October 3, 1994 STID 3161 ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY **DEPARTMENT OF ENVIRONMENTAL HEALTH** 1131 HARBOR BAY PARKWAY, 2ND FLOOR ALAMEDA, CA 94502-6577

REMEDIAL ACTION COMPLETION CERTIFICATION

Louis Arrighi L&B Arrighi Investments 20 Summit Lane Novato CA 94945

RE: Kalmar AC site, 2792 Cypress St., Oakland CA 94607

Dear Mr. Arrighi,

This letter confirms the completion of site investigation and remedial action for the former 500-gallon waste oil underground storage tank and the former 1,000-gallon gasoline underground storage tank at the above referenced site.

Based on the available information 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(s) 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.

If you have any questions regarding this letter, please contact Jennifer Eberle at (510) 567-6700.

Very truly yours,

Rafat A. Shahid, Director

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cc: Edgar B. Howell, Chief, Hazardous Materials Division/files

Kevin Graves, RWQCB Mike Harper, SWRCB Jennifer Eberle

Eva Vanek, Dennis Bates Assoc., 1020 Railroad Ave., Suite E, Novato CA 94945

LOP/Completion je 3161clos.let

CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: 8/5/94

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pky

City/State/Zip: Alameda CA 94502 Phone: (510) 567-6700

Responsible staff person: Jennifer Eberle Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: Kalmar AC

Site facility address: 2792 Cypress St., aka Mandela Pky, Oakland CA 94607

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 3161
URF filing date: 2/23/89 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:
Louis Arrighi, L&B Arrighi Investments, 20 Summit Lane, Novato CA 94945

<u>Tank</u>	<u>Size in</u>	<u>Content</u>	s:	Closed in	<u>-place</u> <u>D</u>	ate:
No:	gal.:			or remove		
1	1,000-gal	gasoline	removed to	Erickson	(#87505741)	1/26/89
2	500-gal	waste oil	removed to	Erickson	(#93243867)	3/3/94

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: unknown Site characterization complete? YES Date approved by oversight agency: 8/26/94 Monitoring Wells installed? Number: 3 Proper screened interval? apparently yes Highest GW depth below ground surface: 13.95' Lowest depth: 12.05' Flow direction: varies, see attached Table 4 Most sensitive current use: commercial Aquifer name: NA Are drinking water wells affected? NO Is surface water affected? NO Nearest affected SW name: NA Off-site beneficial use impacts (addresses/locations): unknown Report(s) on file? YES Where is report(s) filed? Alameda County, 1131 Harbor Bay Pky, Alameda CA 94502

Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u>	· •	<u> Action (Treatmen</u>	t <u>Date</u>
	<u>(include un</u>	nits) of	<u>Disposal w/desti</u>	<u>nation)</u>
<u>Tank</u>	1,000-gal	to Erickson	(#87505741)	1/26/89
	500-gal	to Erickson	(#93243867)	3/3/94

Soil (fm gasoline UST) 40 YD3 To Forward Landfill, Stockton by 3/8/90 (note the only documentation we have is a waste characterization form) Soil (fm waste oil UST) 14.6 tons to Port Costa in Richmond 8/4/94

Oily Water from waste oil UST, 75 gal, to Gibson (#92219149) 3/3/94

Leaking Underground Fuel Storage Tank Program

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

Contaminant	Soil (ppm) Before <u>After</u>	Water (ppb) <u>Before After</u>
TPH (Gas)	30* ND	410 330
TPH (Diesel)	ND* ND	290 250
Benzene	2.8* 5.50	ND 40
Toluene	.690* .970	ND ND
Xylene	.810* 10.0	10 11
Ethylbenzene	.130* 6.80	ND ND
Oil & Grease	2,900** NA	10,000** 1,100***

Comments (Depth of Remediation, etc.):

* in gasoline tank pit. Post-aeration samples from soil stockpile for gasoline UST: 600 ppm TPH-d, 170 ppm TPH-g, 1.5 ppm benzene.

** note that they used EPA 3510/SM503D, which includes non-petroleum oils and greases (the soil concentration is from boring MW-1). The "Before" water samples were from the 3 wells sampled 12/19/89.

*** Method 418.1

THE SOIL SAMPLES ARE FOR GASOLINE UST PIT. SEE SECTION VII FOR DISCUSSION OF WASTE OIL UST SAMPLES (ALSO THE ATTACHED TABLE 2).

CLOSURE IV.

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

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

Does corrective action protect public health for current land use? YES Site management requirements: NA

Should corrective action be reviewed if land use changes? perhaps, if site becomes a sensitive receptor such as residential, school, or hospital

Monitoring wells Decommisioned: they all will be, following receipt of closure letter

Number Retained: Number Decommisioned:

List enforcement actions taken: none

List enforcement actions rescinded: none

Leaking Underground Fuel Storage Tank Program

LOCAL AGENCY REPRESENTATIVE DATA V.

Name: Jennifer Eberle
Signature:
Reviewed by
Name: Barney Chan
Signature:

Name: Scott Seery

Signature: "

Title: Haz Mat Specialist

Date: 8/5/94

Title: Haz Mat Specialist

Date: 9/22/94

Title: Sr. Haz Mat Specialist

Date: 9-22-94

RB Response: Approved
Title: AWRCE | Wate: 7/27/24

VI. RWQCB NOTIFICATION

Date Submitted to RB: 9/27/99
RWQCB Staff Name: Kevin Graves

ADDITIONAL COMMENTS, DATA, ETC. VII.

The gasoline UST had corrosion holes (observed during removal in 1989); it failed a pressure test on 11/1/88. The gasoline pit was overexed on 10/9/89. Approx 20 yd3 were removed. GW encountered at 6'bgs. Two sidewall samples at gw interface had ND TPH-g, ND TPH-d, but 5.5 ppm benzene. Pit was backfilled w/clean sand. This stockpile was hot: 360 ppm TPH-g, 180 ppm TPH-d, but some BTEX (2.0 ppm benzene). The stockpile was disposed.

Three MWs installed on 12/19/89. Up to 2,900 ppm TOG (by SM503D) was found in soil sampled at 5'bgs from all 3 borings. (Note that SM503D includes both petroleum and non-petroleum oils and greases.) TPH-d, TPH-g and BTEX were ND except for 7.1 ppm TPHg and trace BTEX in MW-1. As for the water, the wells were sampled 12/89, then not again until 5/12/92. See attached Table 1 for gw sampling history.

It was suspected that the waste oil UST was the probable source of the oil in the soil. The last time this tank was tested (tight) was 2/89 (before the earthquake and the collapse of the adjacent Cypress Structure). correspondence from the ACDEH dated 3/26/93 and 12/2/93, the RP was requested to submit tank integrity results (and begin quarterly sampling).

The waste oil UST was removed on 3/3/94. UST was tar-coated with no obvious holes. After tank was removed, water was sitting in pit at about 4.5'bgs. This water appeared to be entering the pit at approx. 3'bgs. soils included 0-3'bgs fill, and 3' to at least 5'bgs green-grey tight clay. Soil in the sidewall in the pit was sampled at approx. 6'bgs in apparent bay mud. Water in the pit was not sampled because a) there are 3 MWs onsite nearby, and b) it may not be true gw. The pit soil sample was ND for everything except .062 ppm 1,1-DCA (and some metals, but they were all <10X the STLCs). However, the stockpile

Leaking Underground Fuel Storage Tank Program

soils had 13,000 ppm TOG (SM5520) and an assortment of other compounds, including many HVOCs (see attached Table 2). Thus, the stockpile soils appeared to have been affected by a release from the waste oil tank.

Groundwater flow direction has been a mystery at this site. The GWEs have been presented in feet **below** mean sea level; the flow directions have varied widely (see attached table 4). The gw flow direction is not reliable in any one direction.

Dennis Bates Associates (DBA) theorized that the upper 3 feet of soils throughout the site were contaminated from "dirty fill" material. However, during a mtg w/Kevin Graves of RWQCB on 7/13/94, these points all became moot. The germaine points became a) TDS was 8,600 mg/L, and b) the recharge rate is very low (<2 liters per 8 hr., as per John Sammons of DBA). Based on these two points, the RWQCB determined that gw underlying this site was of no potential beneficial use, and agreed that the case could be closed. Note that low levels of benzene were left in gw and soil. See Part III on page 2, and the attached Table 1.

TABLE 1

Summary Analytical Results for Groundwater Samples L & B Investments, Oakland, CA

WELL	DATE	TPH as Diesel (mg/l)	TRPH/TOG (mg/l)	TPH as Gasoline (mg/l)	Beszene (µg/l)	Toluene (µg/l)	Ethyl Benzene (µg/l)	Xylenes (μg/l)	Sampler	The stor
MWI	12/89	0.28	ND	0.2	ND	ND	ΝD	ND	MEC	1
MWI	05/92	0 64	DM	0.52	27	סא	2.1	4		ĺ
MWI	12/92	ДИ	(20	ND	ИD	ND	DN	ND		}
MWI	03/93	ИD	NA	0.13	ND	ND	ND	ND	DBA	
MWI	06/93	ND	ND	ND	1.3	סא	מא	ND]	SE
MW1	02/94	0.080	NA	סא	40	ND	ND	ND		SE S
MW2	12/89	(0.29)	MQ 10	NO AN	ND	מא	מא	ND	MEC	<u> </u>
MW2	05/92	NS	NS	NS .	NS	NS	NS	NS	1	
MW2	12/92	NS	NS	NS	NS	NS	NS	NS		ĺ
MW2	03/93	NS	NA	NS	NS	NS	NS	NS	DBA]
MW2	06/93	ND	ďΩ	ND	ND	0.68	NTO	ND		
MW2	02/94	מא	NA .	ND	ND	ND	ND	ND]
MW3	12/89	0.15	ND	0 41	ND	ND	ND	0.01	MEC	
MW3	05/92	0.93	ND	0.52	73	2,5	4	6.2	Ì)
MW3	12/92	ND	ND	0.79	46	ND	7.8	1.6		
MW3	03/93	ND	NA	0.51	63.	110	ND	13	DBA	1
MW3	06/93	0.21	{ t.1	0 78	(2,49) 1	2.1	ND	14		
MW3	02/94	0.250	NA NA	0.330	23	ND	ND	t t		ļ.

ND * Not Detected at the method reporting limit

NA = Not Analyzed

NS = Not Sampled

FOR THE SAMPLES ANALYZED IN MAY OF 1992, NET PACIFIC LABORATORIES NOTED: "THE POSITIVE RESULTS FOR PETROLEUM HYDROCARBONS AS DIESEL APPEAR TO BE BOTH HEAVIER AND LIGHTER HYDROCARBONS THAN DIESEL*.

MEC = Miller Environmental Company DBA - Dennis Bates Associates, Inc.

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TABLE 2

SUMMARY ANALYTICAL RESULTS FOR SOILS SAMPLES COLLECTED FROM THE WASTE OIL TANK PIT I & B Investments Oakland CA

L	α	D	шу	estn	nents	s, U	aki	and,	CA	L

Sample No.		Method	S-1 (Bottom Sidewall)	SP-2 (Stockpile)	P-1(Vent Line)
Date			03/04/94	03/04/94	03/04/94
	Constituent				
TPH as Diesel (mg/kg)		8015M	ND	610	
TOG (mg/kg)		SM5520	ND	13,000	180
TPH as Gasol	ine (mg/kg)	8015M	ND	4.3	***
Веплене (µg/1	(g)	EPA 8020	ND	29	
Toluene (μg/k	(8)	EPA 8020	ND	210	
Ethyl Benzene	: (µg/kg)	EPA 8020	αи	56	
Xylenes (µg/k	e)	EPA 8020	ND	360	
1 Halogenated Volatile Compounds (µg/kg)		EPA 8010	1,1 Dichloroethane-62	Methylene Chloride-1,200 1,1,1-TCA-4,700 1,1-Dichloroethane-590 Tetrachloroethane-730	
² Extractable Organics (µg/kg)		EPA 8270	ND	Naphthalene-2,300 2-Methyl Naphthalene- 2,600 Butylbenzylphthalate-7,500 Bis (2-ethylbexyl) phthalate- 4,900	
	Cadmium (mg/kg)	EPA 6010	ND	ND	
	Chromium (mg/kg)	EPA 6010	20	16	
METALS	Lead (mg/kg)	EPA 6010	10	21	
	Nickel (mg/kg)	EPA 6010	35 26		
	Zinc (mg/kg)	EPA 6010	52	140	

Not Detected at the method reporting limit

(---) Not Tested

NOTES:

Constituents detected reported in this column, all constituents tested for included in Appendix B.

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TABLE 4

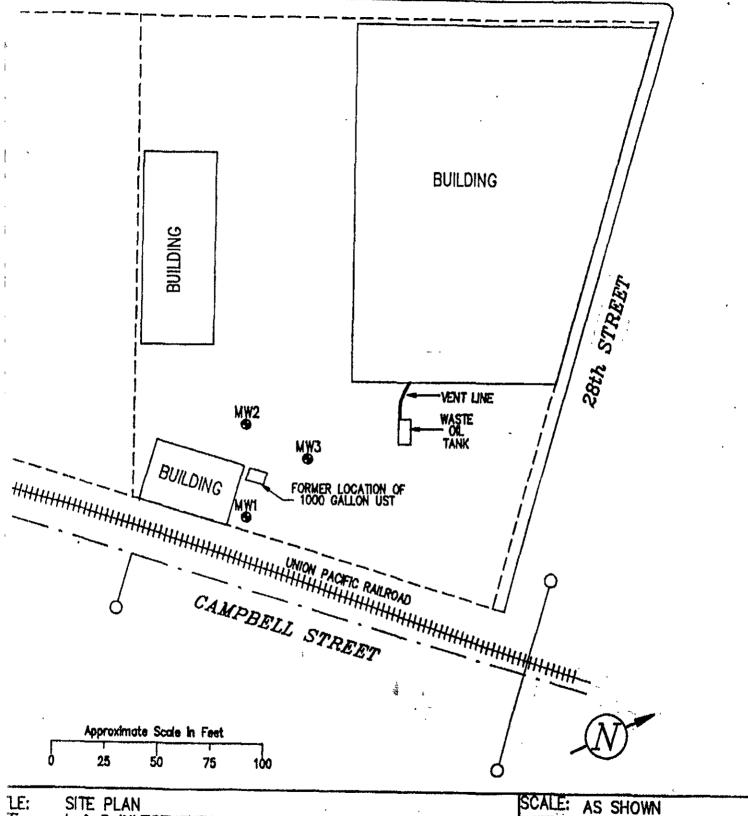
SUMMARY OF GROUNDWATER FLOW DIRECTIONS

(By Compass Directions)
L & B Investments, Oakland, CA

DATE	DIRECTION
12/89	316 DEGREES - NORTHWEST
01/90	290 DEGREES - NORTHWEST
02/90	238 DEGREES - SOUTHWEST
05/90	NOT AVAILABLE
03/93	NOT AVAILABLE
06/93	137 DEGREES - SOUTHEAST
02/94	230 DEGREES - SOUTH

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CYPRESS STREET



E L & B INVESTMENTS
DRESS: 2792 MANDELA PARKWAY, OAKLAND, CALIFORNIA

AS SHOWN PROJECT # 93022

DATE: MARCH 21, 1994 FIGURE:

DENNIS BATES ASSOCIATES, INC.

494 Alvarado Street, Suite B Monterey, CA. 93940 1020 Railroad Ave. Suite E, Novato, CA 94945