



KAPREALIAN ENGINEERING
INCORPORATED

September 6, 1996

Alameda County Health Care Services
Hazardous Materials
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502-6577

Attention: Ms. Juliet Shin

RE: Former Texaco Service Station
1127 Lincoln Avenue
Alameda, California

Dear Ms. Shin:

A dual vapor and ground water extraction system began operation at the subject site in September 1993. The system was installed to remediate soil and ground water at the site. Kaprealian Engineering, Inc. (KEI), on behalf of Texaco, requests concurrence to terminate operation of the dual remedial system.

The site formerly contained a Texaco service station facility. Four underground fuel storage tanks and one underground waste oil tank were removed in September 1989. Eleven monitoring wells and five vapor extraction wells have previously been installed. As previously noted, a dual vapor and ground water extraction system began operation in September 1993. A review of site ground water contour maps indicates that the ground water flow direction has historically been predominantly to the north.

The system was originally designed to remediate the elevated concentrations of hydrocarbons previously detected. The system appears to have been successful in achieving its purpose and is no longer effective in recovering significant hydrocarbons or in further remediating the site. Review of the vapor extraction system influent data since December of 1994 indicates a constant or declining trend, as shown on the attached figure. Since January 1996, the maximum hydrocarbon extraction rate has been 0.30 pounds per day, and a maximum influent concentration of only 99 $\mu\text{g/L}$. Thus, the continued operation of the dual remediation system does not appear warranted.

Based on the ongoing quarterly monitoring and sampling data, it appears that the dissolved hydrocarbon plume is stable and is defined in the downgradient direction. In addition, since the underground storage tanks have been removed and no ongoing source exists, it appears that the site may be a candidate for a "low risk" classification. Therefore, further remediation does not appear warranted.

Ms. Juliet Shin
Alameda County Health Care Services

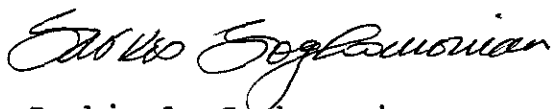
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Based on the discussion presented above, KEI recommends termination of system operation. However, KEI also recommends the continuation of the ongoing quarterly ground water monitoring and sampling program to verify plume stability and that the concentrations remain at reasonably consistent levels. Should site conditions change, further recommendations will be made as warranted. Unless advised otherwise, system operations will be terminated.

If you have any questions, please do not hesitate to call me at (510) 602-5106.

Sincerely,

Kaprealian Engineering, Inc.



Sarkis A. Soghomonian
Project Engineer

sas:jad\JS0906

cc: Ms. Karen E. Petryna, Texaco
RWQCB, San Francisco Bay Region

Former Texaco
1127 Lincoln Avenue
Alameda, California

VAPOR EXTRACTION SYSTEM
LABORATORY ANALYTICAL RESULTS
AIR

<u>DATE</u>	<u>SAMPLE</u>	TPH as <u>Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Xylenes</u>
7/31/96	INF	<10	0.49	<0.2	<0.2	<0.2
7/22/96	INF	<10	<0.2	<0.2	<0.2	<0.2
7/17/96	INF	13	0.32	<0.2	<0.2	0.76
7/8/96	INF	16	0.52	0.4	<0.2	0.47
7/2/96	INF	<10	<0.2	<0.2	<0.2	<0.2
6/25/96	INF	<10	0.54	<0.2	<0.2	<0.2
6/18/96	INF	10	1.5	0.3	<0.2	0.55
6/5/96	INF	20	1.8	0.28	<0.2	0.78
5/22/96	INF	<10	1.2	<0.2	<0.2	0.68
4/9/96	INF	10	1.8	0.51	<0.2	0.37
4/2/96	INF	<10	<0.2	<0.2	<0.2	<0.2
3/13/96	INF	<10	0.86	0.28	<0.2	0.6
1/2/96	INF	<10	0.74	0.25	<0.2	0.32
12/6/95	INF	99	1.4	1.9	0.21	2
11/15/95	INF	349	2.4	3.7	0.42	3.9
10/31/95	INF	23	0.38	0.56	<0.2	0.53
9/28/95	INF	200	1.5	3.8	<1	1.2
8/2/95	INF	190	2.7	4.6	<1	4.3
7/5/95	INF	130	1.30	2.00	0.32	1.90
6/6/95	INF	64	0.33	0.84	<0.2	1.1
5/3/95	INF	47	0.27	1.1	0.27	1.1
4/6/95	INF	<10	0.49	<0.2	<0.2	0.3
3/9/95	INF	<10	<0.2	<0.2	<0.2	<0.2
2/1/95	INF	<10	<0.2	<0.2	<0.3	<0.5
1/9/95	INF	51	<0.2	0.36	<0.3	2.4
12/13/94	INF	13	<0.2	<0.2	<0.3	0.95
11/3/94	INF	450	9.1	14	3.6	2.5

Sample results are in micrograms per liter. (ppb)

Texaco, 1127 Lincoln Avenue, Alameda, California
VES Influent Concentrations

