

January 26, 1994  
Project No. RC0136.003

Mr. Safa Toma  
Source Control Division  
East Bay Municipal Utility District  
EBMUD Mail Slot #702  
P.O. Box 24055  
Oakland, California 94623

SUBJECT: Quarterly Groundwater Treatment System Compliance Report, Former Chevron Service Station #9-0020, 1633 Harrison Street, Oakland, California.

Dear Mr. Toma:

Geraghty & Miller, Inc. (Geraghty & Miller) is submitting this system compliance report for the reporting period from October 1 through December 31, 1993, on behalf of Chevron U.S.A. Products Company (Chevron).

System samples were collected during this reporting period on October 14 and November 17, 1993. The samples were collected from the system influent, intermediate (between Carbon Vessels 1 and 2), and the effluent immediately prior to discharge to the sewer (Effluent). Samples were not collected in December because the system had shut down due to low flow rates. Once the system is restarted, further sampling of the system will continue on a monthly basis, per permit requirements. A restart date has not been established at this time.

All samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) (USEPA Method 8015, modified) and benzene, toluene, ethylbenzene, and xylenes (BTEX) (USEPA Method 8020). All samples were submitted to GTEL Environmental Laboratories, a USEPA-certified laboratory in Concord, California, for analysis. Copies of the certified laboratory reports and the chain-of-custody documentation are included in Attachment 1.

The volume of water treated and discharged for this reporting period was 55 gallons. A summary of the flow totalizing meter readings is presented in Table 1. Analytical results are presented in Table 2.

The system influent analytical results and system flow rate are used to calculate the carbon loading. Based upon the highest influent TPH-G concentration (390 parts per billion) and the total flow to date, with a carbon loading efficiency of 5%, the amount of spent carbon is calculated as follows:

$$\frac{390 \mu\text{g/L TPH-G}}{1 \times 10^9 \mu\text{g/L H}_2\text{O}} \times 35 \text{ gal} \times \frac{8.3 \text{ lb H}_2\text{O}}{\text{gal H}_2\text{O}} = 0.0001 \text{ lb TPH-G processed}$$

Carbon loading (5% loading of TPH at low concentrations):

$$0.0001 \text{ lb TPH-G processed} \times \frac{100 \text{ lb carbon}}{5 \text{ lb TPH-G}} = 0.002 \text{ lb carbon used}$$

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Geraghty & Miller is submitting this information on behalf of Chevron U.S.A. Products Company. If you have any questions, please do not hesitate to contact the undersigned at (510) 233-3200.

Sincerely,  
GERAGHTY & MILLER, INC.

Kent O'Brien  
Project Scientist/Project Manager

Attachments:      Table 1              Flow Totalizer Readings  
                         Table 2              Groundwater Analytical Results  
                         Attachment 1      Copies of Certified Laboratory Reports and  
   Chain-of-Custody Documentation

cc:      Mark Miller, Chevron U.S.A. Products Company

**Table 1: Flow Totalizer Readings**  
 Former Chevron Service Station #9-0020  
 1633 Harrison Street, Oakland, California.

Date	Totalizer Reading (Gallons)	Gallons Discharged This Period	Cumulative Gallons	Days Since Previous Reading	Average Discharge Rate (GPM)	Notes
1-Jul-93	0	0	0		0	System nonoperational
14-Jul-93	2,059 (a)	0	0		0	System startup
19-Jul-93	2,218	159	159	5	0.02	O&M, collect air samples
22-Jul-93	2,218	0	159	3	0.00	Shut off system; sump pump failure
9-Sep-93	2,466	248	407	49	0.004	Restart system; collect GW system samples
14-Oct-93	2,492	26	433	35	0.001	Collect GW system samples
17-Nov-93	2,501	9	442	34	0.000	Collect GW system samples
12-Dec-93	2,521	20	462	25	0.001	System off on arrival; no samples collected <b>55 gal. discharged this reporting period</b>

(a) Meter not zeroed when system began operation.

GPM = Gallons per minute



**Table 2: Groundwater Analytical Results**  
 Former Chevron Service Station #9-0020  
 1633 Harrison Street, Oakland, California.

Sample	Date	TPH as				
		Gasoline ( $\mu\text{g/L}$ ) (a)	Benzene ( $\mu\text{g/L}$ ) (b)	Toluene ( $\mu\text{g/L}$ ) (b)	Ethylbenzene ( $\mu\text{g/L}$ ) (b)	Xylenes ( $\mu\text{g/L}$ ) (b)
Influent	15-Jul-93	4,400	330	260	170	900
	9-Sep-93	220	6	11	9	56
	14-Oct-93	100	7	4	2	15
	17-Nov-93	390	12	8	5	40
Intermediate	15-Jul-93	NS	NS	NS	NS	NS
	9-Sep-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	14-Oct-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	17-Nov-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
Effluent	15-Jul-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	9-Sep-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	14-Oct-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	17-Nov-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
Trip Blank	15-Jul-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	9-Sep-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	14-Oct-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)
	17-Nov-93	ND(<50)	ND(<0.5)	ND(<0.5)	ND(<0.5)	ND(<0.5)

(a) Analyzed by USEPA Method 8015, modified.

(b) Analyzed by USEPA Method 8020.

TPH Total petroleum hydrocarbons

$\mu\text{g/L}$  Micrograms per liter

ND( ) Laboratory method detection limit; limit in parentheses

NS Not sampled

No samples were collected in December 1993; the groundwater treatment system was off.

