

PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

*Request  
CL*

January 16, 1996  
Project 330-105.5B

Mr. Ray Maxwell  
East Bay Municipal Utility District  
P.O. Box 24055  
Oakland, California 46623-1055

Re: Wastewater Discharge Permit 502-64411  
ARCO Service Station 2107  
3310 Park Boulevard at East 34th Street  
Oakland, California

Dear Mr. Maxwell:

On behalf of ARCO Products Company, Pacific Environmental Group, Inc. (PACIFIC) is performing environmental services at the site referenced above. Per our phone conversation today, PACIFIC requests a change to the referenced permit. In light of the new regulatory environment, and a recent meeting with the Alameda County Health Care Services Agency regarding the site, groundwater extraction at this site will no longer be required. However, until formal site closure has been granted, PACIFIC would like to maintain the referenced permit. Therefore, PACIFIC request to change the estimated annual discharge volume from 788,400 to 40,844 gallons retroactively to the start date of the current permit, and receive billing credit for fees paid to the East Bay Municipal Utilities District prior to the proposed change in discharge volume. The groundwater extraction system was shut down in April 1995 and has remained shut down to this date. Treatment system operational data are presented in Table 1.

Please do not hesitate to call if you have any questions.

Sincerely,  
**Pacific Environmental Group, Inc.**

Shaw Garakani  
Project Engineer

Attachment: Table 1 - Groundwater Extraction System Performance Data

cc: Mr. Michael Whelan, ARCO Products Company  
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region  
Mr. Barney Chan, Alameda County Health Care Services Agency \*

RECEIVED  
PACIFIC ENVIRONMENTAL  
JAN 17 PM 2:10 '96

Table 1  
Groundwater Extraction System Performance Data

ARCO Service Station 2107  
3310 Park Boulevard at East 34th Street  
Oakland, California

Sample I.D.	Date Sampled	Totalizer Reading (gallons)	Net Volume (gallons)	Average Flow Rate (gpm)	TPH as Gasoline			Benzene			Primary Carbon Loading (percent)
					Influent Concentration (µg/L)	Net Removed (lbs)	Removed to Date (lbs)	Influent Concentration (µg/L)	Net Removed (lbs)	Removed to Date (lbs)	
INFL	01/25/93 a	2,095	2,095	3.2	2,400	0.04	0.04	52	0.001	0.00	0.1
INFL	01/26/93	7,135	5,040	3.5	NS	0.10	0.14	NS	0.007	0.01	0.2
INFL	01/28/93	8,799	1,664	3.6	4,800	0.07	0.21	270	0.004	0.01	0.3
INFL	02/05/93	36,879	28,080	3.6	4,300	1.00	1.21	710	0.115	0.13	1.5
INFL	02/10/93	52,388	15,509	2.2	1,600	0.21	1.42	180	0.058	0.18	1.8
INFL	02/16/93	68,518	16,128	1.4	890	0.12	1.54	76	0.017	0.20	1.9
INFL	02/25/93	86,660	18,144	1.8	220	0.03	1.57	7.1	0.006	0.21	2.0
INFL	03/03/93	94,670	8,010	1.5	5,100	0.34	1.91	610	0.021	0.23	2.4
INFL	03/19/93	113,162	18,492	2.3	5,100	0.79	2.70	300	0.070	0.30	3.4
INFL	03/24/93	123,876	10,714	2.5	2,400	0.21	2.91	140	0.020	0.32	3.6
INFL	04/01/93	139,936	16,060	2.6	3,400	0.45	3.36	160	0.020	0.34	4.2
INFL	05/05/93	210,724	70,788	1.7	660	0.40	3.76	55	0.063	0.40	4.7
INFL	05/20/93	237,367	26,643	1.2	NS	0.15	3.91	NS	0.009	0.41	4.9
INFL	06/01/93	250,687	13,320	1.0	NS	0.07	3.98	NS	0.005	0.41	5.0
INFL	06/09/93	262,835	12,148	1.0	660	0.07	4.05	28	0.004	0.42	5.1
INFL	06/28/93	266,217	23,382	0.9	NS	0.13	4.18	NS	0.003	0.42	5.2
INFL	07/08/93	292,667	6,450	0.5	260	0.01	4.19	1.4	0.001	0.42	5.2
INFL	07/22/93	306,145	13,476	0.7	NS	0.03	4.22	NS	0.004	0.43	5.3
INFL	08/04/93	333,223	27,078	1.4	480	0.11	4.33	67	0.008	0.43	5.4
INFL	08/18/93	359,835	26,612	1.2	NS	0.11	4.44	NS	0.006	0.44	5.6
INFL	09/23/93	389,991	30,156	0.6	NS	0.04	4.48	NS	0.009	0.45	5.6
INFL	10/06/93	402,021	12,030	0.7	130	0.01	4.50	7.4	0.004	0.46	5.6
INFL	10/21/93	419,854	17,833	0.6	NS	0.02	4.52	NS	0.001	0.46	5.6
INFL	11/10/93	426,648	6,795	0.6	850	0.05	4.56	8.4	0.000	0.46	5.7
INFL	11/24/93	441,330	14,681	0.8	NS	0.10	4.66	NS	0.001	0.46	5.8
INFL	01/26/94	454,825	13,495	1.2	NS	0.06	4.72	NS	0.001	0.46	5.9
INFL	02/02/94	455,192	367	0.03	140	0.00	4.72	8.1	0.000	0.46	5.9
INFL	03/01/94	455,604	412	0.01	87	0.00	4.72	2.8	0.000	0.46	5.9
INFL	03/29/94	502,785	47,181	1.2	1,500	0.59	5.31	21	0.005	0.46	6.6
INFL	04/27/94 b	529,277	26,492	0.63	NS	0.33	5.64	NS	0.005	0.47	7.1
INFL	11/30/94 c	531,268	1,991	N/A	830	0.01	5.66	0.93	0.000	0.47	7.1
INFL	12/16/94 d	542,699	11,431	0.50	NS e	0.08	5.73	NS e	0.000	0.47	7.2
INFL	02/02/95	576,998	34,299	0.37	64	0.26	5.99	1.4	0.000	0.47	7.5
INFL	03/07/95	595,175	16,177	0.38	NS e	0.01	6.00	NS e	0.000	0.47	7.5

Table 1 (continued)  
Groundwater Extraction System Performance Data

ARCO Service Station 2107  
3310 Park Boulevard at East 34th Street  
Oakland, California

Sample I.D.	Date Sampled	Totalizer Reading (gallons)	Net Volume (gallons)	Average Flow Rate (gpm)	TPH as Gasoline			Benzene			Primary Carbon Loading (percent)
					Influent Concentration (µg/L)	Net Removed (lbs)	Removed to Date (lbs)	Influent Concentration (µg/L)	Net Removed (lbs)	Removed to Date (lbs)	
INFL	04/13/95	602,583	7,408	0.14	ND	0.00	6.00	ND	0.000	0.47	7.5
INFL	05/09/95	612,957	10,374	0.26	NS <sup>e</sup>	0.00	6.00	NS <sup>e</sup>	0.000	0.47	7.5
REPORTING PERIOD: 03/07/95 - 05/09/95											
TOTAL POUNDS REMOVED:								6.00			0.47
TOTAL GALLONS REMOVED:								0.98			0.06
PERIOD POUNDS REMOVED:								0.00			0.00
PERIOD GALLONS REMOVED:								0.00			0.00
TOTAL GALLONS EXTRACTED:					612,957						
PERIOD GALLONS EXTRACTED:					17,782						
PERIOD AVERAGE FLOW RATE (gpm):					0.20						
PRIMARY BED CAPACITY REMAINING (%):					92.5						
TPH = Total petroleum hydrocarbons					a. All data prior to 9/1/94 provided by prior consultant.						
gpm = Gallons per minute					b. RESNA shut system down 4/27/94.						
µg/L = Micrograms per liter					c. Pacific Environmental Group, Inc. became consultant for the site 9/1/94.						
lbs = Pounds					d. System was shut down 12/16/94 to 12/31/94.						
NS = Not sampled					e. TPH/benzene pounds removed estimated from previous data.						
N/A = Not available or not applicable					f. System left shut down 5/9/95 due to low concentrations/removal rates.						
System operation began 1/25/93 under RESNA Industries, Inc.; system shut down 4/27/94 - 11/29/94.											
Carbon loading assumes an 8% isotherm.											
Pounds of hydrocarbons removed to date through 3/29/94 provided by RESNA; benzene removed estimated from data provided.											

20651 CL

**RESNA**  
Working To Restore Nature  
93 SEP 20 PM 12:22

3315 Almaden Expressway, Suite 34  
San Jose, CA 95118  
Phone: (408) 264-7723  
FAX: (408) 264-2435

September 2, 1993  
0902BCHA.2107  
61026.02

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2107, 3310 Park Blvd., Oakland, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during June, July and August 1993, and site activities anticipated for the month of September 1993.

**June, July and August 1993 Activities**

- Performed monthly groundwater monitoring.
- Continued with operation and maintenance of interim soil and groundwater remediation system at the site. Due to high groundwater elevations at the site, the VES has been operating on an intermittent basis since startup. The groundwater remediation system has been operating for over 3,000 hours since operation began in January 1993.

Site Status Update  
ARCO Station 2107, Oakland, California

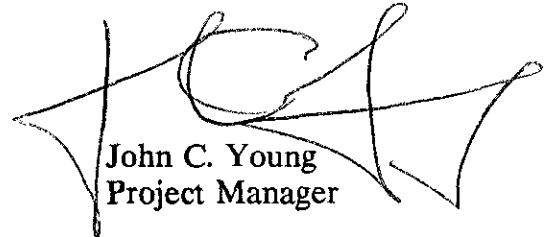
September 2, 1993  
61026.02

**Work Anticipated for September 1993**

- Perform groundwater sampling for Third Quarter 1993.
- Submit Second Quarter 1993 Groundwater Monitoring and Remediation Performance Evaluation Report to ARCO and regulatory agencies.
- Continue with system operation, maintenance testing and monitoring procedures associated with interim remediation system at the site.
- Based on a consistent groundwater flow direction over the past year of monthly monitoring at the subject site, ARCO will discontinue monthly monitoring as of September 1993, and continue quarterly sampling.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries Inc.



John C. Young  
Project Manager

cc: Mr. Michael Whelan, ARCO Products Company  
Mark Thomson, Alameda County District Attorney's Office  
Richard Hiett, Regional Water Quality Control Board

20651



CONFIDENTIAL

3315 Almaden Expressway, Suite 34  
San Jose, CA 95118  
Phone: (408) 264-7723  
FAX: (408) 264-2435

April 19, 1993  
0415BCHA.2107  
61026.02

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2107, 3310 Park Blvd., Oakland, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during March 1993, and site activities anticipated for the month of April 1993.

#### March 1993 Activities

- Performed groundwater monitoring.
- Continued with operation and maintenance of interim soil and groundwater remediation system at the site. As a result of permitting delays of 1 to 2 months, system start-up was delayed till the end of January 1993. Permitting delays included issuance of wastewater discharge permit by East Bay Municipal Utility District (EBMUD) gaining electrical service from PG & E.

Site Status Update  
ARCO Station 2107, Oakland, California

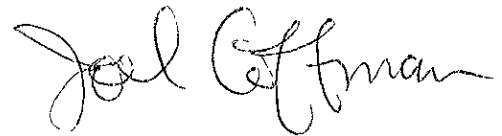
April 19, 1993  
61026.02

**Work Anticipated for April 1993**

- Continue monthly groundwater monitoring.
- Continue with system operation and maintenance testing and monitoring procedures associated with start-up of the interim remediation system at the site. System start-up occurred on schedule.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries Inc.



Joel Coffman  
Project Manager

cc: Mr. Michael Whelan, ARCO Products Company  
Mark Thomson, Alameda County District Attorney's Office  
Richard Hiatt, Regional Water Quality Control Board

20651  
CL



3315 Almaden Expressway, Suite 34  
San Jose, CA 95118  
Phone: (408) 264-7723  
FAX: (408) 264-2435

3890

February 23, 1993  
0217BCHA.2107  
61026.02

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2107, 3310 Park Blvd., Oakland, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during January 1993, and site activities anticipated for the month of February 1993.

**January 1993 Activities**

- Performed groundwater monitoring.
- Initiated Start-up of and Testing of Interim groundwater Remediation system at the site. Permitting delays (1 to 1 1/2 month) were incurred by East Bay Municipal Utility District (EBMUD) for actual system start-up.

**Work Anticipated for February 1993**

- Continue monthly groundwater monitoring.
- Continue with system testing and start-up procedures associated with the interim remediation system at the site.





Site Status Update  
ARCO Station 2107, Oakland, California

February 23, 1993  
61026.02

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If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries Inc.

A handwritten signature in black ink that reads "Joel Coffman". The signature is written in a cursive, flowing style.

Joel Coffman  
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company  
Mark Thomson, Alameda County District Attorney's Office  
Richard Hiatt, Regional Water Quality Control Board



3315 Almaden Expressway, Suite 34  
San Jose, CA 95118  
Phone: (408) 264-7723  
FAX: (408) 264-2435

January 29, 1993  
0129BCHA.2107  
61026.02

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2107, 3310 Park Blvd., Oakland, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during December 1992, and site activities anticipated for the month of January 1993.

**December 1992 Activities**

- Performed groundwater monitoring.
- Continued construction activities associated with installation of interim groundwater remediation system at the site.
- Submitted Subsurface Report for installation of offsite monitoring wells and recovery well RW-1 to ARCO and regulators.

Site Status Update  
ARCO Station 2107, Oakland, California

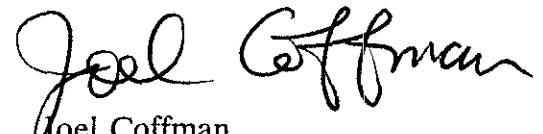
January 29, 1993  
61026.02

**Work Anticipated for January 1993**

- Continue monthly groundwater monitoring.
- Initiate system testing and start-up procedures associated with the interim remediation system. Permitting delays (1 to 1 1/2 month) have been incurred by East Bay Municipal Utility District (EBMUD) for actual system start-up.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries Inc.

  
Joel Coffman  
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company  
Mark Thomson, Alameda County District Attorney's Office  
Richard Hiatt, Regional Water Quality Control Board

3315 Almaden Expressway, Suite 34  
San Jose, CA 95118  
Phone: (408) 264-7723  
Fax: (408) 264-2345

December 11, 1992  
1211BCHA.2107  
61026.02

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2107, 3310 Park Blvd., Oakland, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during November 1992, and site activities anticipated for the month of December 1992.

**November 1992 Activities**

- Performed groundwater monitoring.
- Continued construction activities associated with installation of interim groundwater remediation system at the site.
- Initiated preparation of report for installation of offsite monitoring wells and recovery well RW-1, report to issued in final form by January 1, 1993.

Site Status Update  
ARCO Station 2107, Oakland, California

December 11, 1992  
61026.02

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**Work Anticipated for December 1992**

- Continue monthly groundwater monitoring.
- Continue construction activities associated with installation of interim remediation system. Permitting delays (1 to 1 1/2 month) have been incurred by EBMUD for actual system start-up.
- Submit draft report for installation of offsite monitoring wells and recovery well to ARCO for review, due in final form January 1, 1993.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries Inc.



Joel Coffman  
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company  
Mark Thomson, Alameda County District Attorney's Office  
Richard Hiatt, Regional Water Quality Control Board



3315 Almaden Expressway, Suite 34  
San Jose, CA 95118  
Phone: (408) 264-7723  
Fax: (408) 264-2435

November 6, 1992  
1105BCHA.2107  
61026.02

Mr. Barney Chan  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94624

Subject: Site Status Update for ARCO Station 2107, 3310 Park Blvd., Oakland, California.

Dear Mr. Chan:

This letter provides an update on investigation and remedial activities conducted for the above-referenced site. This update covers site activities performed during October 1992, and site activities anticipated for the month of November 1992.

#### October 1992 Activities

- Performed groundwater monitoring.
- Initiated construction activities associated with installation of interim groundwater remediation system at the site including installation of recovery well RW-1.

Site Status Update  
ARCO Station 2107, Oakland, California

November 6, 1992  
61026.02

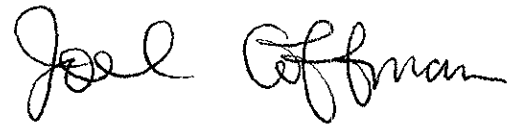
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**Work Anticipated for November 1992**

- Continue monthly groundwater monitoring.
- Continue construction activities associated with installation of interim remediation system.
- Initiate preparation of report for installation of offsite monitoring wells and recovery well RW-1.

If you have any questions or comments regarding this letter, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries Inc.



Joel Coffman  
Project Geologist

cc: Mr. Michael Whelan, ARCO Products Company  
Mark Thomson, Alameda County District Attorney's Office  
Richard Hiatt, Regional Water Quality Control Board



3315 Almaden Expressway, Suite 34  
 San Jose, CA 95118  
 Phone: (408) 264-7723  
 Fax: (408) 264-2435

*ROBESI*  
*CL* *ALSO* *ROBESI* *CL*

# TRANSMITTAL

TO: Mr. Barney Chan  
 Alameda County Health Care Services  
 Department of Environmental Health  
 Hazardous Materials Division  
 80 Swan Way, Room 200  
 Oakland, California 94621

DATE: July 1, 1992  
 PROJECT NUMBER: 62029.01  
 SUBJECT: ARCO Station 2107, 3310 Park  
 Boulevard, Oakland, California and  
 ARCO Station 276, 10600 MacArthur  
 Boulevard, Oakland, California

FROM: Joel Coffman  
 TITLE: Project Manager

WE ARE SENDING YOU: Attached

COPIES	DATED	NO.	DESCRIPTION
1	7/1/92	62029.01	Check for \$1,582.50 for the Deposit Refund Account for the above sites

THESE ARE TRANSMITTED as checked below:

- For review and comment     Approved as submitted     Resubmit \_\_\_ copies for approval
- As requested     Approved as noted     Submit \_\_\_ copies for distribution
- For approval     Return for corrections     Return \_\_\_ corrected prints
- For your files

REMARKS:

Copies: 1 to RESNA project file no. 62029.01  
 Mike Whelan, ARCO Products Company

*92 JUL -2 PM 1:48*