



PACIFIC
ENVIRONMENTAL
GROUP, INC.

October 22, 1996
Project 310-058.5A

Ms. Susan Keach
Oro Loma Sanitary District
2600 Grant Avenue
San Lorenzo, California 94580

Re: Wastewater Discharge Permit 024 - September 1996 Sewer Report
Unocal Service Station 5760
376 Lewelling Boulevard at Usher Street
San Lorenzo, California

Dear Ms. Keach:

On behalf of Unocal Corporation, Pacific Environmental Group, Inc. (PACIFIC) is operating a groundwater extraction (GWE) and treatment system at the site referenced above. This letter transmits treatment system operational data for the period from August 31 through September 30, 1996. The GWE system was temporarily deactivated on July 17, 1996 due to operational problems. Operational parameters are summarized in the table below.

<i>Current System Status:</i>	<i>Non-Operational</i>
<i>Reporting Period:</i>	8/31/96 - 9/30/96
<i>Period Temperature:</i>	N/A
<i>Period pH reading:</i>	N/A
<i>Period Volume Discharged:</i>	0 gallons
<i>Total Discharged to Date:</i>	194,654 gallons
<i>Average Flow Rate:</i>	N/A
<i>Analytical Reports:</i>	N/A

The primary carbon vessel was changed-out on October 13, 1996 and the primary and secondary vessel positions were switched. The GWE system was re-started on October 15, 1996 following pre-soaking of the new carbon, and samples were collected;

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results will be presented in next month's report. The GWE system was down throughout September, so no samples were taken.

Operational and analytical data are included in Tables 1 and 2. If you have any questions regarding this project or require further information, please do not hesitate to call.

Sincerely,

Pacific Environmental Group, Inc.



Suzanne McClurkin-Nelson
Staff Scientist

Attachments: Table 1 - Treatment System Metered Volume
Table 2 - Groundwater Treatment System Analytical Data

cc: Ms. Tina Berry, Unocal Corporation
Mr. Richard Hiatt, Regional Water Quality Control Board - S.F. Bay Region
~~Ms. Amy Leach, Alameda County Health Care Services~~

Table 1
Treatment System Metered Volume

Unocal Service Station 5760
376 Lewelling Boulevard at Usher Street
San Lorenzo, California

Date Sampled	Flow Meter Reading (gallons)	Flow Meter Net Volume (gallons)	Cumulative System Discharge To Date (gallons)	Average Total System Discharge (gpm)	Average Total System Discharge (gpd)
10/18/95 a	76	0	0	N/A	N/A
10/30/95	4,040	3,964	3,964	0.2	330
11/30/95	7,751	3,711	7,675	0.1	120
12/27/95	15,031	7,280	14,955	0.2	270
01/22/96	19,350	4,319	19,274	0.1	166
02/13/96	28,980	9,630	28,904	0.3	438
03/11/96 b	82,320	53,340	82,244	1.4	1,976
04/05/96	82,660	340	82,584	0.01	14
05/15/96 c	132,610	49,950	132,534	0.87	1,249
07/02/96 d	142,690	10,080	142,614	N/A	N/A
07/17/96 e,f	194,730	52,040	194,654	2.4	3,469

gpm = Gallons per minute
gpd = Gallons per day
N/A = Not applicable or not available

a. GWE continuous system operation began on October 18, 1995.
b. GWE system found down 3/11/96; carbon changeout performed 3/25/96.
c. GWE system shut down in May for primary carbon replacement.
d. System restarted July 2, 1996.
e. System temporarily shut down to address operational problems.
f. Carbon changeout to primary on 10/13/96; primary & secondary switched.

Table 2
Groundwater Treatment System Analytical Data

Unocal Service Station 5760
376 Lewelling Boulevard at Usher Street
San Lorenzo, California

Date Sampled	TPPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Xylenes (µg/L)	Permit Compliance Parameters		
						COD (mg/L)	TSS (mg/L)	pH (units)
Influent Samples								
10/30/95	33,000	480	1,400	900	7,100	N/A	N/A	N/A
11/30/95	15,000	190	310	210	3,700	N/A	N/A	N/A
12/27/95	1,100	16	23	<2.0	300	N/A	N/A	N/A
02/13/96 b	32,000	460	1,100	1,500	7,700	N/A	N/A	N/A
04/05/96	25,000	280	1,400	900	6,400	N/A	N/A	N/A
05/15/96	22,000	240	1,200	850	4,700	N/A	N/A	N/A
07/02/96	22,000	230	1,300	950	4,700	N/A	N/A	N/A
Effluent Samples								
10/04/95	<50	<0.50	<0.50	<0.50	<0.50	<20	<1.0	8.89 a
10/30/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS
11/30/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	NS
12/27/95	<50	<0.50	<0.50	<0.50	<0.50	NS	NS	7.05 a
02/13/96 b	<50	<0.50	<0.50	<0.50	<0.50	<20	9.0	6.83 a
04/05/96 c	83	<0.50	0.80	<0.50	2.0	<20	11	6.83 a
05/15/96 c	<50	1.8	1.6	<0.50	5.8	<20	12	6.86 a
07/02/96 d	<50	<0.50	<0.50	<0.50	<0.50	15	2.0	7.09 a
TPPH = Total purgeable petroleum hydrocarbons COD = Chemical oxygen demand TSS = Total suspended solids µg/L = Micrograms per liter mg/L = Milligrams per liter N/A = Not applicable NS = Not sampled < = Denotes any potential concentrations fell below the shown detection limit for the analysis. a. The pH reading was measured by field instruments, not by laboratory analysis. b. GWE system was found down 1/17/96 and two pumps were pulled for repair and replaced 2/13/96. c. Carbon replacement of primary on 3/25/96 (switched to secondary); new primary replaced in May. d. System restarted July 2, 1996; de-activated July 17 to schedule carbon replacement to current primary.								