCE	trans 1,2-DCE	1,1-DCA	Vinyl Chloride	Gasoline	Dicscl	Benzene	Oil & Grease
"	08/10/89	ENSR	4.8	ND	ND	NA	NA	NA	--	ND	NA	NA	ND	NA
"	11/07/89	ENSR	3.7	ND	ND	ND	NA	NA	--	ND	NA	NA	ND	NA
"	07/27/90	ENSR	4.4	ND	ND	12.0	NA	NA	--	ND	NA	NA	ND	NA
"	11/02/90	ENSR	5.0	ND	ND	ND	ND	ND	--	ND	NA	NA	ND	NA
"	03/16/92	H+GCL	6.0	ND	ND	ND	ND	ND	--	ND	NA	NA	ND	NA
"	08/06/92	H+GCL	7.0	ND	ND	ND	ND	ND	--	ND	NA	NA	ND	NA
"	12/10/92	H+GCL	8.0	ND	ND	ND	ND	ND	--	ND	NA	NA	NA	NA
"	03/31/93	H+GCL	6.0	ND	ND	ND	ND	ND	--	ND	NA	NA	NA	NA
"	06/18/93	H+GCL	8.0	ND	ND	ND	ND	ND	--	ND	NA	NA	NA	NA
"	09/17/93	H+GCL	9.0	ND	ND	ND	ND	ND	--	ND	NA	NA	NA	NA
"	12/28/93	H+GCL	6.8	ND	ND	ND	ND	ND	--	ND	NA	NA	NA	NA
"	04/08/94	H+GCL	8.7	ND	ND	ND	ND	ND	--	ND	NA	NA	NA	NA
"	07/27/94	Hygienetics	6.0	ND	ND	ND	0.61	ND	ND	ND	NA	NA	NA	NA
"	12/15/94	Hygienetics	5.9	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
"	04/07/95	Hygienetics	8.0	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
"	08/18/95	Hygienetics	4.5	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
"	12/15/95	Hygienetics	6.3	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
"	08/01/96	Hygienetics	5.6	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA
MW	Sample Date	Consultant	TCE	PCP	1,1-DCE	1,2 DCE (total)	cis 1,2-DCE	trans 1,2-DCE	1,1-DCA	Vinyl Chloride	Gasoline	Dicscl	Benzene	Oil & Grease
"	08/10/89	ENSR	9.0	ND	4.2	19.0	NA	NA	--	ND	ND	NA	6.1	NA
"	11/07/89	ENSR	4.9	ND	2.6	12.0	NA	NA	--	ND	ND	NA	7.3	NA
"	07/27/90	ENSR	ND	ND	ND	ND	NA	NA	--	ND	ND	NA	ND	NA
"	11/02/90	ENSR	1.0	ND	ND	3.9	3.9	ND	--	ND	ND	NA	ND	NA
"	03/16/92	H+GCL	3.0	ND	ND	ND	7.0	ND	--	ND	ND	NA	ND	NA
"	08/06/92	H+GCL	3.0	ND	ND	ND	14.0	ND	--	ND	NA	NA	NA	NA
"	12/10/92	H+GCL	6.0	ND	2.0	ND	21.0	ND	--	ND	NA	NA	NA	NA
"	03/31/93	H+GCL	2.0	ND	ND	ND	10.0	ND	--	ND	NA	NA	NA	NA
"	06/18/93	H+GCL	3.0	ND	ND	ND	7.0	ND	--	ND	NA	NA	NA	NA
"	09/17/93	H+GCL	3.0	ND	ND	ND	16.0	ND	--	ND	NA	NA	NA	NA
"	12/28/93	H+GCL	3.6	ND	ND	ND	7.7	ND	--	ND	NA	NA	NA	NA
"	04/08/94	H+GCL	1.9	ND	ND	ND	11.0	ND	--	ND	NA	NA	NA	NA
"	07/27/94	Hygienetics	2.3	ND	ND	ND	12.0	ND	0.73	ND	NA	NA	NA	NA
"	12/15/94	Hygienetics	1.3	ND	ND	ND	18.0	ND	0.6	ND	NA	NA	NA	NA
"	04/07/95	Hygienetics	2.6	ND	ND	ND	19.0	ND	0.7	ND	NA	NA	NA	NA
"	08/18/95	Hygienetics	2.4	ND	ND	ND	16.0	ND	1.0	1.5	NA	NA	NA	NA
"	12/15/95	Hygienetics	2.8	ND	ND	ND	20.0	ND	0.7	ND	NA	ND	NA	NA
"	08/01/96	Hygienetics	2.0	ND	ND	ND	18.0	ND	ND	ND	NA	ND	NA	NA

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MW -3	Sample Date	Consultant	TCE	PCE	1,1-DCE	1,2 DCE (total)	cis 1,2-DCE	trans 1,2-DCE	1,1-DCA	Vinyl Chloride	Gasoline	Diesel	Benzene	Oil & Grease
"	08/10/89	ENSR	ND	ND	3.0	ND	ND	ND	-	ND	NA	NA	ND	NA
"	11/07/89	ENSR	ND	ND	ND	ND	ND	ND	-	ND	NA	NA	ND	NA
"	07/27/90	ENSR	ND	ND	ND	ND	ND	ND	-	ND	NA	NA	ND	NA
"	11/02/90	ENSR	ND	ND	ND	ND	ND	ND	-	ND	NA	NA	ND	NA
"	03/16/92	H+GCL	ND	ND	ND	ND	ND	ND	-	ND	NA	NA	ND	NA
"	08/06/92	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	12/10/92	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	03/31/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	06/18/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	09/17/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	12/28/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	04/08/94	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	07/27/94	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	12/15/94	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	04/07/95	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	08/18/95	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	12/15/95	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	08/01/96	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

MW -4	Sample Date	Consultant	TCE	PCE	1,1-DCE	1,2 DCE (total)	cis 1,2-DCE	trans 1,2-DCE	1,1-DCA	Vinyl Chloride	Gasoline	Diesel	Benzene	Oil & Grease
"	08/10/89	ENSR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
"	11/07/89	ENSR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
"	07/27/90	ENSR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
"	11/02/90	ENSR	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
"	03/16/92	H+GCL	4.0	44.0	ND	ND	ND	ND	ND	ND	ND	87	ND	NA
"	08/06/92	H+GCL	2.0	25.0	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	12/10,11/92	H+GCL	2.0	18.0	ND	ND	ND	ND	ND	ND	NA	240	NA	NA
"	03/31/93	H+GCL	1.0	31.0	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
"	06/18/93	H+GCL	1.0	14.0	ND	ND	ND	ND	ND	ND	NA	100	NA	NA
"	09/17/93	H+GCL	ND	6.0	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	12/28/93	H+GCL	2.5	4.6	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	04/08/94	H+GCL	0.71	2.9	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	07/27/94	Hygienetics	0.62	1.0	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	12/15/94	Hygienetics	ND	2.1	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	04/07/95	Hygienetics	ND	1.0	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	08/18/95	Hygienetics	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	12/15/95	Hygienetics	0.8	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA
"	08/01/96	Hygienetics	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	NA	NA

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MW -5	Sample Date	Consultant	TCE	PCF	1,1-DCE	1,2 DCE (total)	cis 1,2- DCE	trans 1,2- DCE	1,1-DCA	Vinyl Chloride	Gasoline	Dicscl	Benzene	Oil & Grease
"	08/10/89	ENSR	ND	ND	5.2	ND	NA	NA	ND	ND	NA	ND	ND	2,000
"	11/07/89	ENSR	ND	ND	ND	ND	NA	NA	ND	ND	NA	94,000	ND	ND
"	07/27/90	ENSR	ND	ND	ND	ND	NA	NA	ND	ND	NA	ND	ND	ND
"	11/02/90	ENSR	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND
"	03/16/92	H+GCL	ND	ND	ND	ND	ND	ND	ND	ND	NA	250	ND	NA
"	08/06/92	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	190	NA	NA
"	12/10/92	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	250	NA	NA
"	03/31/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	06/18/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	200	NA	NA
"	09/17/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	12/28/93	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	04/08/94	H+GCL	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	07/27/94	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	12/15/94	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	04/07/95	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	08/18/95	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA
"	12/15/95	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
"	08/01/96	Hygienetics	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	NA	NA

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SUMMARY

Dissolved concentrations of purgeable halocarbons and petroleum hydrocarbons in the groundwater have been intermittently detected in samples collected in 1989, 1990, 1992 and 1993. For the most recent sampling event on August 1, 1996, groundwater samples had detectable concentrations of purgeable halocarbons TCE and cis 1,2-DCE. PCE was not detected in groundwater samples for the third time since the March 1992 sampling event. TPH as diesel was not detected in groundwater samples collected from monitoring wells MW-4 and MW-5. Since the previous groundwater monitoring event, the groundwater flow direction has remained the same with flow to the southeast.

The pattern of VOC concentrations in groundwater collected from the on-site monitoring wells suggest that the source or sources is off-site. In general, if PCE was spilled biodegradation should form TCE, cis 1,2-DCE, trans 1,2-DCE, and vinyl chloride in increasing amounts. However, the patterns on-site suggest possible multiple off-site VOC sources.

The San Leandro Plume Site Investigation, under the direction of the Cal-EPA Department of Toxic Substances Control (DTSC), has indicated that several chlorinated solvents, such as solvents and degreasers commonly used by industry since the 1940s, are present in groundwater. According to the February 1995 DTSC San Leandro Plume Public Participation Plan, these include PCE, TCE, trichloroethane (TCA), DCE and related compounds. VOCs have been detected at levels significantly above the MCLs. PCE has been detected at up to 3,200 ppb, TCE at up to 8,100 ppb, and cis-1,2-DCE at up to 1,700 ppb. Metals detected above the MCLs include chromium, nickel, and lead. Nitrate contamination is widespread.

The investigations concluded that the largest groundwater contamination plume in the study area was a mile wide and up to two and one-half miles long, extending towards the San Francisco Bay. The depth of the contamination was not determined but is known to exceed 100-feet deep at some locations. The plume underlies a major industrial area of the city and impinges on an established residential area. Several small plumes have also been identified which appear to be migrating westward from locations east (Caterpillar site) and southeast (Williams Street site) of the subject site. The PCE concentration identified at 800 Davis Street appears to be migrating from an unidentified upgradient source (HLA 1990, HLA 1991).

Assumed groundwater flow in the area is to the west/southwest, investigation in the site vicinity have documented groundwater flow in the south/southeast possibly from tidal influences.

Considering no on-site chlorinated solvent USTs were utilized at the site and only low levels of VOCs have been detected in groundwater, it appears that the subject site has been impacted by the regional groundwater contamination plume or plumes.

Since 1989, groundwater monitoring has been conducted at this site and because halogenated hydrocarbons are readily sorbed to silt and clay and slowly desorbs, VOC concentrations on the subject property probably will not significantly decrease overtime, unless off-site up-gradient sources are remediated.