

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



Alameda County CC458  
Environmental Protection Services  
1131 Harbor Bay Parkway, Room 250  
Alameda CA 94502-6577

STID 3943

June 20, 1996

Michael Whelan  
ARCO Products Company  
P.O. Box 612530  
San Jose, CA 95161

RE: ARCO SERVICE STATION #2152, 22141 CENTER STREET, CASTRO  
VALLEY

Dear Mr. Whelan:

The Alameda County Environmental Health Department, Environmental Protection Division, has received concurrence from the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), for final closure of the underground storage tank investigation at the referenced site.

Prior to the issuance of a "Remedial Action Completion Certificate" by this office, however, the monitoring wells located at this site must be properly destroyed should you have no further use for them. Well destruction is performed under permit issued by Zone 7 - Alameda County Flood Control and Water Conservation District.

Please advise me if the wells will be destroyed, and when well destruction has been completed, as appropriate. I may be reached 510/567-6783.

Sincerely,



Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

cc: Mee Ling Tung, Agency Director  
Kevin Graves, RWQCB  
Craig Mayfield, Zone 7  
Jim Ferdinand, Alameda County Fire Department  
Robert Bogni, P.O. Box 14258, Fremont, CA 94539



PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

March 28, 1996  
Project 330-048.6A

Mr. Robert E. Cave  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Re: Permit to Operate - Plant 7413  
ARCO Service Station 2152  
22141 Center Street  
Castro Valley, California

Dear Mr. Cave:

On behalf of ARCO Products Company, Pacific Environmental Group, Inc. (PACIFIC) has been performing environmental services at the site referenced above. PACIFIC will not be renewing the Permit to Operate, which expires on April 1, 1996, as remediation has been completed at this site. The system was shut down on February 8, 1994, and has not operated since. The soil vapor extraction and treatment system has been dismantled and removed from the site.

If you have any further questions or require additional information, please do not hesitate to call.

Sincerely,

**Pacific Environmental Group, Inc.**

Suzanne McClurkin-Nelson  
Staff Scientist

cc: Mr. Michael Whelan, ARCO Products Company  
Mr. Scott Seery, Alameda County Health Care Service Agency  
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region

ALAMEDA COUNTY ENVIRONMENTAL  
HEALTH DEPARTMENT

ENVIRONMENTAL PROTECTION DIVISION  
1131 Harbor Bay Parkway, Suite #250  
Alameda, CA 94502-6577  
Telephone (510) 567-6700  
Fax Number (510) 337-9335

FAX COVER SHEET

DATE: August 16, 1995

TO: MICHAEL WHELAND

ARCO

FAX # (408) 377-8361

Total number of pages including cover sheet 2

FROM: SUSAN HUGO

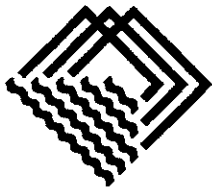
NOTE:

Per your request.

(SMILE) have a nice day.  
DO SOMETHING FOR OUR ENVIRONMENT.

LIST OF ARCO SITES WITH UGT CLEANUP  
(August 16, 1995)

<u>STID#</u>	<u>ACHD CONTACT</u>	<u>ARCO#</u>	<u>ADDRESS</u>
3629	Susan Hugo	2112	1260 Park Street, Alameda 94501
817	Amy Leech	5387	20200 Hesperian Blvd. Hayward 94541
3943	Scott Seery	2152	22141 Center St., Castro Valley 94546
3883	Susan Hugo	6113	785 E. Stanley Blvd., Livermore 94550
3873	Susan Hugo	771	899 Rincon Avenue, Livermore 94550
1053	Eva Chu	6041	7249 Village Parkway, Dublin 94568
779	Amy Leech	608	17601 Hesperian Blvd. San Lorenzo 94580
3876	Barney Chan	2185	9800 East 14th Street, Oakland 94603
3756	Barney Chan	276	10600 MacArthur Blvd. Oakland 94605
3874	Susan Hugo	4931	731 W. MacArthur Blvd. Oakland 94609
3884	Susan Hugo	374	6407 Telegraph Avenue, Oakland 94609
3626	Susan Hugo	6148	5131 Shattuck Avenue, Oakland 94609
3890	Barney Chan	2107	3310 Park Blvd. Oakland 94610
3854	Barney Chan	4494	566 Hegenberger Road, Oakland 94621
3793	Susan Hugo	2169	889 W. Grand Ave. Oakland 94607
3858	Barney Chan	2035	1001 San Pablo Avenue, Albany 94706
4275	Scott Seery	601	712 Lewelling Blvd. San Leandro 94579
744	Dale Kletke	2111	1156 Davis Street, San Leandro 94577



PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

July 13, 1995  
Project 330-048.6A

Mr. Scott Seary  
Alameda County Health Care Services Agency  
Division of Hazardous Materials  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502

Re: Discontinuation of Groundwater Sampling  
ARCO Service Station 2152  
22141 Center Street  
Castro Valley, California

Dear Mr. Seary:

This letter, prepared by Pacific Environmental Group, Inc. (PACIFIC) on behalf of ARCO Products Company (ARCO), notifies the Alameda County Health Care Services Agency (ACHCSA) that groundwater monitoring and sampling performed at the site referenced above will be discontinued.

Groundwater analytical data collected from site groundwater monitoring wells indicate that total petroleum hydrocarbons calculated as gasoline (TPH-g) and benzene have been below the detection limits since July 1991. The only exception was on February 27 and May 26, 1995.

- In February 1995, TPH-g and benzene were detected only in Well MW-2 at 210 and 4 parts per billion (ppb), respectively. TPH-g and benzene in Wells MW-1, MW-3, and MW-4 were below the detection limits. Analytical results from verification sampling performed at Well MW-2 on March 23, 1995 indicated that TPH-g and benzene were below the detection limits. The February 1995 results are considered anomalous and were due to either a sampling or laboratory error. In addition, groundwater sampling performed on May 26, 1995 indicate that groundwater from Well MW-2 was below

95 JUL 14 PM 1:22  
ENVIRONMENTAL GROUP, INC.

the detection limits for TPH-g and benzene. Therefore, providing additional verification that the February 1995 results were anomalous.

- In May 1995, benzene was detected only in Well MW-3 at just above the detection limit at 0.75 ppb; TPH-g was below the detection limit. TPH-g and benzene in Wells MW-1, MW-2, and MW-4 were below the detection limits.

Therefore, based on these results, groundwater monitoring and sampling performed at site wells will be discontinued beginning with the third quarter 1995.

If you have any questions regarding the contents of this letter, please call.

Sincerely,

**Pacific Environmental Group, Inc.**



Kelly C. Brown  
Project Manager

cc: Mr. Michael Whelan, ARCO Products Company  
Mr. Kevin Graves, Regional Water Quality Control Board

ALAMEDA COUNTY ENVIRONMENTAL  
HEALTH DEPARTMENT

ENVIRONMENTAL PROTECTION DIVISION  
1131 Harbor Bay Parkway, Suite #250  
Alameda, CA 94502-6577  
Telephone (510) 567-6700  
Fax Number (510) 337-9335

FAX COVER SHEET

DATE: June 27, 1995

TO: DAVID LARSON

FAX # (408) 453-0452

Total number of pages including cover sheet 2

FROM: SUSAN L. HUGO

NOTE:

List of ARCO SITES & corresponding  
contact person

(SMILE) have a nice day.  
DO SOMETHING FOR OUR ENVIRONMENT.

(6/27/95)

LIST OF ARCO SITES WITH UGT CLEANUP

<u>STID#</u>	<u>ACHD CONTACT</u>	<u>ARCO FACILITY#</u>	<u>ADDRESS</u>
3629	Susan Hugo	Station 2112	1260 Park Street Alameda 94501
817	Amy Leech	Station 5387	20200 Hesperian Blvd. Hayward 94541
3943	Scott Seery	Station 2152	22141 Center Street Castro Valley 94546
3883	Susan Hugo	Station 6113	785 E. Stanley Blvd. Livermore 94550
3873	Susan Hugo	Station 771	899 Rincon Avenue Livermore 94550
1053	Eva Chu	Station 6041	7249 Village Parkway Dublin 94568
779	Amy Leech	Station 608	17601 Hesperian Blvd. San Lorenzo 94580
3876	Barney Chan	Station 2185	9800 East 14th Street Oakland 94603
3756	Barney Chan	Station 276	10600 MacArthur Blvd. Oakland 94605
3874	Susan Hugo	Station 4931	731 W. MacArthur Blvd. Oakland 94609
3884	Susan Hugo	Station 374	6407 Telegraph Avenue Oakland 94609
3626	Susan Hugo	Station 6148	5131 Shattuck Avenue Oakland 94609
3890	Barney Chan	Station 2107	3310 Park Blvd. Oakland 94610
3854	Barney Chan	Station 4494	566 Hegenberger Road Oakland 94621
3793	Susan Hugo	Station 2169	889 W. Grand Ave. Oakland 94607
3858	Barney Chan	Station 2035	1001 San Pablo Avenue Albany 94706
4275	Scott Seery	Station 601	712 Lewelling Blvd. San Leandro 94579





PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

ENVIRONMENTAL  
PROTECTION

95 MAY 24 PM 1:18

May 22, 1995  
Project 330-048.6A

Ms. Beth Farmer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Re: Permit to Operate - Plant 7413  
ARCO Service Station 2152  
22141 Center Street  
Castro Valley, California

Dear Ms. Farmer:

On behalf of ARCO Products Company, Pacific Environmental Group, Inc. (PACIFIC) has been performing environmental services at the site referenced above. PACIFIC will not be renewing the Permit to Operate, as remediation has been completed at this site. The system was shut down on February 8, 1994, and has not operated since. The soil vapor extraction and treatment system has been dismantled and removed from the site.

If you have any further questions or require additional information, please do not hesitate to call.

Sincerely,

**Pacific Environmental Group, Inc.**

Suzanne McClurkin-Nelson  
Staff Scientist

Shaw Garakani  
Project Engineer

cc: Mr. Michael Whelan, ARCO Products Company  
Mr. Scott Seery, Alameda County Health Care Service Agency  
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

STID 3943

Alameda County CC4580  
Environmental Protection Division  
1131 Harbor Bay Parkway, Room 250  
Alameda CA 94502-6577

April 18, 1995

Mr. Michael Whelan  
ARCO Products Company  
P.O. Box 5811  
San Mateo, CA 94402

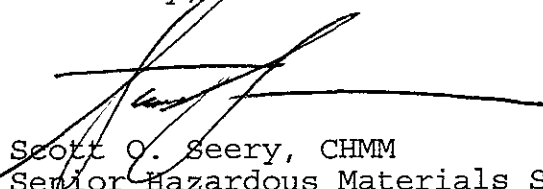
RE: ARCO SERVICE STATION #2152, 22141 CENTER STREET, CASTRO  
VALLEY

Dear Mr. Whelan:

I am in receipt of the April 11, 1995 addendum to the February 7, 1995 Pacific Environmental Group, Inc. (PEG) work plan for the assessment of soil conditions in proximity to the tank complex and former vapor recovery sump. The referenced addendum modifies one of the two borings originally proposed from a vertical orientation, to a slant boring.

The cited work plan, as amended, has been accepted. Please contact this office once field activities have been scheduled. I may be reached at 510/567-6783.

Sincerely,



Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Agency Director  
Gil Jensen, Alameda County District Attorney's Office  
Kevin Graves, RWQCB  
Don Atkinson-Adams, ACDEH  
Kelly C. Brown, Pacific Environmental Group, Inc.



PACIFIC  
ENVIRONMENTAL  
GROUP, INC.

ENVIRONMENTAL  
PROTECTION  
95 APR 17 PM 2:31

April 11, 1995  
Project 330-048.6A

Mr. Scott Seary  
Alameda County Health Care Services Agency  
Division of Hazardous Materials  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502

Re: Work Plan Modification  
ARCO Service Station 2152  
22141 Center Street  
Castro Valley, California

Dear Mr. Seary:

This letter, prepared by Pacific Environmental Group, Inc. (PACIFIC) on behalf of ARCO Products Company (ARCO), presents notification of a change in scope of work regarding PACIFIC's *Work Plan* dated February 7, 1995. The original scope of work outlined in PACIFIC's February 7, 1995 *Work Plan* proposed the drilling of two soil borings (B-21 and B-22) adjacent the former underground product line vapor recovery sump (SUMP). During field reconnaissance by a PACIFIC geologist, it was determined that the boring (B-21), proposed to be drilled between Well MW-1 and the SUMP, could not be drilled vertically, due to underground product lines in this area and the close proximity of the underground storage tanks (USTs). Only Boring B-22 can be drilled in the proposed location in the conductor casing within the UST complex. Therefore, PACIFIC requests that the February 7, 1995 *Work Plan* be modified as follows:

- Boring B-21 will be drilled as an angle boring. Boring B-21 will be drilled at an angle of approximately 55 degrees from horizontal. Soil samples will be collected at 25, 30, 35, 40, 45, and 50 feet along the line of drilling. A schematic showing the drilling angle and soil sample locations is shown on Figure 1.

As originally proposed in PACIFIC's February 7, 1995 *Work Plan*, Boring B-22 will be drilled in the conductor casing within the UST complex and soil samples will be collected

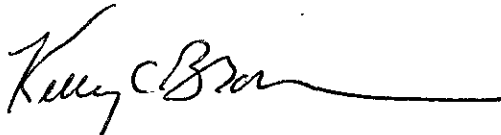
April 11, 1995  
Page 2

at five foot depth intervals beginning at 15 feet below ground surface. All soil samples collected will be submitted for laboratory analysis.

Please review this *Work Plan Modification* and issue a letter of approval referencing both this letter and the February 7, 1995 *Work Plan*. If you have any questions regarding the contents of this letter, please call.

Sincerely,

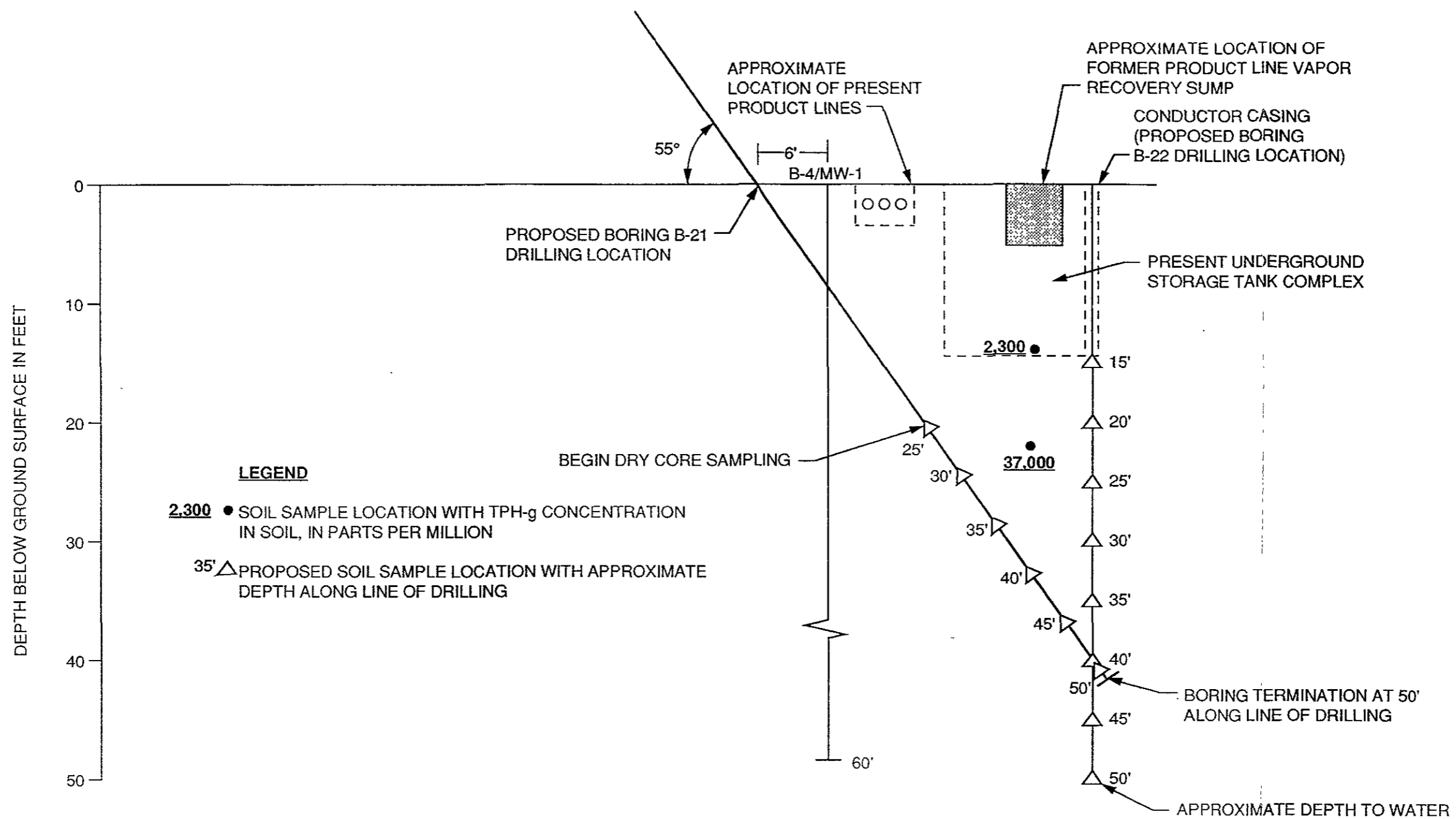
**Pacific Environmental Group, Inc.**

A handwritten signature in cursive script that reads "Kelly C. Brown". The signature is written in black ink and extends across the width of the page.

Kelly C. Brown  
Project Manager

Attachments: Figure 1 - Angel Boring Schematic

cc: Mr. Michael Whelan, ARCO Products Company  
Mr. Kevin Graves, Regional Water Quality Control Board



PACIFIC ENVIRONMENTAL GROUP, INC.

**SCALE**  
 HORIZONTAL : 1" = 30'  
 VERTICAL : 1" = 10'

ARCO SERVICE STATION 2152  
 22141 Center Street at Grove Way  
 Castro Valley, California

ANGLE BORING SCHEMATIC

FIGURE:  
**1**  
 PROJECT:  
 330-048.1A

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY  
DAVID J. KEARS, Agency Director

RAFAT A. SHAHID, Assistant Agency Director

Alameda County CC4580  
Environmental Protection Division  
1131 Harbor Bay Parkway, Room 250  
Alameda CA 94502-6577

STID 3943

February 9, 1995

Mr. Michael Whelan  
ARCO Products Company  
P.O. Box 5811  
San Mateo, CA 94402

RE: ARCO SERVICE STATION #2152, 22141 CENTER STREET, CASTRO  
VALLEY

Dear Mr. Whelan:

I am in receipt of the February 7, 1995 Pacific Environmental Group, Inc. (PEG) correspondence presenting both a summary of our meeting of February 2, 1995, and a brief work plan for the assessment of soil conditions in proximity to the tank complex and former vapor recovery sump.

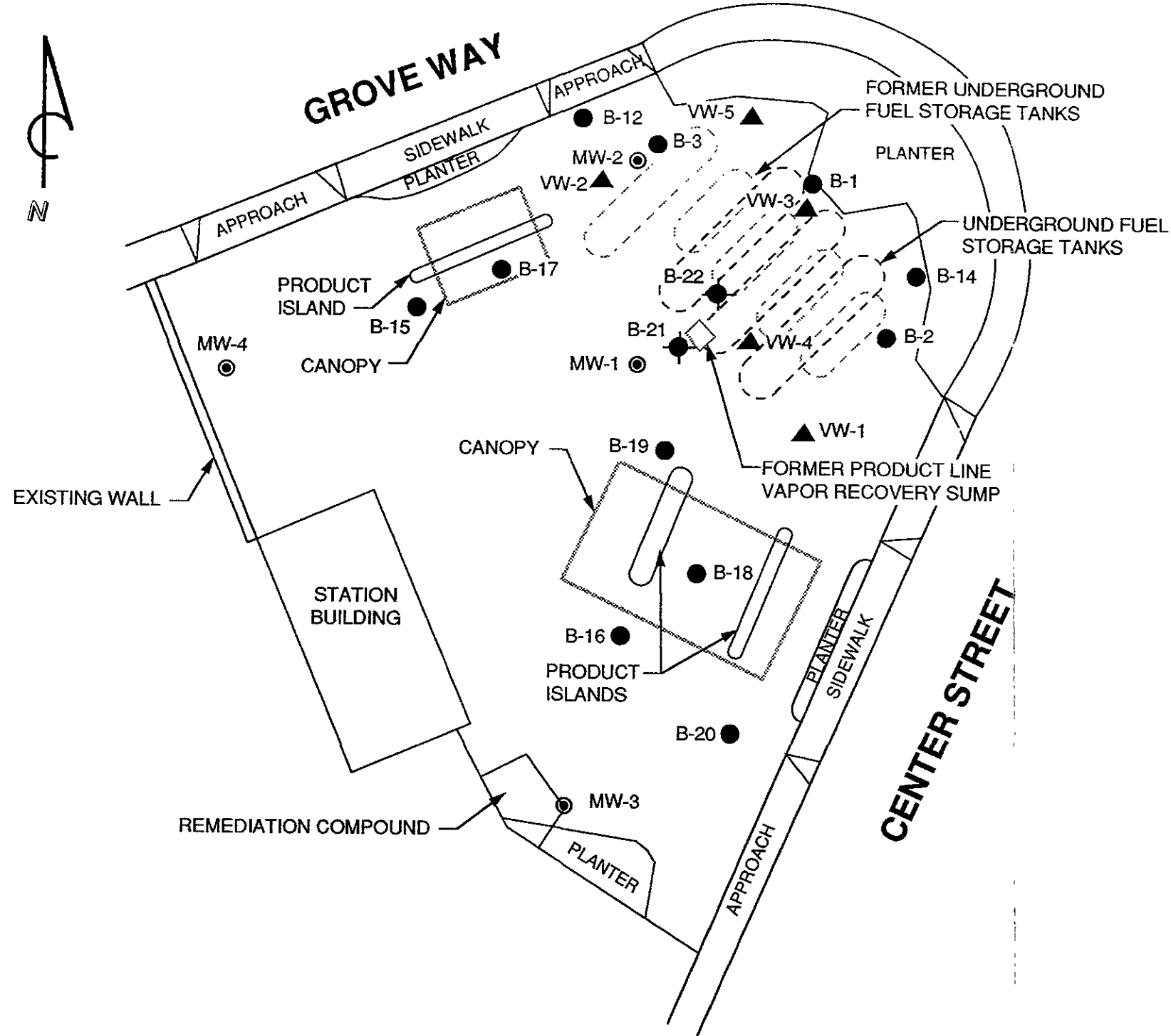
The cited work plan has been accepted as submitted. Please contact this office once field activities have been scheduled, and when ARCO has become aware of their final occupancy status at the site. I may be reached at 510/567-6783.

Sincerely,

  
Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Agency Director  
Gil Jensen, Alameda County District Attorney's Office  
Kevin Graves, RWQCB  
Don Atkinson-Adams, ACDEH  
Kelly C. Brown, Pacific Environmental Group, Inc.

Post-It™ brand fax transmittal memo 7671		# of pages ▶	1
To	Kelly Brown	From	SCOTT SEERY
Co.	Pacific	Co.	ACDEH
Dept.		Phone #	510/567-6783
Fax #	408/441-7589	Fax #	



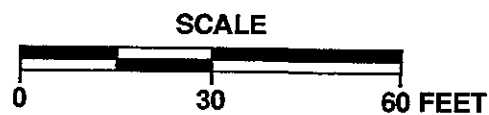
**LEGEND**

- MW-4 ● GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- VW-1 ▲ SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION
- B-2 ● SOIL BORING LOCATION AND DESIGNATION
- B-21 ● PROPOSED SOIL BORING LOCATION AND DESIGNATION

Reference: Basemap taken from RESNA



PACIFIC ENVIRONMENTAL GROUP, INC.



ARCO SERVICE STATION 2152  
22141 Center Street at Grove Way  
Castro Valley, California

PROPOSED SOIL BORING LOCATION MAP

FIGURE:  
**1**  
PROJECT:  
330-048.6A

DEPARTMENT OF ENVIRONMENTAL HEALTH  
HAZARDOUS MATERIALS DIVISION  
80 SWAN WAY, ROOM 200  
OAKLAND, CA 94621  
PHONE NO. 510/271-4320

SCOTT SEERY  
567-6783

1-17-95 ACCEPTED  
SDS

DEPARTMENT OF ENVIRONMENTAL HEALTH  
470 - 27th Street, Third Floor  
Oakland, CA 94612  
Telephone: (415) 375-7237

These plans have been reviewed and found to be reasonable and essentially meet the requirements of the local health laws. Changes to the plans may be made by the Department after it issues a permit, but they must comply with the laws. The project proponent has agreed to the conditions of any required conditions for its work. One copy of these accepted plans must be submitted to all contractors and craftmen involved in the removal.

Any changes or alterations of these plans must be submitted to the Department and approved by the Department. Department Department of Health and Human Services, State of California. Notify the Department at least 48 hours prior to the start of any work. Follow the following instructions:

- Removal of Tank and Filling
  - Sampling
  - Final Inspection
- Presence of a manifest is dependent on compliance with remedial plans and all applicable laws and regulations.
- U.S. EPA CONTRACT NUMBER: 747-1-07  
CALIFORNIA HAZARDOUS MATERIALS DIVISION

UNDERGROUND TANK CLOSURE PLAN

\*\*\* Complete according to attached instructions \*\*\*

- Business Name Formerly ARCO AM/PM #2152  
Business Owner CLOSED
  - Site Address 2241 CENTER ST.  
City CASTRO VALLEY zip 94546 Phone DISCONNECTED
  - Mailing Address ARCO PRODUCTS Co PO Box 6411  
City ARTESIA, CA zip 90702 Phone (310) 407-2610
  - Land Owner BOGNI ASSOC  
Address PO Box 4258 city, state FREMONT, CA zip 94539
  - Generator name under which tank will be manifested ARCO PRODUCTS  
Co.
- EPA I.D. No. under which tank will be manifested CAL000009866



6. Contractor GETTLER-RYAN INC  
Address 6747 SIERRA CT, SUITE J  
City DUBLIN, CA 94568 Phone (510) 551-7555  
License Type\* B, A, HAZ ID# 220793

\*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board. Indicate that the certificate has been received, in addition, to holding the appropriate contractors license type.

7. Consultant PACIFIC ENVIRONMENTAL GROUP  
Address 2025 GATEWAY PI, SUITE 440  
City SAN JOSE, CA 95110 Phone (408) 441-7500

8. Contact Person for Investigation  
Name KELLY BROWN Title PROJECT MANAGER  
Phone (408) 441-7539

9. Number of tanks being closed under this plan 3  
Length of piping being removed under this plan 200 FT  
Total number of tanks at facility 3

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

\*\* Underground tanks are hazardous waste and must be handled \*\*  
as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter

Name ERICKSON INC EPA I.D. No. CAD 009466392  
Hauler License No. 0019 License Exp. Date 5-95  
Address 255 PAAR BLVD  
City RICHMOND State CA Zip 94801

b) Product/Residual Sludge/Rinsate Disposal Site

Name GIBSON ENVIRONMENTAL EPA I.D. No. \_\_\_\_\_  
Address \_\_\_\_\_  
City REDWOOD CITY State CA Zip \_\_\_\_\_

c) Tank and Piping Transporter

Name ERICKSON INC EPA I.D. No. CAD009466392  
Hauler License No. 0019 License Exp. Date 5-95  
Address 255 PARK BLVD  
City RICHMOND State CA zip 94801

d) Tank and Piping Disposal Site

Name ERICKSON INC EPA I.D. No. CAD009466392  
Address 255 PARK BLVD  
City RICHMOND State CA zip 94801

11. Experienced Sample Collector

Name \_\_\_\_\_  
Company PACIFIC ENVIRONMENTAL GROUP  
Address 2025 GATEWAY PL, Suite 440  
City SAN JOSE State CA zip 95110 Phone (408) 441-7500

12. Laboratory

Name SEQUOIA ANALYTICAL  
Address 680 CHESAPEAKE DR  
City REDWOOD CITY state CA zip 94068  
State Certification No. 1210

13. Have tanks or pipes leaked in the past? Yes [ ] No []

If yes, describe. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. Describe methods to be used for rendering tank inert

TRIPLE RINSE THEN INSERT 30 lbs / 1000 gal Capacity  
DRY ICE IN EACH TANK

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be plugged.

The Bay Area Air Quality Management District (771-6000), along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground-water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
12000 GAL	UNLEADED GASOLINE	SOIL	2 SAMPLES @ NATIVE SOIL/ BACKFILL INTERFACE
12000 GAL	"	SOIL	
12000 GAL	"	SOIL	

One soil sample must be collected for every 20 feet of piping that is removed. A ground water sample must be collected should any ground water be present in the excavation.

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (Estimated)	Sampling Plan SAMPLE 1/50CY for <u>disposal</u>

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

16. Chemical methods and associated detection limits to be used for analyzing samples

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
TPH-G	5030 Soil/WATER	8015/8020	1.0 ppm
BTEX		8020/8240	0.005 "
TOTAL LEAD	AA		

17. Submit Site Health and Safety Plan (See Instructions)

18. Submit Worker's Compensation Certificate copy

Name of Insurer TRANS AMERICA INS GROUP

19. Submit Plot Plan (See Instructions)

20. Enclose Deposit (See Instructions)

21. Report any leaks or contamination to this office within 5 days of discovery. The report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (see Instructions)

22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true.

I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

Signature of Contractor

Name (please type) GETTLER-RYAN INC, BARRY E. MC COY

Signature *Barry E. McCoy*

Date 1-6-95

Signature of Site Owner or Operator

Name (please type) TIMOTHY DAHL, ON BEHALF OF ARCO PRODUCTS CO.

Signature *Timothy J. Dahl*

Date 1/6/95

## INSTRUCTIONS

### General Instructions

- \* Three (3) copies of this plan plus attachments and deposit must be submitted to this Department.
- \* Any cutting into tanks requires local fire department approval.
- \* One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.

### Item Specific Instructions

2. SITE ADDRESS  
Address at which closure is taking place.
5. EPA I.D. NO. under which the tanks will be manifested  
EPA I.D. numbers may be obtained from the State Department of Health Services, 916/324-1781.
6. CONTRACTOR  
Prime contractor for the project.
10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
  - a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
  - c) Tanks must be hauled as hazardous waste.
  - d) This is the place where tanks will be taken for cleaning.
15. TANK HISTORY AND SAMPLING INFORMATION

Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, and the date when the tank was last used.

Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the high water mark, etc.

16. CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS  
See attached Table 2.

17. SITE HEALTH AND SAFETY PLAN

A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:

- a) The name and responsibilities of the site health and safety officer;
- b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;
- c) Identification of health and safety hazards of each work task. Include potential fire, explosion, physical, and chemical hazards;
- d) For each hazard, identify the action levels (contaminant concentrations in air) or physical conditions which will trigger changes in work habits to ensure workers are not exposed to unsafe chemical levels or physical conditions;
- e) Description of the work habit changes triggered by the above action levels or physical conditions;
- f) Frequency and types of air and personnel monitoring - along with the environmental sampling techniques and instrumentation - to be used to detect the above action levels. Include instrumentation maintenance and calibration methods and frequencies;
- g) Confined space entry procedures (if applicable);
- h) Decontamination procedures;
- i) Measures to be taken to secure the site, excavation and stockpiled soil during and after work hours (e.g. barricades, caution tape, fencing, trench plates, plastic sheeting, security guards, etc.);
- j) Spill containment/emergency/contingency plan. Be sure to include emergency phone numbers, the location of the phone nearest the site, and directions to the hospital nearest the site;
- k) Documentation that all site workers have received the appropriate OSHA approved trainings and participate in appropriate medical surveillance per 29 CFR 1910.120; and
- l) Page for employees to sign indicating they have read and will comply with the site health and safety plan.

The safety plan must be distributed to all employees and contractors working in hazardous waste operations on site. A complete copy of the site health and safety plan along with any standard operating procedures shall be on site and accessible at all times.

NOTE: These requirements are excerpts from 29 CFR Part 1910.120(b)(4), Hazardous Waste Operations and Emergency Response; Final Rule, March 6, 1989. Safety plans of certain underground tank sites may need to meet the complete requirements of this Rule.

19. PLOT PLAN

The plan should consist of a scaled view of the facility at which the tank(s) are located and should include the following information:

- a) Scale;
- b) North Arrow;
- c) Property Lines;
- d) Location of all Structures;
- e) Location of all relevant existing equipment including tanks and piping to be removed and dispensers;
- f) Streets;
- g) Underground conduits, sewers, water lines, utilities;
- h) Existing wells (drinking, monitoring, etc.);
- i) Depth to ground water; and
- j) All existing tanks and piping in addition to the ones being pulled.

20. DEPOSIT

A deposit, payable to Alameda County for the amount indicated on the Alameda County Underground Storage Tank Fee Schedule, must accompany the plans.

21. Blank Unauthorized Leak/Contamination Site Report forms may be obtained in limited quantities from our office and from the San Francisco Bay Regional Water Quality Control Board (415/464-1255). Larger quantities may be obtained directly from the State Water Resources Control Board at (916) 739-2421.

22. TANK CLOSURE REPORT

The tank closure report should contain the following information:

- a) General description of the closure activities;
- b) Description of tank, fittings and piping conditions. Indicate tank size and former contents; note any corrosion, pitting, holes, etc.;



- c) Description of the excavation itself. Include the tank and excavation depth, a log of the stratigraphic units encountered within the excavation, a description of root holes or other potential contaminant pathways, the depth to any observed ground water, descriptions and locations of stained or odor-bearing soil, and descriptions of any observed free product or sheen;
- d) Description of sampling methods;
- e) Description of any remedial measures conducted at the time of tank removal;
- f) To-scale figures showing the excavation size and depth, nearby buildings, sample locations and depths, and tank and piping locations. Include a copy of the plot plan prepared for the Tank Closure Plan under item 19;
- g) Chain of custody records;
- h) Copies of signed laboratory reports;
- i) Copies of "TSDF to Generator" Manifests for all hazardous wastes hauled offsite (sludge, rinsate, tanks and piping, contaminated soil, etc.); and
- j) Tabulation of the volume and final destination of all non-manifested contaminated soil hauled offsite.

TABLE #2  
RECOMMENDED MINIMUM VERIFICATION ANALYSES FOR  
UNDERGROUND TANK LEAKS

<u>HYDROCARBON LEAK</u>	<u>SOIL ANALYSIS</u>	<u>WATER ANALYSIS</u>
Unknown Fuel	TPH G GCFID(5030) TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) TPH D GCFID(3510) BTX&E 602, 624 or 8260
Leaded Gas	TPH G GCFID(5030) BTX&E 8020 OR 8240 TPH AND BTX&E 8260 TOTAL LEAD AA -----Optional----- TEL DHS-LUFT EDB DHS-AB1803	TPH G GCFID(5030) BTX&E 602 or 624 TOTAL LEAD AA TEL DHS-LUFT EDB DHS-AB1803
Unleaded Gas	TPH G GCFID(5030) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH G GCFID(5030) BTX&E 602, 624 or 8260
Diesel, Jet Fuel and Kerosene	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Fuel/Heating Oil	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602, 624 or 8260
Chlorinated Solvents	CL HC 8010 or 8240 BTX&E 8020 or 8240 CL HC AND BTX&E 8260	CL HC 601 or 624 BTX&E 602 or 624 CL HC AND BTX&E 8260
Non-chlorinated Solvents	TPH D GCFID(3550) BTX&E 8020 or 8240 TPH AND BTX&E 8260	TPH D GCFID(3510) BTX&E 602 or 624 TPH and BTX&E 8260
Waste and Used Oil or Unknown (All analyses must be completed and submitted)	TPH G GCFID(5030) TPH D GCFID(3550) TPH AND BTX&E 8260 O & G 5520 D & F BTX&E 8020 or 8240  CL HC 8010 or 8240	TPH G GCFID(5030) TPH D GCFID(3510)  O & G 5520 C & F BTX&E 602, 624 or 8260  CL HC 601 or 624

ICAP or AA TO DETECT METALS: Cd, Cr, Pb, Zn, Ni  
METHOD 8270 FOR SOIL OR WATER TO DETECT:  
PCB\*  
PCP\*  
PNA  
CREOSOTE

\* If found, analyze for dibenzofurans (PCBs) or dioxins (PCP)

Reference: Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, 10 August 1990

**EXPLANATION FOR TABLE #2: MINIMUM VERIFICATION ANALYSIS**

1. OTHER METHODOLOGIES are continually being developed and as methods are accepted by EPA or DHS, they also can be used.
2. For DRINKING WATER SOURCES, EPA recommends that the 500 series for volatile organics be used in preference to the 600 series because the detection limits are lower and the QA/QC is better.
3. APPROPRIATE STANDARDS for the materials stored in the tank are to be used for all analyses on Table #2. For instance, seasonally, there may be five different jet fuel mixtures to be considered.
4. To AVOID FALSE POSITIVE detection of benzene, benzene-free solvents are to be used.
5. TOTAL PETROLEUM HYDROCARBONS (TPH) as gasoline (G) and diesel (D) ranges (volatile and extractible, respectively) are to be analyzed and characterized by GCFID with a fused capillary column and prepared by EPA method 5030 (purge and trap) for volatile hydrocarbons, or extracted by sonication using 3550 methodology for extractable hydrocarbons. Fused capillary columns are preferred to packed columns; a packed column may be used as a "first cut" with "dirty" samples or once the hydrocarbons have been characterized and proper QA/QC is followed.
6. TETRAETHYL LEAD (TEL) analysis may be required if total lead is detected unless the determination is made that the total lead concentration is geogenic (naturally occurring).
7. CHLORINATED HYDROCARBONS (CL HC) AND BENZENE, TOLUENE, XYLENE AND ETHYLBENZENE (BTX&E) are analyzed in soil by EPA methods 8010 and 8020 respectively, (or 8240) and in water, 601 and 602, respectively (or 624).
8. OIL AND GREASE (O & G) may be used when heavy, straight chain hydrocarbons may be present. Infrared analysis by method 418.1 may also be acceptable for O & G if proper standards are used. Standard Methods" 17th Edition, 1989, has changed the 503 series to 5520.
9. PRACTICAL QUANTITATION REPORTING LIMITS are influenced by matrix problems and laboratory QA/QC procedures. Following are the Practical Quantitation Reporting Limits:

	<u>SOIL PPM</u>	<u>WATER PPB</u>
TPH G	1.0	50.0
TPH D	1.0	50.0
BTX&E	0.005	0.5
O & G	50.0	5,000.0

Based upon a Regional Board survey of Department of Health Services Certified Laboratories, the Practical Quantitation Reporting Limits are attainable by a majority of laboratories with the exception of diesel fuel in soils. The Diesel Practical Quantitation Reporting Limits, shown by the survey, are:

ROUTINE	MODIFIED PROTOCOL
≤ 10 ppm (42%)	≤ 10 ppm (10%)
≤ 5 ppm (19%)	≤ 5 ppm (21%)
≤ 1 ppm (35%)	≤ 1 ppm (60%)

When the Practical Quantitation Reporting Limits are not achievable, an explanation of the problem is to be submitted on the laboratory data sheets.

- LABORATORY DATA SHEETS are to be signed and submitted and include the laboratory's assessment of the condition of the samples on receipt including temperature, suitable container type, air bubbles present/absent in VOA bottles, proper preservation, etc. The sheets are to include the dates sampled, submitted, prepared for analysis, and analyzed.
- IF PEAKS ARE FOUND, when running samples, that do not conform to the standard, laboratories are to report the peaks, including any unknown complex mixtures that elute at times varying from the standards. Recognizing that these mixtures may be contrary to the standard, they may not be readily identified; however, they are to be reported. At the discretion of the LIA or Regional Board the following information is to be contained in the laboratory report:

The relative retention time for the unknown peak(s) relative to the reference peak in the standard, copies of the chromatogram(s), the type of column used, initial temperature, temperature program is C/minute, and the final temperature.

- REPORTING LIMITS FOR TPH are: gasoline standard ≤ 20 carbon atoms, diesel and jet fuel (kerosene) standard ≤ 50 carbon atoms. It is not necessary to continue the chromatography beyond the limit, standard, or EPA/DHS method protocol (whichever time is greater).

#### EPILOGUE

ADDITIVES: Major oil companies are being encouraged or required by the federal government to reformulate gasoline as cleaner burning fuels to reduce air emissions. MTBE (Methyl-tertiary butyl ether), ETHANOL (ethyl alcohol), and other chemicals may be added to reformulate gasolines to increase the oxygen content in the fuel and thereby decrease undesirable emissions (about four percent with MTBE). MTBE and ethanol are, for practical purposes, soluble in water. The removal from the water column will be difficult. Other compounds are being added by the oil companies for various purposes. The refinements for detection and analysis for all of these additives are still being worked out. If you have any questions about the methodology, please call your Regional Board representative.



# GETTLER - RYAN INC.

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## SITE SAFETY PLAN, JOB 11 .01

### GENERAL INFORMATION:

SITE:           Company:           ARCO Products Co. # 2152  
                  Location:           22141 Center St./Grove Way  
                  City:                Castro Valley, CA 94546

PLAN PREPARED BY:           Gettler-Ryan Inc.           DATE: 1/03/95

OBJECTIVES:                 To provide a plan for the safe completion of the site work.

PROPOSED DATE OF SITE  
WORK:                         1/16/95

DOCUMENTATION/  
SUMMARY:                     Hazardous material may be present, caution is advised.  
                                  Site work includes removal of three gasoline UGST's  
                                  and demolition of all site improvements.

### SITE/WASTE CHARACTERISTICS:

WASTE TYPE(S):             Liquid                     Solid                     Gas

CHARACTERISTIC(S):        Volatile                   Flammable               Toxic

FACILITY DESCRIPTION:     Service station with underground utilities (disconnected)

STATUS:                     Closed

### HAZARD EVALUATION

PARAMETER:                 TLV 300 ppm THC

HEALTH: ingestion, inhalation, absorption

LEL 10% Gastechtor max.

**SPECIAL PRECAUTIONS  
AND COMMENTS:**

Correct safety procedures must be followed, per Gettler-Ryan Inc. Health and Safety Plan. UGST to be inerted per BAAQMD guidelines (Reg.8, Section 30) 30 lbs. of dry ice per 1000 gallon capacity to be placed in each tank prior to removal.

**SITE SAFETY WORKPLAN**

**PERIMETER  
ESTABLISHMENT:**

Use barricades and flagging to restrict access to tank removal area and gasoline UGST work area. Site to be fenced.

**PERSONAL PROTECTION:**

Level of Protection EPA Level D  
Modifications: Rubber gloves & hard hats.  
Surveillance Equipment and Material: Gastech

**SITE ENTRY PROCEDURES:**

None

**DECONTAMINATION  
PROCEDURES:**

Personnel: Wash thoroughly with detergent solution and water

Equipment: Steam clean if necessary

**FIRST AID:**

As applicable

**WORK LIMITATIONS:**

(Time of day, weather, heat/cold stress): None

**INVESTIGATION-DERIVED  
MATERIAL DISPOSAL:**

Tank and lines to be manifested and hauled by Erickson, Inc. All materials removed from tank hole to be sampled, placed on visqueen on site and covered until classified for proper disposal. All demolition materials to be recycled as appropriate.

**TEAM COMPOSITION:**

Barry McCoy - Job Foreman, Site Safety Officer  
1 Operator and crew from Tank Excavators.  
1 Field Technician from GeoTech Co.

EMERGENCY INFORMATION

LOCAL RESOURCES:	Ambulance/Hospital	Dial 911
	Police/Sheriff/Hwy Patrol	Dial 911
	Fire Department	Dial 911

SITE RESOURCES:

- Water Supply
- Telephone
- Visqueen
- Fire Extinguisher
- First Aid Kit
- Sorbant Pads

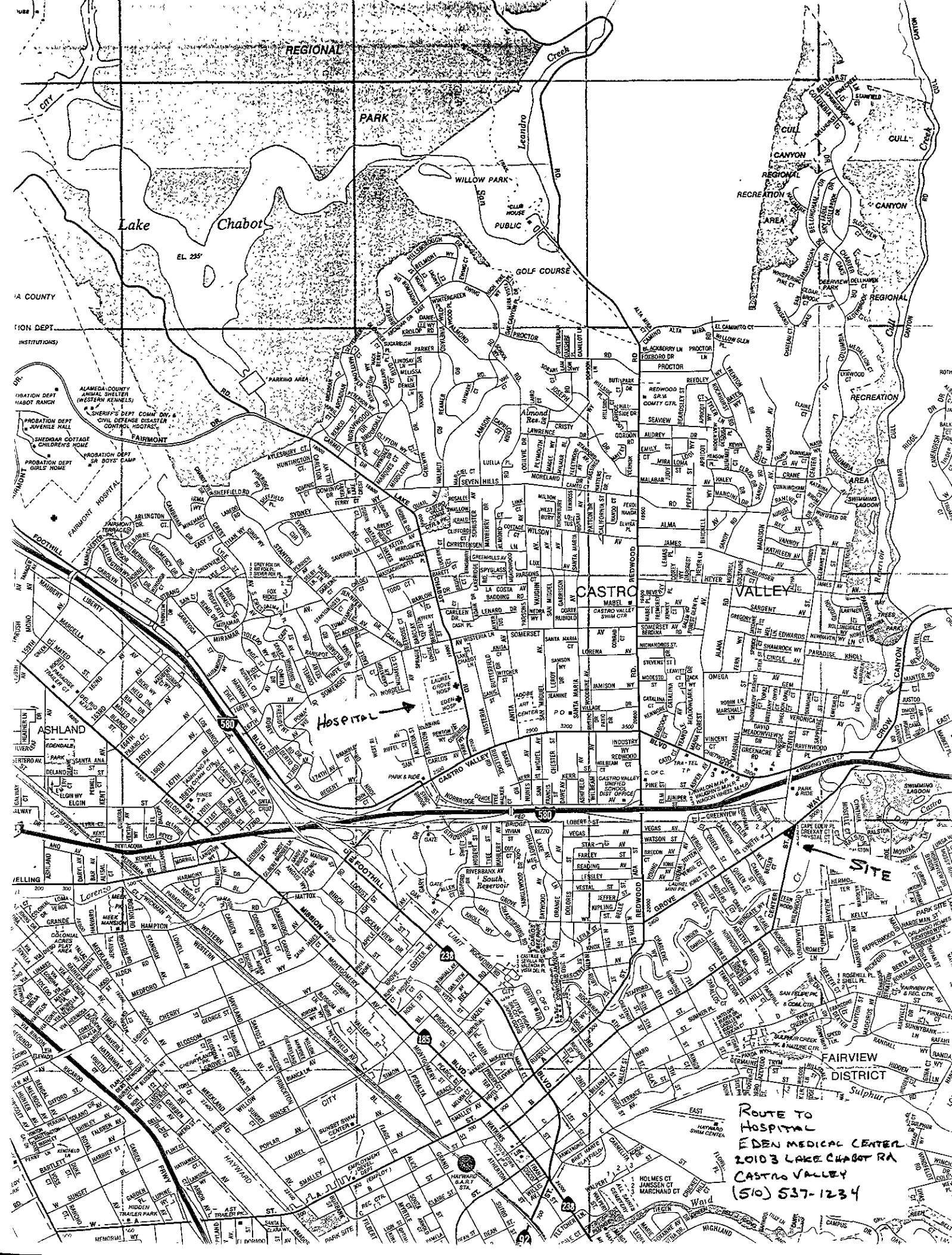
EMERGENCY CONTACT: Gettler-Ryan Inc. (510) 551-7555

EMERGENCY ROUTES: Nearest emergency hospital is:

**EDEN MEDICAL CENTER  
20103 Lake Chabot Road  
Castro Valley, CA 94546**

**(510) 537-1234**

MAP ATTACHED



REGIONAL PARK  
Creek  
CULL CANYON  
WILLOW PARK  
PUBLIC  
GOLF COURSE  
Lake Chabot  
EL. 235  
ALAMEDA COUNTY  
SHERIFF'S DEPT COMD DIV. & CIVIL DEFENSE DISTRICT CONTROL POSTS  
PROBATION DEPT JUVENILE HALL  
SHERMAN COTTAGE CHILDREN'S HOME  
PROBATION DEPT SA BOYS CAMP  
PROBATION DEPT GIRLS HOME  
FAIRMONT HOSPITAL  
ASHLAND  
HOSPITAL  
CASTRO VALLEY  
FAIRMONT DISTRICT  
SITE  
ROUTE TO HOSPITAL  
EDEN MEDICAL CENTER  
2013 LAKE CHABOT RA  
CASTRO VALLEY  
(510) 537-1234



**GROVE WAY**

PROTECT EXISTING CURB,  
GUTTER, SIDEWALK AND  
DRIVEWAYS TO REMAIN

DEMOLISH EXISTING  
PUMP ISLANDS  
AND CANOPY

DEMOLISH EXISTING  
2 STORY SERVICE  
STATION BUILDING

DEMOLISH EXISTING  
PUMP ISLANDS  
AND CANOPY

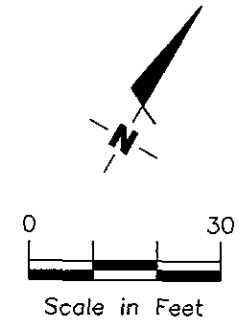
APPROXIMATE  
ARCO LEASE LINE

**CENTER STREET**

REMOVE EXISTING  
UNDERGROUND  
GASOLINE TANKS  
AND ALL RELATED UNDER-  
GROUND PIPING

**GENERAL NOTES**

1. PROTECT EXISTING OFF-SITE IMPROVEMENTS, BOTH PUBLIC AND PRIVATE.
2. REMOVE AND DISPOSE OF EXISTING UNDERGROUND STORAGE TANKS AND PIPING IN ACCORDANCE WITH ALAMEDA COUNTY ENVIRONMENTAL HEALTH HAZARDOUS MATERIALS DIVISION AND ALAMEDA COUNTY FIRE DEPARTMENT REQUIREMENTS.
3. REMOVAL ALL EXISTING ON-SITE IMPROVEMENTS, INCLUDING BUILDINGS, FOUNDATIONS, PLANTERS, CURBS, SLABS, PAVING, ETC.
4. BACKFILL AND COMPACT ALL TANK HOLES AND OTHER EXCAVATIONS IN 8" MAXIMUM THICKNESS LIFTS AND COMPACT TO 90% MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557.
5. LEAVE SITE IN A RAKED CLEAN CONDITION.



FIGURE

**1**

DEMOLITION PLAN  
FORMER ARCO SERVICE STATION #2152  
22141 CENTER STREET  
CASTRO VALLEY, CALIFORNIA

REVISD DATE

DATE  
1-5-95

**Gettler - Ryan Inc.**

6747 Sierra Ct., Suite J (510) 551-7555  
Dublin, CA 94568

REVIEWED BY



JOB NUMBER  
8201.01

# ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY)

03/30/94

**PRODUCER**  
 Matsen Insurance Brokers  
 100 Stony Point Road Ste.160  
 O. Box 907  
 Santa Rosa, CA 95402

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

### COMPANIES AFFORDING COVERAGE

- COMPANY LETTER **A** Transamerica Insurance Co.
- COMPANY LETTER **B**
- COMPANY LETTER **C**
- COMPANY LETTER **D**
- COMPANY LETTER **E**

**INSURED**  
 Gettler-Ryan, Inc. &  
 GeoStrategies, Inc.  
 6747 Sierra Court, Suite J  
 Dublin, CA 94568

### COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS
	<b>GENERAL LIABILITY</b> <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR. <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT.				GENERAL AGGREGATE \$ PRODUCTS-COMP/OP AGG. \$ PERSONAL & ADV. INJURY \$ EACH OCCURRENCE \$ FIRE DAMAGE (Any one fire) \$ MED. EXPENSE (Any one person) \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> GARAGE LIABILITY				COMBINED SINGLE LIMIT \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE \$
	<b>EXCESS LIABILITY</b> <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE \$ AGGREGATE \$
<b>A</b>	<b>WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY</b>	WCP80570916	04/01/94	04/01/95	<input checked="" type="checkbox"/> STATUTORY LIMITS EACH ACCIDENT \$1,000,000 DISEASE-POLICY LIMIT \$1,000,000 DISEASE-EACH EMPLOYEE \$1,000,000
	<b>OTHER</b>				

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

### CERTIFICATE HOLDER

County of Alameda Dept. of  
 Environmental Health  
 80 Swan Way, Room 200  
 Oakland, CA 94621

### CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

ARCO Products Company  
2000 Alameda de las Puigas  
Mailing Address: Box 5811  
San Mateo, California 94402  
Telephone 415 571 2400

ALCO  
HAZMAT



94 SEP 13 PM 2:14  
September 9, 1994

Ms. Susan Hugo  
Alameda County Heath Care Services  
80 Swan Way, Room 200  
Oakland, CA 94621

Re: Transfer of ARCO Projects.

Dear Ms. Hugo:

The purpose of this letter is to inform you of changes that ARCO Products Company (ARCO) has recently made in regards to environmental consulting firms working on environmental projects at existing and former ARCO retail facilities. In an effort to promote consistency, be more proactive, streamline communications and reduce costs, ARCO has significantly reduced the number of environmental consultants performing assessment and remedial activities on these environmental projects. The consolidation, which took effect on 9/1/94, involves a reduction of approximately 75% to 80% of the consulting firms that ARCO previously used. ARCO firmly believes that this consolidation effort will dramatically streamline ARCO's communication process, both with your office and staff as well as with ARCO's remaining consultants. The consulting firms which ARCO will now use at retail facility environmental projects throughout the west (WA, OR, CA, NV and AZ) include: Brown & Caldwell, Delta Environmental, Emcon Associates, Pacific Environmental Group, and Secor.

Attached to this letter is a list of sites in your jurisdiction that have recently been transferred to one of the five consulting firms listed above. In most cases, these five consulting firms were already working on ARCO projects in your jurisdiction. Also included in the list is the name of the ARCO engineer responsible for the site. please don't hesitate to call the respective ARCO engineer or the consultant's regional contact if you have any questions regarding any of the projects.

The transfer of the projects from the former consultant to one of the five firms listed above should be completed by October 1, 1994. Shortly thereafter I will be contacting you to schedule a meeting to introduce you to the primary contacts at the consulting companies and to review the projects with your staff. Please contact me at (415) 571-2468 if you have any questions concerning this letter.

Sincerely,

Kyle Christie

## ALAMEDA COUNTY HEALTH DEPT.

Facility Number	City	Address	New Consulting Firm	ARCO Engineer	ARCO Engineer phone number
276	Oakland	10600 MacArthur Blvd.	Emcon	Mike Whelan	415-571-2449
347	Oakland	2751 High Street	Brown & Caldwell	Brad Jones	213-486-0681
374	Oakland	6407 Telegraph Avenue	Pacific Env. Group	Mike Whelan	415-571-2449
601	San Leandro	712 Lewelling Blvd.	Emcon	Mike Whelan	415-571-2449
771	Livermore	899 Rincon Avenue	Emcon	Mike Whelan	415-571-2449
2035	Albany	1001 San Pablo Avenue	Emcon	Mike Whelan	415-571-2449
2107	Oakland	3310 Park Blvd.	Pacific Env. Group	Mike Whelan	415-571-2449
2111	San Leandro	1156 Davis Street	Emcon	Mike Whelan	415-571-2449
2112	Alameda	1260 Park Street	Pacific Env. Group	Mike Whelan	415-571-2449
2152	Castro Valley	22141 Center Street	Pacific Env. Group	Mike Whelan	415-571-2449
2162	San Leandro	15135 Hesperian Blvd.	Pacific Env. Group	Mike Whelan	415-571-2449
2169	Oakland	889 West Grand Avenue	Emcon	Mike Whelan	415-571-2449
2185	Oakland	9800 East 14th Street	Emcon	Mike Whelan	415-571-2449
4494	Oakland	566 Hagenberger Road	Pacific Env. Group	Mike Whelan	415-571-2449
4931	Oakland	731 West MacArthur Blvd.	Pacific Env. Group	Mike Whelan	415-571-2449
6002	Oakland	6235 Seminary Avenue	Emcon	Mike Whelan	415-571-2449
6041	Dublin	7249 Village Parkway	Emcon	Mike Whelan	415-571-2449
6113	Livermore	785 East Stanley Blvd.	Emcon	Mike Whelan	415-571-2449
6148	Oakland	5131 Shattuck Avenue.	Emcon	Mike Whelan	415-571-2449
9908	Oakland	8255 San Leandro Blvd	Brown & Caldwell	Brad Jones	213-486-0681

Your Emcon contact is Mr. Jay Johnson.

Your Pacific Environmental Group contact is Mr. Greg Barclay

Your Brown & Caldwell contact is Mr. Ron Zurlinden

## CONSULTANTS CONTACTS

Consultant Name	ARCO Program Manager (APM)	Technical Coordinator (TC)	Area	Administrative Coordinator (AC)
Brown & Caldwell	Mikk Anderson 150 So Arroyo Pkwy Pasadena, CA 91109 (818) 577-1020 Fax (818) 795-6016	Ron Zur Linden 9616 micro Ave Sacramento, CA 95813-3449 (916) 444-0123 --- Fax (916) 856-5277	NW	Mat Quinn 150 So Arroyo Pkwy Pasadena, CA 91109 (818) 577-1020 Fax (818) 795-6016
		Ron Halsey 16735 Von Karman, Suite 200 Irvine, CA 92714-4918 (714) 660-1070 --- Fax (714) 474-0940	SW	
		Mike Higman 9040 Frairs Rd, Suite 220 San Diego, CA 92108 (619) 528-9090 --- Fax (619) 528-9199	SW	
Delta	Jon Pesicka 27141 Ailso Creek Rd, Suite 270 Aliso Viejo, CA 92656 (714) 362-3077 Fax (714) 362-0290	Todd Galati 3330 Data Dr, Suite 100 Rancho Cordova, CA 95670 (916) 638-2085 --- Fax (916) 638-8385	NW	Debbie Fluckiger 27141 Ailso Creek Rd, # 270 Aliso Viejo, CA 92656 (714) 362-3077 Fax (714) 362-0290
		Jon Pesicka (714) 362-3077 --- Fax (714) 362-0290	SW	
Emcon	Jack Hardin 1921 Ringwood Ave San Jose, CA 95131-1721 (408) 453-7300 Fax (408) 437-9526	Rob Dixon 15055 SW Sequoia Pkwy, Suite 140 Portland, OR 97224-7712 (503) 624-7200 Fax (503) 620-7658	NW	Jeanette Memeo 1921 Ringwood Ave San Jose, CA 95131-1721 (408) 453-7300 Fax (408) 437-9526
		Jay Johnson 1433 N Ave Market Blvd. Sacramento, CA 95834-1943 (916) 928-3300 Fax (916) 928-3341	NW	

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 ENVIRON ENGINEERING  
 1013  
 091  
 091-00-1794

## CONSULTANTS CONTACTS

Consultant Name	ARCO Program Manager (APM)	Technical Coordinator (TC)	Area	Administrative Coordinator (AC)
Emcon	Jack Hardin	Ric Morgan 120 Columbia, Suite 500 Aliso Viejo, CA 92656 (714) 362-1130 Fax (714) 362-1137	SW	Jeanette Merneo
Pacific Enviro Group	Debra Moser 2025 Gate Way Place, Suite 440 San Jose, CA 95110 (408) 441-7500 Fax (408) 441-7539	Greg Barclay 3050 Fite Circle, Suite 101 Sacramento, CA 95827 (916) 361-8091 --- Fax (916) 361-8094	NW	Norma Gutierrez 2025 Gate Way Place, Suite 440 San Jose, CA 95110 (408) 441-7500 Fax (408) 441-7539
		Cleve Solomon 650 N Sierra Madre Villa, Suite 204 Pasadena, CA 91107 (818) 351-4814 -- Fax (818) 351-4822	SW	
Seacor	David Childs 1913 Volcanic Dr. Benton, AR 72015-2161 (501) 776-3400 Fax (501) 776-3053	Jim Ritchie 90 New Montgomery St, Suite 620 San Francisco, CA 94015-4503 (415) 882-1548 -- Fax (415) 882-4406	NW	Cindy Malloy 1734 - 34th St Sacramento, CA 95816-7004 (916) 456-4333 Fax (916) 456-0110
		Kyle Emerson 1180 Nevada St, Suite 200 Redlands, CA 92374 (909) 335-6116 --- Fax (909) 335-6120	SW	
		Bob Wilson 3485 Sacramento Dr, Suite A San Luis Obispo, CA 93401-7160 (805) 546-0455 --- Fax (805) 546-0583	SW	

LAW OFFICES

**WALTER & PISTOLE**

An Association, including a Professional Corporation

WATERFALL TOWERS  
2455 BENNETT VALLEY ROAD, SUITE 201B  
SANTA ROSA, CALIFORNIA 95404  
(707) 523-0732  
FACSIMILE NO. (707) 523-0924

March 3, 1994

JEFFREY A. WALTER\*  
VALERIE PISTOLE  
JOHN EASTMAN  
\*A Professional Corporation

94 MAR 7 11:22 AM '94  
NAPA OFFICE  
1005 JEFFERSON STREET  
P.O. BOX 578  
NAPA, CALIFORNIA 94581  
(707) 253-6888  
SANTA ROSA

REPLY TO

Scott Seery  
Hazardous Waste Division  
Alameda County Health Department  
80 Swan Way, Room 200  
Oakland, CA 94612  
FAX 510-569-4757

Re: Arco Station #2142, 22141 Center Street, Castro Valley  
Our File: Grove Way Mini Storage

Dear Mr. Seery:

Our client, Key Lease Corporation recently purchased the Grove Way Mini Storage in Castro Valley. Prior to the purchase, EnviroNet evaluated the site for potential impacts due to any releases of hazardous or potentially hazardous substances either from on-site or off-site sources.

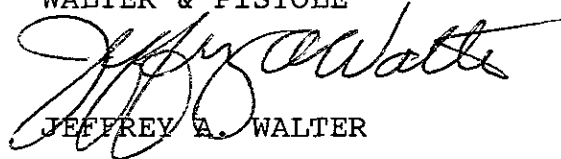
EnviroNet's research revealed that the Arco Products Facility at 22141 Center Street, Castro Valley, was on the Leaking Underground Storage Tank (LUST) records. The records indicated that ARCO's Leading Underground Storage Tanks have impacted groundwater and further investigation and remediation are required. EnviroNet recommended that we contact your Agency in order to be kept apprised of any activity regarding the above site.

Therefore, as concerned adjacent property owners to the above-referenced Arco station, we are requesting that our firm be added to the "distribution" or "CC" list in order to receive copies of all correspondence and memos your office prepares in reference to this site.

Your cooperation in this matter is greatly appreciated.

Sincerely yours,

WALTER & PISTOLE



JEFFREY A. WALTER

JAW/af

93 SEP 20 PM 12:21

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

**T R A N S M I T T A L**

TO: Mr. Scott Seery  
Alameda County Health  
Care Services Agency  
80 Swan Way, Room 200  
Oakland, CA 94621

DATE: September 15, 1993  
PROJECT NUMBER: 61026.02  
SUBJECT: Site Status Updates  
ARCO Various Station  
PAGE No.: 1 of 1

FROM: John C. Young

WE ARE SENDING YOU:

COPIES DATED

DESCRIPTION

Site Status Update for ARCO Stations:

1	9/2/93	ARCO Station No. 601, 712 Lewelling Boulevard, San Leandro, California.
1	9/2/93	ARCO Station No. 2152, 22141 Center Street, Castro Valley, California.

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. 61026.02

  
John C. Young, Project Manager

cc: Mr. John Meck, ARCO Legal    Mr. Richard Hiatt, RWQCB  
Mr. John Jang, RWQCB  
Mr. Gary Grimm, RWQCB  
Mr. Mark Thomson, ACDAO  
Mr. Michael Whelan, ARCO



**TRANSMITTAL SHEET****DOCUMENT SENT TO: Mr. Scott Seery****Alameda County Health Care Services Agency****Facsimile Number: (510) 569 - 4757****DOCUMENT SENT FROM: VALLI VORUGANTI; RESNA/San Jose****3315 Almaden Expressway #34, San Jose, California 95118 (408) 264-7723****Facsimile Number: (408) 264-2435****Date Sent: January 26, 1993 Time Sent: 12.30 P.M.****DELIVER:            Immediately XXXX Same Day****CONFIRMATION OF RECEIPT REQUESTED:        Yes XXX No  
(Recipient to call sender upon receipt.)****DOCUMENT DESCRIPTION: THIS IS TO NOTIFY ACHCSA THAT START UP OF THE INTERIM SOIL REMEDIATION SYSTEM AT ARCO 2152 HAS BEEN INITIATED AT THE SITE ON JANUARY 25, 1993. THE SYSTEM WILL BE MONITORED ON A DAILY BASIS PER THE BAAQMD PERMIT REQUIREMENTS THE FIRST WEEK.****NUMBER OF PAGES (INCLUDING TRANSMITTAL SHEET): 1**

93 JAN 22 11 21 48

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

January 18, 1993  
1118rhie  
61078.02

Mr. Richard Hiett  
Regional Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, Suite 500  
Oakland, California 94612

Subject: Remediation Schedules for ARCO Sites in Alameda County, California.

Dear Mr. Hiett:

On behalf of ARCO Products Company (ARCO), RESNA has prepared these estimated schedules for remediation of sites under your regulatory oversight. These include ARCO Stations 276, 374, 2107, 2185, 4494 and 6148 in Oakland, California, ARCO Station 2035 in Albany, California, ARCO Station 2152 in Castro Valley, California, and ARCO Station 6041 in Dublin, California.

The darkened lines on the schedules represent deadlines which were agreed upon during the September 30, 1992 meeting at the Alameda County Health Care Services Agency (ACHCSA). The hatched lines represent our best guess estimates of times which may be required to complete tasks should unforeseen delays occur. These unforeseen delays include permitting issues, offsite access issues, and estimated times of operation of the respective remediation systems.

If you have any questions or comments, please contact us at (408) 264-7723 or Mr. Michael Whelan of ARCO at (415) 571-2449.

Sincerely,  
RESNA Industries Inc.



Joel Coffman  
Project Manager

cc: Ms. Susan Hugo, ACHCSA  
Mr. Michael Whelan, ARCO  
Mr. John Meck, ARCO legal  
Mr. Chris Winsor, ARCO  
Mr. Mark Thomson, Alameda County D.A. (Cover Letter)

ACTIVITIES	1992												1993												1994												1995																																																											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D																																																
1) Onsite Subsurface Investigation	COMPLETED																																																																																															
2) Additional Onsite Investigation	COMPLETED																																																																																															
3) Remedial Action Plan	COMPLETED																																																																																															
4) Preliminary and Detailed Engineering Design	COMPLETED																																																																																															
5) Soil Remediation Permitting	[Gantt bar: July 1992 - August 1992]																																																																																															
6) Equipment Selection and Procurement (Including Bid Package Preparation and Selection)	[Gantt bar: September 1992 - November 1992]																																																																																															
7) System Construction and Startup: Soil	[Gantt bar: December 1992 - February 1993]																																																																																															
8) Soil Remediation System Operation and Maintenance (1 year)	[Gantt bar: March 1993 - March 1994]																																																																																															
9) Performance Evaluation	[Gantt bar: April 1993 - July 1993]																																																																																															
10) System Shut Down: Soil Remediation	[Gantt bar: August 1994 - July 1995]																																																																																															
11) Site Closure: Soil (1 year)	[Gantt bar: August 1995 - August 1996]																																																																																															
<b>EXPLANATION:</b>	[Solid black bar]																								Probable schedule based on current deadlines and reasonable time necessary to complete the task. Assumes no delays.																								[Hatched bar]																								Estimated schedule based on consultant's experience, on receiving regulatory and other approval on time, and based on other related work being completed.																							

- 1) Onsite Subsurface Investigation:**  
 • Initial Onsite Assessment Report completed.  
 • Vapor extraction testing completed prior to 1992.
- 2) Additional Onsite Investigation:**  
 • Additional onsite investigation complete.  
 • No further assessment is needed.
- 3) Remedial Action Plan:**  
 • RAP completed and approved by ACHCSA.
- 4) Preliminary and Detailed Engineering Design:**  
 • Design completed.
- 5) Soil Remediation Permitting:**  
 • Permitting estimated to be completed by January 1993.  
 • Groundwater has only shown occasional evidence of minor hydrocarbon impact and has been non-detectable since July 1991 sampling event. Assumes no permitting for groundwater system will be necessary.

- 6) Equipment Selection and Procurement:**  
 • Completed.
- 7) System Construction and Startup (Soil):**  
 • Assumes groundwater remediation will be addressed with soil system.  
 • Assumes no delays due to weather.  
 • Assumes no delays due to other contractors performing work onsite.  
 • Assumes no delays due to utility installation.  
 • Construction initiated in October 1992, resumes December 1992, to be completed by mid-January 1993.  
 • Assumes no delays due to special permitting requirements.  
 • System startup to begin by March 15, 1993.
- 8) System Operation and Maintenance:**  
 • Assumes that it is technically feasible to achieve cleanup levels.  
 • Assumes no offsite remediation will be necessary.  
 • Assumes no significant equipment breakdowns.  
 • Interim soil remediation system is expected to be in operation through March 1994.

- 9) Performance Evaluation:**  
 • Evaluation shows that system will effectively remove hydrocarbons from soil and groundwater impacted areas and will reduce concentrations significantly over time.  
 • Evaluation shows that additional vapor and groundwater extraction wells are not required to effectively remediate impacted areas once the treatment system is operational.  
 • Performance evaluation to be completed by July 1993.
- 10) Shut Down of Soil Remediation System:**  
 • Cleanup will be completed in approximately 1 year after startup.  
 • Soil remediation system expected to be shut down by July 1994.
- 11) Site Closure:**  
 • Requirements for soil closure involve only drilling of confirmation borings and performance evaluation at time of system shutoff.  
 • Requirements for groundwater closure involve only groundwater monitoring and performance evaluation at system shutoff.  
 • Closure dependent on agency concurrence within 1 year following completion of verification monitoring.  
 • Assumes no risk assessment will be necessary.  
 • Site closure anticipated for 1995.



**ESTIMATED SOIL AND GROUNDWATER REMEDIATION IMPLEMENTATION SCHEDULE**  
 ARCO Station 2152  
 22141 Center Street  
 Castro Valley, California

PLATE  
  
A

99 JAN 15 11 06 00

January 13, 1993

Ms. Susan Hugo  
Alameda County Department of Environmental Health  
80 Swan Way  
Oakland, California 94621

**ARCO Products Company Facilities in Alameda County**

Dear Ms. Hugo:

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the fourth quarter of 1992; also included are projected site activities for the first quarter of 1993 and a bibliography of reports submitted for each location.

The QSRs are classified by city and address within Alameda County. We are submitting this document and attached QSRs as agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,



Kyle A. Christie  
Environmental Engineer

Attachments: ARCO Facility QSRs

UST LEAK                      Date of Last                      Current  
 SITE UPDATE              Review/Update      September 25, 1992              Date      December 28, 1992

**SITE IDENTIFICATION**

Name      ARCO Service Station 2152                      Case No. \_\_\_\_\_  
 Address      22141 Center Street  
                     Street Number                      Street  
                     Castro Valley                      94546  
                     City                      ZIP Code  
 County      Alameda                      Substance      Gasoline  
 Local Agency      Alameda County Health Care Services Agency (ACHCSA)  
 Regional Board      Regional Water Quality Control Board (CRWQCB)

**LEAD STAFF PERSON**                      ACHCSA - Scott Seery

**CASE TYPE**

\_\_\_\_\_ Undetermined      \_\_\_\_\_ Soil Only        X   Groundwater      \_\_\_\_\_ Drinking Water

**STATUS** (Date Indicates when case moved into status)

_____	No Action Taken	
<u>  X  </u>	Leak Being Confirmed	Date      8/89
<u>  X  </u>	Preliminary Site Assessment Workplan Submitted	Date      4/90
<u>  X  </u>	Preliminary Site Assessment Underway	Date      6/90
<u>  X  </u>	Pollution Characterization	Date      1/91
<u>  X  </u>	Remediation Plan	Date      12/91
_____	Remedial Action Underway	Date      _____
_____	Post Remedial Action Monitoring	Date      _____
_____	Case Referred to Regional Board	Date      _____
_____	Case Referred to Dept. of Health Services	Date      _____
_____	Case Closed	Date      _____

**COMMENTS/MILESTONES:**

USTs and product lines replaced in August through October 1989. 1850 cubic yards of soil excavated and aerated onsite; soil removed to landfill. Received ACHCSA approval of remedial action plan for soil remediation. Received BAAQMD permit for vapor extraction system (VES) installation. Drilled two borings on February 12 and February 13, 1992. Submitted Plans and Specifications for Construction and Installation of VES for bid. Received all permits related to system construction. Received & evaluated bids for installation of VES. Awarded contract 10/92. System construction initiated 10/92 will be completed by 2/93.

**RECENT ACTIVITIES/FINDINGS:**

Last Quarter Activities: Finalized Limited Subsurface Investigation Report on 7/17/92. Finalized Second Quarter Groundwater Monitoring Report on 9/23/92. Performed groundwater monitoring monthly and quarterly sampling. Submitted Plans and Specifications for Installation of a VES on 9/92.

Current Quarter Activities: Performed monthly groundwater monitoring & quarterly groundwater sampling. Received & evaluated bids for installation of VES. Awarded contract in 10/92. Initiated system construction in 11/92.

**ANTICIPATED ACTIVITIES:**

Next Quarter Activities: System installation by the end of 1/93. Initiate operation & maintenance of VES.

Reports documenting the site's history are listed on page 2.

<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Third Quarter 1992 Groundwater Monitoring Report 69013.09	12/31/92	RESNA
Second Quarter 1992 Groundwater Monitoring Report 69013.09	9/23/92	RESNA
Plans and Construction Specifications and Contract Documents for Installation of VES 69013.08	9/16/92	RESNA
Limited Subsurface Environmental Investigation 69013.08	7/17/92	RESNA
First Quarter 1992 Groundwater Monitoring Report 69013.09	5/1/92	RESNA
Fourth Quarter 1991 Groundwater Monitoring Report 69013.09	3/13/92	RESNA
Fourth Quarter 1991 Groundwater Monitoring Report (DRAFT) 69013.09	12/17/91	RESNA
Permit Application for an Authority to Construct and Permit to Operate a Vapor Extraction System 69013.08	12/9/91	RESNA
Work Plan for Additional Subsurface Environmental Investigation and Design and Permitting of Vapor Extraction System 69013.08	10/22/91	RESNA
Third Quarter 1991 Groundwater Monitoring Report 69013.05	10/18/91	RESNA
Supplemental Subsurface and Remedial Investigation 69013-6	7/02/91	RESNA/Applied GeoSystems
Letter Report on Second Quarter 1991 Ground-Water Monitoring AGS 69013-5	5/20/91	RESNA/Applied GeoSystems
Letter Report Quarterly Ground-Water Monitoring, First Quarter 1991 AGS 69013-5	03/24/91	Applied GeoSystems
Environmental Subsurface Investigation at ARCO 2152, Castro Valley, CA AGS 69013-4	11/13/90	Applied GeoSystems
Addendum to Work Plan, Initial Subsurface Investigation at ARCO 2152, Castro Valley, CA AGS 69013-3	5/14/90	Applied GeoSystems
Work Plan-Initial Subsurface Investigation at ARCO 2152 Castro Valley, CA AGS 69013-3W	4/1/90	Applied GeoSystems

REPORT

DATE

CONSULTANT

Environmental Investigation Related to  
Underground Tank Removal  
AGS 69013-2

1/18/90

Applied  
GeoSystems

Limited Environmental Site  
Assessment, Castro Valley, CA  
AGS 69013-1

5/26/89

Applied  
GeoSystems

October 12, 1992

92 OCT 11 PM 12:55

Ms. Susan Hugo  
Alameda County Department of Environmental Health  
80 Swan Way  
Oakland, California 94621

**ARCO Products Company Facilities in Alameda County**

Dear Ms. Hugo:

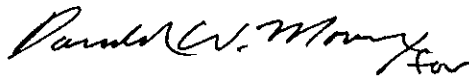
Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the third quarter of 1992; also included are projected site activities for the fourth quarter of 1992 and a bibliography of reports submitted for each location.

The QSRs are classified by city and address within Alameda County. We are submitting this document and attached QSRs as agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning the next comprehensive QSR submittal for ARCO sites on January 15, 1993. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,



Kyle A. Christie  
Environmental Engineer

Attachments: ARCO Facility QSRs





<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Second Quarter 1992 Groundwater Monitoring Report 69013.09	9/23/92	RESNA
Plans and Construction Specifications and Contract Documents for Installation of VES 69013.08	9/16/92	RESNA
Limited Subsurface Environmental Investigation 69013.08	7/17/92	RESNA
First Quarter 1992 Groundwater Monitoring Report 69013.09	5/1/92	RESNA
Fourth Quarter 1991 Groundwater Monitoring Report 69013.09	3/13/92	RESNA
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Environmental Investigation Related to Underground Tank Removal AGS 69013-2	1/18/90	Applied GeoSystems

Limited Environmental Site  
Assessment, Castro Valley, CA  
AGS 69013-1

5/26/89

Applied  
GeoSystems



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

92 SEP 23 09:47

September 23, 1992  
0923shgo

Ms. Susan Hugo  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94612

Subject: Proposed Agenda for Meeting at your office on September 30, 1992.

Dear Ms. Hugo:

We have prepared this proposed agenda for the meeting we have scheduled at your office on September 30, 1992. This meeting will be for discussion of sites under direction of Mr. Richard Hiatt and Mr. John Jang of the Regional Water Quality Control Board (RWQCB). We understand these RWQCB personnel may not be able to attend the entire meetings but may be able to stop by for site specific discussions. A separate meeting to discuss sites overseen by Mr. Eddie So of the RWQCB will have to be scheduled at another date as he has other agencies involved with many of his sites.

Items we would like to discuss include the following: ongoing assessment at the sites, offsite access problems and possible offsite contributing polluters, schedules for remediation, and other issues as they arise in discussing the sites. If you have any questions or comments concerning this proposed agenda, please call us at (408) 264-7723.

Sincerely,  
RESNA Industries, Inc.

Joel Coffman  
Project Geologist

cc: Michael Whelan, ARCO Products Company  
John Jang, RWQCB  
Richard Hiatt, RWQCB  
John Vargas, GeoStrategies

September 21, 1992

Proposed Agenda for September 30, 1992 ACHCSA Meeting

<u>ARCO Station</u>	<u>ACHCSA Staff</u>	<u>RWOCB Staff</u>	<u>Cnsltnt</u>
# 276, 10600 MacArthur Blvd.	Barney Chan	Richard Hiett	RESNA
# 2035, 1001 San Pablo, Albany	Barney Chan	Richard Hiett	RESNA
00 - 10:30 # 2107, 3310 Park Blvd.	Barney Chan	Richard Hiett	RESNA
# 2185, 9800 E. 14th St.	Barney Chan	Richard Hiett	RESNA
# 4494, 566 Hegenberger Rd.	Barney Chan	Richard Hiett	RESNA
# 374, 6407 Telegraph Ave.	Susan Hugo	Richard Hiett	RESNA
# 2112, 1260 Park St., Alameda	Susan Hugo	Richard Hiett	G/Ryan
30 - 12:00 # 2169, 899 W. Grand Ave.	Susan Hugo	Richard Hiett	G/Ryan
# 4931, 731 W. MacArthur	Susan Hugo	Richard Hiett	G/Ryan
# 6148, 5131 Shattuck Ave.	Susan Hugo	Richard Hiett	RESNA
# 6041, 7249 Village Pkwy, Dublin	Scott Seery	Richard Hiett	RESNA
# 2152, 22141 Ctr. St., Castro Valley	Scott Seery	Richard Hiett	RESNA
1:00 - 3:00 # 601, 712 Lewelling Bd., San Leandro	Scott Seery	John Jang	RESNA



A RESNA Company



Working To Restore Nature

### TRANSMITTAL

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

TO: MR. SCOTT SEARY  
ALAMEDA COUNTY HEALTH CARE  
DEPT. OF ENVIRONMENTAL HEALTH  
80 SWAN WAY, ROOM 200  
OAKLAND, CALIFORNIA 94624

DATE: JULY 23, 1992  
PROJECT NUMBER: 61026.01  
SUBJECT: SITE STATUS UPDATES

FROM: JOEL COFFMAN  
TITLE: PROJECT GEOLOGIST

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:  
 Shop drawings  Prints  Reports  Specifications  
 Letters  Change Orders  \_\_\_\_\_

COPIES	DATED	NO.	DESCRIPTION
1 EACH	6/18/92		FINAL - SITE STATUS UPDATES FOR ARCO STATIONS 601, 6041.

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: CC: MR. MICHAEL WHELAN, ARCO

Copies: 1 to project file no. 61026-9

\*Revision Date: 11/21/91  
\*File Name: TRANSMT.PRJ

4/23/92  
Called Don Moore (Seaton)  
received GR updates of ARCO

April 13, 1992

92 APR 13 PM 3:00

Ms. Susan Hugo  
Alameda County Department of Environmental Health  
80 Swan Way  
Oakland, California 94621

**ARCO Products Company Facilities in Alameda County**

Dear Ms. Hugo:

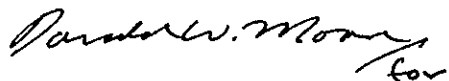
Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the first quarter of 1992; also included are projected site activities for the second quarter of 1992 and a bibliography of reports submitted for each location.

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Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning a subsequent comprehensive QSR submittal for ARCO sites on July 15, 1992. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,



Kyle A. Christie  
Environmental Engineer

Attachments: ARCO Facility QSRs





<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Fourth Quarter 1991 Groundwater Monitoring Report 69013.09	3/13/92	RESNA
Fourth Quarter 1991 Groundwater Monitoring Report (DRAFT) 69013.09	12/17/91	RESNA
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Third Quarter 1991 Groundwater Monitoring Report 69013.05	10/18/91	RESNA
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Limited Environmental Site Assessment, Castro Valley, CA AGS 69013-1	5/26/89	Applied GeoSystems



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

92 MAR 21 PM 2:51  
**TRANSMITTAL**

TO: MR. SCOTT SEERY  
ACHCSA-DEH  
HAZARDOUS MATERIALS DIVISION  
80 SWAN WAY, ROOM 200  
OAKLAND, CALIFORNIA 94624

DATE: 3/20/92  
 PROJECT NUMBER: 69013.08  
 SUBJECT: ARCO STATION 2152,  
22141 CENTER STREET, CASTRO VALLEY,  
CALIFORNIA.

FROM: JOEL COFFMAN  
 TITLE: PROJECT GEOLOGIST

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:  
 Shop drawings  Prints  Reports  Specifications  
 Letters  Change Orders  \_\_\_\_\_

COPIES	DATED	NO.	DESCRIPTION
1	3/20/92		LETTER DATED JANUARY 30, 1992 FROM ACHCSA TO MR. CHUCK CARMEL OF ARCO, CONCERNING THE ABOVE SUBJECT SITE.

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 project file no. 69013.08

CC: **CHUCK CARMEL, ARCO PRODUCTS COMPANY**  
**CHRIS WINSOR, ARCO PRODUCTS COMPANY**  
**EDDY SO, RWQCB**  
**J.P. MECK, ARCO LEGAL DEPT.**

\*Revision Date: 11/21/91  
 \*File Name: TRANSMT.PRJ

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RAFAT A. SHAHID, Assistant Agency Director

January 30, 1992

Mr. Chuck Carmel  
ARCO Products Company  
2000 Alameda de las Pulgas  
P.O. Box 5811  
San Mateo, CA 94402

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Division  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(510) 271-4320

RE: ARCO STATION #2152, 22141 CENTER STREET, CASTRO VALLEY, ALAMEDA COUNTY

Dear Mr. Carmel:

The Department is in receipt and has completed review of the following RESNA/Applied GeoSystems (AGS) proposals and reports addressing planned and completed environmental remediation and investigation work at the referenced site: Letter Report, Quarterly Groundwater Monitoring, Third Quarter 1991, October 18, 1991; Work Plan for Additional Subsurface Investigation and Design of Vapor Extraction System, October 22, 1991; and, Permit Application for Authority to Construct and Permit to Operate a Vapor Extraction System, December 9, 1991. The Department has further reviewed the content of the September 26, 1991 correspondence from your office which briefly described the content of the (then) pending soil vapor extraction system work plan to be submitted by your consultant, RESNA/AGS. The noted ARCO letter also responded to several points outlined in the Department's September 4, 1991 correspondence which commented on the results of the RESNA/AGS vapor extraction test performed at the site.

As articulated in the referenced September 4, 1991 correspondence from this office, the Department agrees in principle that soil venting/vapor extraction may be a reasonable approach to the remediation of soils impacted by fuel hydrocarbons at many sites. However, the effectiveness of such a system is strongly dependent upon several factors, including the permeability of the affected soil needing remediation, largely a function of soil particle size. Gravels and sands are obviously more permeable than silts and clays and, hence, will generally benefit more from soil vapor extraction schemes than will the latter sediment types. When soil vapor extraction wells are installed and screened across contacts separating distinctly different sediments exhibiting different permeabilities (e.g., B-9/VW-4: clayey sand to gravelly sand to silty clay), air will preferentially flow through the more permeable sediments. Further, with vapor wells installed through, or in close proximity to, a permeable pea gravel tank backfill, as occurs with all the vapor wells at this site, each well's perceived radius of influence will be distorted by preferential air flow vertically or horizontally through the pea gravel. Such flow has the effect of "short circuiting" the system, potentially reducing air flows through the contaminated native soils.

Mr. Chuck Carmel  
RE: ARCO #2152, 22141 Center Street, Castro Valley  
January 30, 1992  
Page 2 of 4

Although this concern was outlined in the September 4, 1991 Department correspondence, no attempt to discuss the potential limitations of the planned remediation system as a result of preferential air flow through the pea gravel backfill has been provided by either RESNA/AGS or ARCO. The October 22, 1991 RESNA/AGS soil vapor work plan indicated that the "vacuum impact" through the pea gravel would be high. But the question of how such enhanced vacuum impact through the pea gravel will positively impact the remediation of less-permeable native soils has not been answered. During my recent telephone conversations with Mr. Joel Coffman of RESNA/AGS, this point, among others, was raised. A subsequent conversation yesterday with a RESNA engineer confirmed that such system limitations likely exist.

The Department feels that an initial attempt to remediate the native soil through implementation of the proposed vapor extraction system is warranted, in spite of any potential limitations the system may have. **Hence, the proposed soil vapor extraction system work plan has been approved.** This approval also embraces the work plan's proposal to further investigate soil contamination in the area adjacent to the former product lines along Center Street, and the potential subsequent completion of these borings into vapor extraction wells.

In our experience, however, a single remediation technique is often not adequate to clean up a given site to acceptable levels; often it is necessary to implement a battery of remediation schemes, either individually or concurrently, before hitting upon a successful combination. The success or failure of the present remediation system will have to be appropriately evaluated at a future date. As a result of this evaluation, modifications to the existing system, or the implementation of additional soil and/or ground water remediation systems, may be required before the clean-up is considered "adequate."

Be advised that the Department's acceptance of this vapor extraction proposal is based upon the following conditions:

- 1) Following a period of soil vapor extraction and treatment, the success of the system in remediating fuel-impacted soils must be evaluated. Such an evaluation will not be based solely upon an observed reduction of target compound concentrations in the soil vapor influent. Confirmatory soil borings and sample analyses are required. The locations of such borings must be approved in advance by this Department.

Mr. Chuck Carmel  
RE: ARCO #2152, 22141 Center Street, Castro Valley  
January 30, 1992  
Page 3 of 4

- 2) Additional soil vapor extraction wells will be required if the effectiveness of the present design is hampered by the proximity of the tank backfill to the present extraction points. Such additional wells must be located where they will be most able to enhance the volatilization and removal of fuel hydrocarbons from native soil. The locations and number of additional vapor extraction wells must be approved in advance by this Department.
- 3) Should soil vapor extraction prove to be an ineffective tool for reducing fuel hydrocarbon concentrations to acceptable levels, additional soil remediation techniques may be required.

We appreciate ARCO's patience while awaiting the Department's review of the referenced RESNA/AGS soil vapor extraction work plan. As I discussed with you and Mr. Coffman last week, neither the September 26 ARCO correspondence or the October 22 RESNA/AGS work plan contained all the information needed for an informed review of the soil vapor extraction proposal. Several key plates and equipment specification sheets were missing from both documents, even though the text in both documents indicated that such plates/specification sheets were included. However, the December 9, 1991 RESNA/AGS permit application to the BAAQMD provided many of the key elements missing from the prior two documents, as described below.

Among the plates missing from the October 22 work plan were: 1) the remediation compound layout and process flow diagram (Plate 4); 2) typical trench and wellhead details (Plate 5); 3) process and instrumentation drawing (Plate 6); and, 4) electrical one-line diagram (Plate 7). Fortunately, the December 9 RESNA/AGS permit application did provide the most important of these plates for our purposes, Plate 4. Also, the missing trench and wellhead connection diagram was provided as two separate plates in the September 26 ARCO correspondence, as Plates 3 and 4, respectively. However, Plates 5, 6, and 7, as intended for inclusion in the RESNA/AGS work plan, are still missing. (Please note that the October 22 work plan provided diagrams labelled Plates 4 through 7, but were actually site geologic cross sections, not the remediation system diagrams as indicated in text.)

The September 26 ARCO correspondence provided general background information for the project, much of which was intended to respond to comments outlined in the September 4 correspondence from this office, as indicated previously in this letter. However, as with the RESNA/AGS work plan, information referenced as being included with this document were missing: 1) a description of activated carbon and the performance curve for the vapor-extraction blower; and, 2) vapor-extraction blower specifications. Fortunately, these specifications were provided in the noted December 9 RESNA/AGS permit application.

Mr. Chuck Carmel  
RE: ARCO #2152, 22141 Center Street, Castro Valley  
January 30, 1992  
Page 4 of 4

In closing, I would like to comment on statements made in RESNA/AGS correspondence dated January 23, 1992. This letter was apparently authored after I spoke with both you and Mr. Coffman on January 23. The letter states that RESNA/AGS had attempted to contact me by telephone several times over an unspecified period of time, and that messages were left for me to call. The letter also states that I had not returned any of RESNA/AGS's calls. Who placed these calls was not indicated. The letter further states that none of their (RESNA/AGS) messages had been returned, until that day, January 23rd.

For the record, my call to Mr. Coffman was not in response to a message left by RESNA/AGS, but rather by my initiative to inform him, as I did you, that I was beginning to review the soil vapor extraction work plan and related documents. To my best recollection, the only calls I have received regarding this case have been from you, not RESNA/AGS. As you know, both of us left messages for each other over the course of several weeks without a connection, a symptom of both our busy schedules.

The Department expects that we will be contacted once the soil vapor extraction system has been installed, and the system is ready for start-up. Please feel free to contact me at 510/271-4320 should you have any questions or comments.

Sincerely



Scott O. Seery, CHMM  
Senior Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health  
Edgar Howell, Chief, Hazardous Materials Division  
Gil Jensen, Alameda County District Attorney's Office  
Lester Feldman, RWQCB  
Howard Hatayama, DTSC  
Bob Bohman, Castro Valley Fire Department  
Joel Coffman, RESNA/Applied GeoSystems (San Jose office)  
John P. Meck, ARCO Products Company, Legal Division  
files

January 14, 1992

92 JAN 15 PM 2:17

Mr. Edgar Howell  
Alameda County Department of Environmental Health  
80 Swan Way  
Oakland, California 94621

**ARCO Products Company Facilities in Alameda County**

Dear Mr. Howell:

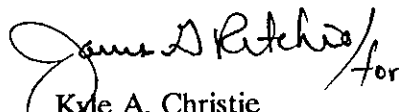
Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the fourth quarter of 1991; also included are projected site activities for the first quarter of 1992 and a bibliography of reports submitted for each location.

The QSRs are classified by city and address within Alameda County. We are submitting this document and attached QSRs as agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning a subsequent comprehensive QSR submittal for ARCO sites on April 15, 1992. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely yours,

  
for  
Kyle A. Christie  
Environmental Engineer

Attachments: ARCO Facility QSRs

UST LEAK Date of Last Current  
SITE UPDATE Review/Update September 6, 1991 Date January 6, 1992

SITE IDENTIFICATION

Name ARCO Service Station 2152 Case No.  
Address 22141 Center Street  
Street Number Street  
Castro Valley 94546  
City ZIP Code  
County Alameda Substance Gasoline  
Local Agency Alameda County Health Care Services Agency  
Regional Board Regional Water Quality Control Board

LEAD STAFF PERSON ACHCSA - Scott Seery

CASE TYPE

Undetermined Soil Only X Ground Water Drinking Water

STATUS (Date indicates when case moved into status)

<input type="checkbox"/>	No Action Taken	Date	
<input checked="" type="checkbox"/>	Leak Being Confirmed	Date	8/89
<input checked="" type="checkbox"/>	Preliminary Site Assessment Workplan Submitted	Date	4/90
<input checked="" type="checkbox"/>	Preliminary Site Assessment Underway	Date	6/90
<input checked="" type="checkbox"/>	Pollution Characterization	Date	1/91
<input checked="" type="checkbox"/>	Remediation Plan	Date	12/91
<input type="checkbox"/>	Remedial Action Underway	Date	
<input type="checkbox"/>	Post Remedial Action Monitoring	Date	
<input type="checkbox"/>	Case Referred to Regional Board	Date	
<input type="checkbox"/>	Case Referred to Dept. of Health Services	Date	
<input type="checkbox"/>	Case Closed	Date	

COMMENTS/MILESTONES:

USTs and product lines replaced in August through October 1989. 1850 cubic yards of soil excavated and aerated onsite; soil removed to landfill. Submitted initial proposal to install wells, and permit on I.C. engine and carbon. Submitted BAAQMD permit applications.

RECENT ACTIVITIES/FINDINGS:

Last Quarter Activities: Submitted report of subsurface investigation and remediation investigation (July 2, 1990). Performed quarterly groundwater monitoring and reporting.

Current Quarter Activities: Submitted Work Plan to ACHCSA on 10/21/91. Submitted Third Quarter 1991 Groundwater Monitoring report. Submitted BAAQMD permit application 12/10/91.

ANTICIPATED ACTIVITIES:

Next Quarter Activities: ARCO to perform quarterly groundwater monitoring. Building permit application in progress at Building Department. ARCO to prepare quarterly groundwater monitoring report.

Reports documenting the site's history are listed on page 2.



<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Fourth Quarter 1991 Groundwater Monitoring Report (DRAFT) 69013.09	12/17/91	RESNA
Permit Application for an Authority to Construct and Permit to Operate a Vapor Extraction System 69013.08	12/9/91	RESNA
Work Plan for Additional Subsurface Environmental Investigation and Design and Permitting of Vapor Extraction System 69013.08	10/22/91	RESNA
Third Quarter 1991 Groundwater Monitoring Report 69013.05	10/18/91	RESNA
Supplemental Subsurface and Remedial Investigation 69013-6	7/02/91	RESNA/Applied GeoSystems
Letter Report on Second Quarter 1991 Ground-Water Monitoring AGS 69013-5	5/20/91	RESNA/Applied GeoSystems
Letter Report Quarterly Ground-Water Monitoring, First Quarter 1991 AGS 69013-5	03/24/91	Applied GeoSystems
Environmental Subsurface Investigation at ARCO 2152, Castro Valley, CA AGS 69013-4	11/13/90	Applied GeoSystems
Addendum to Work Plan, Initial Subsurface Investigation at ARCO 2152, Castro Valley, CA AGS 69013-3	5/14/90	Applied GeoSystems
Work Plan-Initial Subsurface Investigation at ARCO 2152 Castro Valley, CA AGS 69013-3W	4/1/90	Applied GeoSystems
Environmental Investigation Related to Underground Tank Removal AGS 69013-2	1/18/90	Applied GeoSystems
Limited Environmental Site Assessment, Castro Valley, CA AGS 69013-1	5/26/89	Applied GeoSystems

ARCO Products Company  
2000 Alameda de las Pulgas  
Mailing Address: Box 5811  
San Mateo, California 94402  
Telephone 415 571 2400



Date: October 14, 1991

Re: ARCO Station #

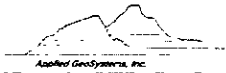
" I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached proposal or report are true and correct."

Submitted by:

A handwritten signature in black ink, appearing to read 'Kyle Christie'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Kyle A. Christie  
Environmental Engineer

91 OCT 15 PM 2:29



A RESNA Company

**RESNA**

Working To Restore Nature

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

92 JAN 10 1992

January 8, 1992  
0107ssry

Mr. Scott Seery  
Alameda County Health Care Services Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94621

Subject: Request for Review of Work Plan for Additional Subsurface Investigation and Design and Permitting of Vapor Extraction System at ARCO Station 2152, 22141 Center Street, Castro Valley, California.

Dear Mr. Seery:

This letter is submitted to request your review and any comments you may have concerning the subject Work Plan submitted to your agency by RESNA on October 21, 1991. To date, we haven't received any response to the proposed work outlined in the subject Work Plan and are currently awaiting either your comments or approval to proceed.

*work plan dated  
Oct 22, 1991 -  
submitted on same date*

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

Sincerely,  
RESNA

Joel Coffman  
Project Geologist

cc: Chuck Carmel, ARCO Products Company

UST LEAK Date of Last Current  
SITE UPDATE Review/Update September 6, 1991 Date January 6, 1992

SITE IDENTIFICATION

Name ARCO Service Station 2152 Case No.  
Address 22141 Center Street Street  
Street Number Street  
Castro Valley City 94546 ZIP Code  
City ZIP Code  
County Alameda Substance Gasoline  
Local Agency Alameda County Health Care Services Agency  
Regional Board Regional Water Quality Control Board

LEAD STAFF PERSON ACHCSA - Scott Seery

CASE TYPE

Undetermined Soil Only X Ground Water Drinking Water

STATUS (Date indicates when case moved into status)

- No Action Taken
X Leak Being Confirmed Date 8/89
X Preliminary Site Assessment Workplan Submitted Date 4/90
X Preliminary Site Assessment Underway Date 6/90
X Pollution Characterization Date 1/91
X Remediation Plan Date 12/91
Remedial Action Underway Date
Post Remedial Action Monitoring Date
Case Referred to Regional Board Date
Case Referred to Dept. of Health Services Date
Case Closed Date

COMMENTS/MILESTONES:

USTs and product lines replaced in August through October 1989. 1850 cubic yards of soil excavated and aerated onsite; soil removed to landfill. Submitted initial proposal to install wells, and permit on I.C. engine and carbon. Submitted BAAQMD permit applications.

RECENT ACTIVITIES/FINDINGS:

Last Quarter Activities: Submitted report of subsurface investigation and remediation investigation (July 2, 1990). Performed quarterly groundwater monitoring and reporting.
Current Quarter Activities: Submitted Work Plan to ACHCSA on 10/21/91. Submitted Third Quarter 1991 Groundwater Monitoring report. Submitted BAAQMD permit application 12/10/91.

ANTICIPATED ACTIVITIES:

Next Quarter Activities: ARCO to perform quarterly groundwater monitoring. Building permit application in progress at Building Department. ARCO to prepare quarterly groundwater monitoring report.
Reports documenting the site's history are listed on page 2.

<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Fourth Quarter 1991 Groundwater Monitoring Report (DRAFT) 69013.09	12/17/91	RESNA
Permit Application for an Authority to Construct and Permit to Operate a Vapor Extraction System 69013.08	12/9/91	RESNA
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Limited Environmental Site Assessment, Castro Valley, CA AGS 69013-1	5/26/89	Applied GeoSystems

October 14, 1991

Alameda County Department of Environmental Health  
80 Swan Way  
Oakland, California 94621

Attention: Mr. Edgar Howell

**ARCO Products Company Facilities in Alameda County**

Dear Mr. Howell:


Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the third quarter of 1991; also included are projected site activities for the fourth quarter of 1991 and a bibliography of reports submitted for each location.

The QSRs are classified by County and by address within the County. We are submitting this document and attached QSRs as previously agreed. Please note that we are forwarding copies of the QSRs to the Regional Water Quality Control Board (RWQCB).

Please also note that ARCO Products Company has reviewed the RWQCB's February 19, 1991 printout of ARCO fuel leak sites. We evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. Those locations for which ARCO is not responsible were listed and described in the QSR package delivered to you on July 15, 1991. The attached QSRs therefore represent only those locations for which ARCO is responsible.

ARCO is planning a subsequent QSR submittal for ARCO sites on January 15, 1992. Please do not hesitate to contact me with any questions regarding this submittal.

Sincerely,

  
Kyle A. Christie  
Environmental Engineer

Attachments:  
ARCO Facility QSRs

UST LEAK Date of Last Current  
SITE UPDATE Review/Update April 15, 1991 Date September 6, 1991

SITE IDENTIFICATION

Name ARCO Service Station 2152 Case No.  
Address 22141 Center Street Street  
Street Number Street  
Castro Valley City 94546 ZIP Code  
City ZIP Code  
County Alameda Substance Gasoline  
Local Agency Alameda County Health Care Services Agency  
Regional Board Regional Water Quality Control Board

LEAD STAFF PERSON ACHCSA - Scott Seery

CASE TYPE

Undetermined Soil Only X Ground Water Drinking Water

STATUS (Date indicates when case moved into status)

No Action Taken  
X Leak Being Confirmed Date 8/89  
X Preliminary Site Assessment Workplan Submitted Date 4/90  
X Preliminary Site Assessment Underway Date 6/90  
X Pollution Characterization Date 1/91  
Remediation Plan Date  
Remedial Action Underway Date  
Post Remedial Action Monitoring Date  
Case Referred to Regional Board Date  
Case Referred to Dept. of Health Services Date  
Case Closed Date

REMEDIAL ACTIONS

USTs and product lines replaced in August through October 1989. 1850 cubic yards of soil excavated and aerated onsite; soil removed to landfill.

COMMENTS

Last Quarter Activities: Performed subsurface investigation and Vapor Extraction Test. Performed quarterly groundwater monitoring and reporting.  
Current Quarter Activities: Submitted report of subsurface investigation and remediation investigation (July 2, 1990). Performed quarterly groundwater monitoring and reporting.  
Next Quarter Activities: Perform quarterly groundwater monitoring and reporting. Initiate design of vapor extraction system.  
Reports documenting the site's history are listed on page 2.

<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Supplemental Subsurface and Remedial Investigation	7/02/91	RESNA/Applied GeoSystems
Letter Report on Second Quarter 1991 Ground-Water Monitoring AGS 69013-5	5/20/91	RESNA/Applied GeoSystems
Letter Report Quarterly Ground-Water Monitoring, First Quarter 1991 AGS 69013-5	03/24/91	Applied GeoSystems
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Limited Environmental Site Assessment, Castro Valley, CA AGS 69013-1	5/26/89	Applied GeoSystems



ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



September 4, 1991

Mr. Charles Carmel  
Arco Products Company  
P.O. Box 6411  
Artesia, CA 90702-6411

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

RE: ARCO STATION # 2152, 22141 CENTER STREET, CASTRO VALLEY, ALAMEDA COUNTY

Dear Mr. Carmel:

The Alameda County Environmental Health Department, Hazardous Materials Division, is in receipt and has completed review of the following Applied GeoSystems reports documenting the ongoing investigation at the referenced Castro Valley facility: Letter Report, Quarterly Ground-Water Monitoring, First Quarter 1991: March 24, 1991; Letter Report, Quarterly Ground-Water Monitoring, Second Quarter 1991: May 20, 1991; and, Supplemental Subsurface and Remedial Investigation: July 2, 1991. Based on the results of ground water monitoring performed to date, with the sole exception being the first round of sampling June 1990, ground water appears not to be impacted by fuel hydrocarbons resulting from past leaks from the former underground storage tank (UST) systems prior to their replacement in 1989. The June 1990 "hits" may have been as a result of isolated laboratory-induced errors, as no target compounds have been detected in sampled ground water since.

This Department agrees in principle that soil venting/vapor extraction may be a reasonable approach, at least initially, to remediate soils impacted by fuel hydrocarbons. The scientific literature recognizes the difficulty in remediating fuel hydrocarbon contamination in soils with low permeability ( $k < 10^1$  darcys), typical of the silts and clays underlying the subject site. Under such low permeability conditions, particularly with clays, contamination may be difficult to remove by any method, short of excavation. Other factors also may influence the effectiveness of a soil vapor extraction system, such as soil moisture content, temperature, capillary forces, adsorption site density, stratigraphy, and any other factors which may impact the radius of influence ( $R_1$ ) from an extraction well (e.g., vertical vapor flow).

Not all the induced air flow will pass through regions of soil impacted by contaminants, such as in areas where air flow is enhanced by passing through the permeable tank pit backfill, limiting the effective air flow rate, and skewing the anticipated venting project's duration. If conditions allow vapor flow through the contaminated regions, however, the more volatile compounds benzene, toluene, and xylenes, will be effectively removed fairly rapidly. Unfortunately, gasoline contains 10-20% of relatively nonvolatile compounds ( $>C_{10}$ ) which are not readily removed by soil venting/vapor extraction.

Mr. Charles Carmel

RE: Arco #2152, 22141 Center St., Castro Valley

September 4, 1991

As stated previously, the Department accepts in "principle" the use of soil venting/vapor extraction as a means of in situ treatment of contaminated soils underlying the site. However, additional technical information, in the form of a remediation system proposal, is required before the project may officially be accepted. The following is a list, albeit incomplete, of the type of additional information required by this Department:

- o Describe permit requirements (i.e., BAAQMD, TSCD TTU variance, Alameda County Building Dept., etc.)
- o TSCD TTU contingency plan
- o Engineering drawings, site plan showing equipment locations/plumbing, equipment cut sheets (e.g., TTU, air flow meters, bypass/flow control valves, sampling ports, etc.)
- o Automated microprocessor or manual data logging systems
- o Treatment unit specifications
- o Fans: forced draft injection or induced draft extraction (positive vs. negative pressure systems)
- o Monitoring requirements: ground water, soils, process air flows and temperatures, exhaust gas, equipment, etc.
- o Proposed schedule for installation and start-up of the system
- o Exposure pathway analysis

As stated previously, the success of a soil venting/vapor extraction system is highly dependent upon site-specific conditions. Both bench-scale and pilot-scale studies support that success is best achieved in highly permeable sandy soils with little or no clays. Such studies have shown that low porosity or clayey soils will require additional time to establish the effective pressure gradient required to enhance volatilization. Recovery periods will likewise reflect site-specific conditions, and are a function of those environmental and engineering factors limiting preferential air flow through the contaminated zones.

A means of determining the effectiveness of the system during its operation, as well as after the proposed 4 month duration of the project, will need to be addressed in the pending remediation proposal. The life of the project will then need to be modified as appropriate, or the technology changed (e.g., enhanced in situ biodegradation), based on its success following the initial treatment period.

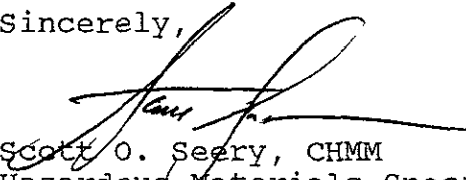
Mr. Charles Carmel  
RE: Arco #2152, 22141 Center St., Castro Valley  
September 4, 1991  
Page 3 of 3

Please submit the soil venting/vapor extraction proposal within 45 days of the date of this letter, or by October 20, 1991.

Please be advised that this is a formal request for technical reports pursuant to California Water Code Section 13267 (b). Failure to respond or a late response could result in the referral of this case to the RWQCB for enforcement, possibly subjecting the responsible party to civil penalties to a maximum of \$1,000 per day. Any extensions of the stated deadlines, or modifications of the required tasks, must be confirmed in writing by either this agency or the RWQCB.

Should you have any questions about the content of this letter, please call me at 510/271-4320.

Sincerely,



Scott O. Seery, CHMM  
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health  
Edgar Howell, Chief, Hazardous Materials Division  
Gil Jensen, Alameda County District Attorney's Office  
Lester Feldman, RWQCB  
Howard Hatayama, TSCD  
Bob Bohman, Castro Valley Fire Department  
Joan Tiernan, Applied GeoSystems (San Jose office)  
files

July 15, 1991

Alameda County Department of Environmental Health  
80 Swan Way  
Oakland, California 94621

Attention: Mr. Rafat Shahid

**ARCO Products Company Facilities in Alameda County - RWQCB Fuel Leaks List**

Dear Mr. Shahid

Please find attached, Quarterly Summary Reports (QSRs) for ARCO Products Company Service Stations in Alameda County. The QSRs summarize activities conducted by ARCO at the respective sites during the second quarter of 1991; also included are projected site activities for the third quarter of 1991 and a bibliography of reports submitted for each location.

The QSRs are classified by address within the County. We are submitting this document and attached QSRs as agreed in our recent meeting with the RWQCB. Please note that we are forwarding copies of the QSRs to the RWQCB as well.

ARCO Products Company has reviewed the Regional Water Quality Control Board's (RWQCB) February 19, 1991 printout of ARCO fuel leak sites in the San Francisco Bay Area. We have evaluated each site with respect to ARCO's responsibility for investigation, monitoring, and/or remediation. It is ARCO's belief that several of the sites originally attributed to ARCO are actually the responsibility of other parties. We have therefore prepared QSRs and a brief discussion regarding those sites which we believe should either be removed from ARCO responsibility or be considered for closure.

ARCO is planning a subsequent comprehensive QSR submittal for ARCO sites on October 15, 1991. Please do not hesitate to contact us with any questions regarding this submittal.

Sincerely,



*for* Kyle A. Christie  
Environmental Engineer

Attachments:

Non-ARCO Facility/Site Closure Discussion and QSRs  
ARCO Facility QSRs

**NON-ARCO FACILITY/SITE CLOSURE DISCUSSION AND QSRS**

**Alameda County**

### Alameda County Sites

Two ARCO facilities including Station Numbers 4977 and 6002 (located at 2770 Castro Valley Road, Castro Valley and 6235 Seminary Avenue, Oakland) experienced vapor/vent line failure during UST system precision testing. In accordance with State Water Resources Control Board (SWRCB) letter LG-43, ARCO requests that these facilities be removed from the RWQCB fuel leaks list.

A small volume of hydrocarbons were released from ARCO Station Number 498 located at 286 South Livermore Avenue, Livermore. The product was released to an on-site secondary containment trench and was subsequently removed; no product was released to the soil or groundwater. Alameda County issued a letter to ARCO on May 24, 1991 stating that no further action is necessary at this site.

A total of seven Alameda County ARCO facilities listed by the RWQCB were not ARCO-owned at the time of the release discovery and/or report. These sites include Station Numbers 188, 329, and 623 (respectively located at 4191 First Street, Pleasanton, 2032 12th Street, Oakland, and 2110 Mountain, Oakland) and facilities located at 2951 High Street, 4401 Market Street, 2844 Mountain Boulevard, and 2740 98th Street, Oakland.

ARCO has prepared QSRs for each of these facilities; however, we request that the cases be omitted from the leaks list or be referred to the actual responsible party, as appropriate. The ownership information for the individual sites is included on the attached QSRs.

Finally, the RWQCB February 19, 1991 printout lists two sites which are actually the same. The facility listed as 71 MacArthur Boulevard is actually ARCO Service Station Number 4931 located at 731 West MacArthur Boulevard in Oakland.

Attachment:  
Non-ARCO Facility QSRs

UST LEAK                      Date of Last                      Current  
SITE UPDATE                  Review/Update                  April 15, 1991                  Date                  July 15, 1991

SITE IDENTIFICATION

Name                  ARCO Service Station 2152                  Case No. \_\_\_\_\_  
Address                  22141 Center Street                                  Street  
                                        Street Number                                  Street  
                                        Castro Valley    94546  
                                        City    ZIP Code  
County                  Alameda    Substance                  Gasoline  
Local Agency                  Alameda County Health Care Services Agency  
Regional Board                  Regional Water Quality Control Board

LEAD STAFF PERSON                  ACHCSA - Scott Seery

CASE TYPE

\_\_\_\_\_ Undetermined                  \_\_\_\_\_ Soil Only                  \_\_\_\_\_ Ground Water                  \_\_\_\_\_ Drinking Water

STATUS (Date indicates when case moved into status)

\_\_\_\_\_ No Action Taken    Date \_\_\_\_\_  
\_\_\_\_\_ Leak Being Confirmed    Date \_\_\_\_\_  
\_\_\_\_\_ Preliminary Site Assessment Workplan Submitted    Date \_\_\_\_\_  
\_\_\_\_\_ Preliminary Site Assessment Underway    Date \_\_\_\_\_  
\_\_\_\_\_ Pollution Characterization    Date \_\_\_\_\_  
\_\_\_\_\_ Remediation Plan    Date \_\_\_\_\_  
\_\_\_\_\_ Remedial Action Underway    Date \_\_\_\_\_  
\_\_\_\_\_ Post Remedial Action Monitoring    Date \_\_\_\_\_  
\_\_\_\_\_ Case Referred to Regional Board    Date \_\_\_\_\_  
\_\_\_\_\_ Case Referred to Dept. of Health Services    Date \_\_\_\_\_  
\_\_\_\_\_ Case Closed    Date \_\_\_\_\_

REMEDIAL ACTIONS

COMMENTS

In fourth quarter 1991 ARCO drilled 9 soil borings, installed 3 additional vadose zone wells, and performed an onsite Vapor Extraction Test (VET) to evaluate the effectiveness of vapor extraction as a soil remediation technique. Hydrocarbons in ground water remain non-detectable. ARCO is currently monitoring water levels monthly and water quality quarterly.

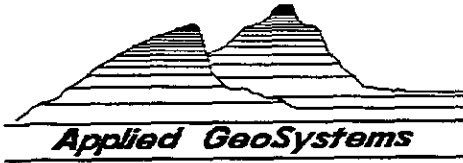
Please refer to the attached page for listing of previously submitted reports which document site history.

RESPONSIBLE PARTY IDENTIFICATION (Only if newly discovered or changed)

Name                  \_\_\_\_\_  
Contact                  \_\_\_\_\_    Phone (       ) \_\_\_\_\_  
Address                  \_\_\_\_\_  
                                        Street Number    Street  
                                        City    State    ZIP Code

<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Letter Report on Second Quarter 1991 Ground-Water Monitoring AGS 69013-5	5/20/91	RESNA/Applied GeoSystems
Letter Report Quarterly Ground-Water Monitoring, First Quarter 1991 AGS 69013-5	03/24/91	Applied GeoSystems
Environmental Subsurface Investigation at ARCO 2152, Castro Valley, CA AGS 69013-4	11/13/90	Applied GeoSystems
Addendum to Work Plan, Initial Subsurface Investigation at ARCO 2152 Castro Valley, CA AGS 69013-3	5/14/90	Applied GeoSystems
Work Plan-Initial Subsurface Investigation at ARCO 2152 Castro Valley, CA AGS 69013-3W	4/1/90	Applied GeoSystems
Environmental Investigation Related to Underground Tank Removal AGS 69013-2	1/18/90	Applied GeoSystems
Limited Environmental Site Assessment, Castro Valley, CA AGS 69013-1	5/26/89	Applied GeoSystems





**TRANSMITTAL**

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

TO: MR. SCOTT SEERY  
ALAMEDA COUNTY HEALTH AGENCY  
DEPARTMENT OF ENVIRON. HEALTH  
80 SWAN WAY, ROOM 200  
OAKLAND, CA 94621

DATE: 11/20/90  
 PROJECT NUMBER: 69013-4  
 SUBJECT: RESPONSE TO LETTER

FROM: STEVE BITTMAN  
 TITLE: ASST. PROJECT GEOLOGIST

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:  
 Shop drawings  Prints  Reports  Specifications  
 Letters  Change Orders  \_\_\_\_\_

COPIES	DATED	NO.	DESCRIPTION
1	11/19/90	69013-4	RESPONSE TO ALAMEDA COUNTY HEALTH AGENCY
			LETTER DATED OCTOBER 25, 1990 REGARDING
			ARCO STATION 2152, 22141 CENTER STREET, CASTRO
			VALLEY, CA.

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  \_\_\_\_\_

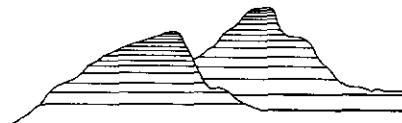
REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Copies: 1 to AGS project file no. 69013-4

SJ READER'S FILE  
 90-1117 92 AON 05

\*Revision Date: 10/15/90  
 \*File Name: TRANSMT.PRJ

<u>REPORT</u>	<u>DATE</u>	<u>CONSULTANT</u>
Environmental Subsurface Investigation at ARCO 2152, Castro Valley, CA	11/13/90	Applied GeoSystems
Addendum to Work Plan, Initial Subsurface Investigation at ARCO 2152 Castro Valley, CA AGS 69013-1	5/14/90	Applied GeoSystems
Work Plan-Initial Subsurface Investigation at ARCO 2152 Castro Valley, CA AGS 69013-3W	4/1/90	Applied GeoSystems
Environmental Investigation Related to Underground Tank Removal	1/18/90	Applied GeoSystems
Limited Environmental Site Assessment, Castro Valley, CA AGS 69013-1	5/26/89	Applied GeoSystems



**Applied GeoSystems**

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

• FREMONT • IRVINE • HOUSTON • BOSTON • SACRAMENTO • CULVER CITY • SAN JOSE

November 19, 1990  
69013-4  
1114ssry

Mr. Scott Seery  
Alameda County Health Agency  
Department of Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94621

Subject: Response to Alameda County Health Agency letter dated October 25, 1990 regarding ARCO Station 2152, 22141 Center Street, Castro Valley, California.

Mr. Seery:

This letter, written on ARCO's behalf, is a response to your letter to ARCO, dated October 25, 1990, regarding frequency of ground-water monitoring of wells MW-1 through MW-4 at the subject site. The initial sampling of these wells on June 25 and 26, 1990, indicated low levels of TPHg and BTEX (below regulatory guidelines) present in the ground-water beneath the site. On September 26, 1990, we performed the third quarter 1990 monitoring at the site. The results of the third quarter 1990 laboratory analyses of water samples from wells MW-1 through MW-4 indicate that concentrations of TPHg and BTEX in these wells are below the laboratory detection limit (50 and 0.05 ppb respectively).

Because very low or nondetectable levels of TPHg and BTEX have been reported in the wells at the site both times they have been sampled, ARCO will perform quarterly ground-water monitoring at this site to evaluate trends in TPHg and BTEX concentrations and changes in ground-water gradient with time. We request that you postpone your requirement for three consecutive monthly ground-water sampling events until such a time levels of TPHg and or BTEX necessitate further investigation in the wells at the site. We expect to begin monthly ground-water level measurements at the site in December 1990. A copy of our report, Environmental Subsurface Investigation addressing items 1 through 6 in your letter referenced above, will be sent to you by November 19, 1990.

Response to Alameda County Health Agency  
ARCO Station 2152, Castro Valley, California

November 19, 1990  
AGS 69013-4

---

If you have any questions or comments, please call me at (408) 264-7723.

Sincerely,



Steve Bittman  
Assistant Project  
Geologist



Greg Barclay  
Branch Manager

cc: Mr. Kyle Christie (Arco Products Company)

ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY

DAVID J. KEARS, Agency Director

Certified Mailer # P 062 128 311

DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Program

80 Swan Way, Rm. 200

Oakland, CA 94621

(415)

October 25, 1990

Mr. Kyle Christy  
ARCO Products Company  
2000 Alameda de las Pulgas  
P.O. Box 5811  
San Mateo, CA 94402

RE: REVIEW OF PRELIMINARY SITE ASSESSMENT REPORT; ARCO STATION  
#2152, 22141 GROVE WAY, CASTRO VALLEY, ALAMEDA COUNTY

Dear Mr. Christie:

This Department is in receipt and has completed review of the Applied GeoSystems (AGS) report entitled, "SUMMARY REPORT, Third Quarter 1990", submitted on October 15, 1990. This report documents work performed during the second and third quarter of 1990 at the referenced site.

The noted AGS report indicates that between June 12 and 19, 1990 four (4) ground water and two (2) vapor wells were installed at the referenced site. Soil samples collected during advancement of the borings were analyzed for fuel hydrocarbon constituents. Water samples were collected from monitoring wells MW-1 through MW-4 (borings B-4 through B-7) on June 26 and September 26, 1990 and subsequently analyzed. The initial samples collected June 26 showed elevated levels of target compounds in three of the four wells sampled; samples collected September 26 showed non detectable (ND) concentrations in all wells sampled.

During this Department's review, several areas requiring clarification or the submittal of supplemental information were identified, as follows:

- 1) Driller's logs associated with borings advanced during June 1990 are not provided. Well construction diagrams illustrating such items as: the depth and diameter of wells; casing type and diameter; depth and type of seal; and, screen interval, filter pack material, and slot size are also not provided. Such well logs and construction diagrams must be submitted;
- 2) Provide groundwater gradient maps and calculations based upon depth-to-ground water soundings collected during the June and September 1990 sampling events. The data presented in the noted gradient maps must be based upon the initial well elevation survey to an established or designated datum, to the accuracy of 0.01 foot, and converted to elevations above mean sea level (MSL). Describe surveying methods;

Mr. Kyle Christie  
RE: 22141 Grove Way, Castro Valley  
October 25, 1990  
Page 2 of 3

- 3) Copies of original laboratory reports and chain-of-custody forms are not provided. Submit copies of these documents;
- 4) Quality control/quality assurance (QA/QC) samples appear (by their absence in the report) not to have been analyzed. All sampling events must include an adequate number of QA/QC samples, which may involve some combination of trip, field or sampler blanks, and spike samples. Laboratory reports must provide the results of the analyses of such samples;
- 5) Discuss: criteria for the selection of particular soil samples collected during boring advancement and submitted for analyses; water level measurement procedures; methods for free product measurement, and observation of sheen and odor; well development procedures and documentation supporting the adequacy of such development; well purging procedures; disposal/storage plans for purged formation water and soil cuttings; sample collection procedures; any unusual conditions encountered, or observations, made during drilling and/or ground water sampling; etc., etc.;
- 6) All reports are to be under seal and signature of an appropriate California-certified professional (i.e., geologist or civil engineer).

The noted information is to be submitted within 15 days, or by **November 9, 1990**. Without such information, the complete interpretation of the data presented in this and subsequent reports is difficult, as is the issuance of recommendations from this Department.

At this time, and in addition to requests made above for the submittal of supplementary information, the following tasks must also be performed following the protocol stated herein:

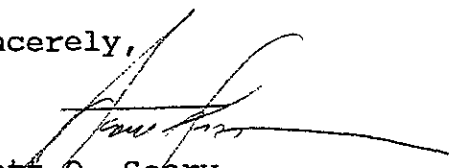
- 1) Water levels of each well must be measured and recorded monthly for the next year, **beginning October 1990**, and then quarterly thereafter. Such data is to be tabulated and presented on ground water gradient maps in subsequent quarterly reports;
- 2) All wells are to be sampled monthly for the next two months, **beginning October 1990**. Therefore, sampling must occur during late October and late November 1990 which, together with September's sampling event, will provide data for three consecutive months. The monthly sampling frequency may be reduced to quarterly after this three month period provided the concentrations of target compounds remain nondetectable (ND);

Mr. Kyle Christy  
RE: 22141 Grove Way, Castro Valley  
October 25, 1990  
Page 3 of 3

- 3) Summary reports are to be submitted quarterly to this Department and the RWQCB for the duration of this project, as designated by final "sign off" by the RWQCB. Such quarterly reports are to detail work performed during the reporting period, and are due the first day of the second month of each subsequent quarter (i.e., February 1, May 1, August 1, and November 1). The next quarterly report is due February 1, 1991 and must document activities performed during the 4th quarter of 1990.

Please be advised that this is a formal request for technical reports pursuant to California Water Code Section 13267(b). Failure to respond or a late response could result in the referral of this case to the RWQCB for enforcement, possibly subjecting the responsible party to civil penalties to a maximum of \$1,000 per day. Any extensions of stated deadlines, or the modifications of the required tasks, must be confirmed in writing by either this agency or the RWQCB.

Should you have any questions regarding the content of this letter, please contact me at 415/271-4320.

Sincerely,  


Scott O. Seery  
Hazardous Materials Specialist

cc: Rafat A. Shahid, Assistant Agency Director, Environmental Health  
Edgar Howell, Chief, Hazardous Materials Division  
Gil Jensen, Alameda County District Attorney's Office  
Howard Hatayama, DHS  
Lester Feldman, RWQCB  
Bob Bohman, Castro Val.  
Steve Bittman, AGS  
files

PS Form 3800, June 1985

Sent to	
Street and No.	
P.O. State and ZIP Code	
Postage	
Certified Fee	
Special Delivery Fee	
Registered Mail Fee	
Collectors' Postage	
Postmark or Date	

RECEIPT FOR CERTIFIED MAIL  
NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)  
P 062 128 311

Arco Station #2152  
Center Street  
Castro Valley

MEMO to file:

9-4-90

Steve Bittman of Applied GeoSystems (AGS) spoke with me today re: The referenced site. He indicated that AGS's initial report won't be ready until about another month. Apparently, AGS is swamped. This report will document work done during the initial installation of vapor and H<sub>2</sub>O wells at The site during June (?) 1990.

I informed Mr. Bittman that groundwater elevation determinations must occur monthly for the next year, and that, minimally, H<sub>2</sub>O samples are to be collected monthly for the first quarter (3 mos.). The beginning date for such sampling/measuring is September 1, 1990. Therefore, the first year of monthly H<sub>2</sub>O determinations will end Sept. 1, 1991.

SOS



ALAMEDA COUNTY  
HEALTH CARE SERVICES



AGENCY

DAVID J. KEARS, Agency Director

May 31, 1990

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

Mr. Steven Bittman  
Applied GeoSystems, Inc.  
3315 Almaden Expressway, Suite 34  
San Jose, CA 95118

RE: PRELIMINARY SITE ASSESSMENT WORKPLAN PROPOSAL; ARCO STATION  
#2152, 22141 CENTER STREET, CASTRO VALLEY

Dear Mr. Bittman:

We are in receipt and have completed review of the May 14, 1990 Applied GeoSystems, Inc. (AGS) addendum, as submitted under cover dated May 15, 1990, to the April 1, 1990 workplan proposal for the investigation of subsurface contamination at the referenced site. This Department has accepted the scope of the current phase of work at this site as amended. However, please be certain that stockpiled drill cutting sampling protocol is consistent with that required by the State DHS and RWQCB for proper characterization of soils prior to disposal.

We understand that field activities associated with this phase of the site investigation are scheduled to begin in early June 1990. We will expect the submittal of a report documenting the results of the noted investigation within 30 days of the completion of this phase of work at this site.

Should you have any questions, please call me at 415/271-4320.

Sincerely,

  
Scott O. Seery  
Hazardous Materials Specialist

SOS:sos

cc: Rafat A. Shahid, Assistant Agency Director, Department of  
Environmental Health  
Edgar Howell, Chief, Hazardous Materials Division  
Gil Jensen, Alameda County District Attorney's Office  
Howard Hatayama, DHS  
Lester Feldman, RWQCB  
Bob Bohman, Castro Valley Fire Department  
Kyle Christie, ARCO Products Co.  
files

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



May 3, 1990

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

Mr. Steve Bittman  
Applied GeoSystems  
3315 Almaden Expressway, Ste. 34  
San Jose, CA 95118

RE: PRELIMINARY SITE ASSESSMENT WORKPLAN PROPOSAL; ARCO STATION  
#2152, 22141 CENTER STREET, CASTRO VALLEY

Dear Mr. Bittman:

This letter is in response to this Department's review of the April 1, 1990 Applied GeoSystems (AGS) workplan proposal for the investigation of subsurface contamination at the referenced site, as submitted under AGS cover dated April 10, 1990. The noted workplan may be approved for this stage of the site assessment provided the following issues are resolved or clarified to the satisfaction of this Department:

- 1) Submit a Site Safety Plan. Reference is made to an AGS Site Safety Plan on page 19 of the April 1 proposal, but such a plan was not provided. Please be certain that the proposed Site Safety Plan adheres to guidelines specified under Part 1910.120(i)(2) of 29 CFR;
- 2) Please discuss how the proposed vadose zone wells will be used following their construction in borings B-8 and B-9. Describe where the screened or slotted interval will be placed in each boring in relation to the native soil/backfill interface at the bottom of the tank excavation;
- 3) Submit typical groundwater and vadose well schematic construction diagrams;
- 4) Please discuss field sample QA/QC protocol;
- 5) Please discuss boring abandonment procedures; and,
- 6) Please discuss the storage and disposal of formation water generated as a result of well development and purging. Also, indicate how drill cuttings will be properly characterized and disposed.

Please submit, in a timely fashion, a response which adequately addresses the previous list of items. This submittal may be in the form of an addendum to the April 1 proposal. Additionally, please submit a copy of your response to the RWQCB (Attn: Lester Feldman).

Mr. Steve Bittman  
RE: Arco Station #2152, 22141 Center Street  
May 3, 1990  
Page 2 of 2

Should you have any questions, please call me at 415/271-4320.

Sincerely,



Scott Seery  
Hazardous Materials Specialist

SOS:sos

cc: Rafat A. Shahid, Assistant Agency Director, Alameda County  
Department of Environmental Health  
Edgar Howell, Chief, Hazardous Materials Division  
Gil Jensen, Alameda County District Attorney's Office  
Howard Hatayama, DHS  
Lester Feldman, RWQCB  
Bob Bohman, Castro Valley Fire Department  
Kyle Christie, Arco Products Co.  
files



**TRANSMITTAL**

**3315 Almaden Expressway, Suite 34**  
 San Jose, California 95118  
 (408) 264-7723 FAX (408) 264-7435

**TO:** MR. SCOTT SEERY  
ALAMEDA COUNTY DEPARTMENT OF  
ENVIRONMENTAL HEALTH  
80 SWAN WAY, SUITE 200  
OAKLAND, CA 94621

**DATE:** 4/27/90  
**PROJECT NUMBER:** 69013-3  
**SUBJECT:** CHECK#286 for \$831.00

**FROM:** STEVE BITTMAN  
**TITLE:** PROJECT GEOLOGIST

WE ARE SENDING YOU  Attached  Under separate cover via \_\_\_\_\_ the following items:  
 Shop drawings  Prints  Reports  Specifications  
 Letters  Change Orders  CHECK#286 FOR \$831.00

COPIES	DATED	NO.	DESCRIPTION
			CHECK FOR \$831.00 (REVIEW FEE)

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 AGS project file no. 69013-3 SJ READER'S FILE  
ARCHIVE

5268868

Arco Station  
22141 Center St

MEMO to file:

4-3-90

I spoke with Kyle Christie of Arco today re: the submittals of final closure & PSA proposal reports for above site. He said that these will be submitted by next week along with \$ 831 to cover costs.

SOS

UST LEAK Date of Last Current  
SITE UPDATE Review/Update October 15, 1990 Date January 15, 1990

SITE IDENTIFICATION

Name ARCO Service Station 2152 Case No. \_\_\_\_\_  
Address 22141 Center Street  
Street Number Street  
Castro Valley 94546  
City ZIP Code  
County Alameda Substance Gasoline  
Local Agency Alameda County Environmental Health Department  
Regional Board Regional Water Quality Control Board

LEAD STAFF PERSON ACEHD - Scott Seery

CASE TYPE

Undetermined  Soil Only  Ground Water  Drinking Water

STATUS (Date indicates when case moved into status)

No Action Taken  
 Leak Being Confirmed Date \_\_\_\_\_  
 Preliminary Site Assessment Workplan Submitted Date \_\_\_\_\_  
 Preliminary Site Assessment Underway Date \_\_\_\_\_  
 Pollution Characterization Date \_\_\_\_\_  
 Remediation Plan Date \_\_\_\_\_  
 Remedial Action Underway Date \_\_\_\_\_  
 Post Remedial Action Monitoring Date \_\_\_\_\_  
 Case Referred to Regional Board Date \_\_\_\_\_  
 Case Referred to Dept. of Health Services Date \_\_\_\_\_  
 Case Closed Date \_\_\_\_\_

REMEDIAL ACTIONS

Installation of 2 vapor extraction wells planned for week of January 14, 1991.

COMMENTS

In the previous quarter ARCO performed onsite investigation for assessment of possible soil and/or ground-water contamination. Soil has been impacted by hydrocarbons; groundwater does not contain hydrocarbon constituents. Additional assessment report to be issued during late first-early second quarter of 1991. ARCO is currently monitoring water levels monthly and water quality quarterly.

Please refer to the attached page for listing of previously submitted reports which document site history.

RESPONSIBLE PARTY IDENTIFICATION (Only if newly discovered or changed)

Name \_\_\_\_\_  
Contact \_\_\_\_\_ Phone (\_\_\_\_\_) \_\_\_\_\_  
Address \_\_\_\_\_  
Street Number Street  
City State ZIP Code

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



Cerified Mailer #P 833 981 262

December 26, 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
30 Swan Way, Rm. 200  
Oakland, CA 94621  
(415)

Mr. Steve Welge  
Atlantic Richfield Co.  
2000 Alameda de las Pulgas  
P. O. Box 5811  
San Mateo, CA 94402

RE: FINAL CLOSURE REPORT, SITE ASSESSMENT PROPOSAL; ARCO STATION  
#2152, 22141 CENTER STREET, CASTRO VALLEY

Dear Mr. Welge:

This letter is written in the wake of several phone calls from this office to you and your colleague, Ron Miles, regarding the submittal of a final report documenting the closure of five (5) underground fuel storage tanks (UST) in August 1989, and the request for a site assessment proposal for the investigation of subsurface contamination at the referenced site.

As you may recall, all tanks were removed from the referenced site as of August 18, 1989. Excavation of the former tank pit, piping runs, and dispenser islands continued through the end of August, culminating with the installation of four (4) new USTs on September 1, 1989. A final inspection of the UST leak detection system occurred on October 20, 1989. This station has since been operating.

The Alameda County Department of Environmental Health requires specific steps to be followed in the enforcement of the State Underground Storage Tank Laws and Regulations pursuant to Chapter 6.7 of the State Health and Safety Code and Title 23, California Code of Regulations. One such requirement is that a final report documenting all UST closure activities be submitted within 60 days of the completed closure. Said report would include, but not be limited to, the following elements:

- 1) Chain of Custody Sheets for all laboratory samples;
- 2) Copies of the original, signed Laboratory Reports;
- 3) Summary of laboratory results;

Mr. Steve Welge  
RE: Arco Station #2151  
22141 Center St.  
Castro Valley  
December 26, 1989  
Page 2 of 3

- 4) Copies of TSD-to-Generator waste disposal receipts/manifests;
- 5) Maps and figures depicting sample collection localities, structures, streets, etc.; and,
- 6) A discussion interpreting what environmental impact, if any, there has been upon the site, and recommendations for further work, if required.

To date, such a final report has not been submitted.

Further, initial field observations made during closure substantiate that a release of product had occurred at this site. Verbal reporting of laboratory analysis results of soil samples collected by the Applied Geosystems geologist overseeing the project confirmed that latent contamination up to 3800 ppm of total petroleum hydrocarbons as gasoline (TPH-G) still remain at a depth of approximately 22 feet. Contamination of this magnitude verifies, minimally, that the site has experienced a "confirmed release," according to the San Francisco Bay Regional Water Quality Control Board (RWQCB) fuel leak criteria.

As a result of this site's "confirmed release" status, additional investigative work must be performed to further define the extent of vertical and lateral impact upon groundwater and soils resulting from the noted contamination. The information gathered by this investigation must be used to determine an appropriate course of action to remediate the site. This preliminary site assessment should be conducted in accordance with the RWQCB Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks. The major elements of such an investigation are summarized in the attached Appendix A.

In order to proceed with a site investigation, you should obtain professional services from a reputable engineering/geotechnical consulting firm. The responsibility of your consultant is to submit for review a proposal outlining planned activities pertinent to meeting the criteria broadly outlined in this letter and the attached Appendix A. Once the preliminary site assessment has been completed, a technical report summarizing site related activities, conclusions and recommendations must be submitted to this office and the RWQCB. All reports and proposals must be submitted under seal of a California-Certified Engineering Geologist, California-Registered Geologist or California-Registered Civil Engineer.

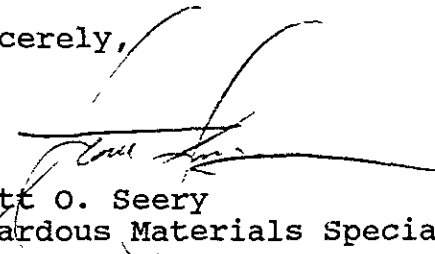


Mr. Steve Welge  
RE: Arco Station #2151  
22141 Center St.  
Castro Valley  
December 26, 1989  
Page 3 of 3

Please submit a Preliminary Site Assessment proposal within thirty (30) days, and the final Closure Report within fifteen (15) days, of the date of this letter. Accompanying the site assessment proposal must be a check for an additional \$831 to help defer the cost of our review of this plan and our oversight of the remediation process. This check should be made out to the County of Alameda. A copy of this proposal should also be sent to the RWQCB (Attn: Lester Feldman) for their review.

Should you have any questions, please call the undersigned at (415) 271-4320.

Sincerely,



Scott O. Seery  
Hazardous Materials Specialist

SOS:mam

Enclosure

cc: Rafat A. Shahid, Assistant Agency Director, Alameda County  
Department of Environmental Health  
Lester Feldman, RWQCB  
Bob Bohman, Castro Valley Fire Dept.  
Gil Jensen, Alameda County District Attorney, Consumer and  
Environmental Protection Division  
Mike Hood, Alameda County Building & Inspection Department  
Ron Miles, Arco  
Steve Bittman, Applied Geosystems  
Files

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



May 24, 1989

DEPARTMENT OF ENVIRONMENTAL HEALTH  
Hazardous Materials Program  
80 Swan Way, Rm. 200  
Oakland, CA 94621  
(415) 271-4320

Mr. Steve Welge  
Atlantic Richfield Company  
2000 Alameda de las Pulgas  
P.O. Box 5811  
San Mateo, CA 94402

RE: TANK CLOSURE APPLICATION, ARCO #2152, 22141 CENTER STREET,  
CASTRO VALLEY

Dear Mr. Welge:

Our office has completed a review of the tank closure plan dated April 24, 1989 for the referenced facility as submitted by Robert H. Lee & Associates. The following items must be addressed prior to the issuance of this department's approval of these plans:

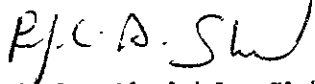
1. Provide the EPA Waste Generator Identification Number for this site. (Item 5)
2. Provide the name, address and phone number of the prime contractor engaged in tank removals. Indicate the contractor's license number and license type. (Item 6)
3. The total number of tanks at this facility is six (6) according to tank registration forms currently on file. This is contrary to information supplied in the tank closure application which identifies three (3) tanks. (Item 9)
4. Indicate the State registered hazardous waste transporters and TSD facilities, and provide all requested information. (Item 11)
5. Provide the name, address and phone number of the company retained to collect samples. (Item 12)
6. Provide assurance that a minimum of two (2) confirmatory soil samples will be collected from beneath each tank, one sample from each end, at the native soil/backfill interface. Include proposed sampling protocol for soil and water sample collection if groundwater is present in the tank excavations. Refer to RWQCB guidelines. (Item 13)
7. Provide a brief description of tank and/or pipe leak history. Present application indicates that no leaks have occurred in the past. (Item 14)
8. Provide the name, address, phone number, and State Certification Number for the laboratory contracted for sample analysis. (Item 16)

Mr. Steve Welge  
UNOCAL Corporation  
RE: 18950 Lake Chabot Rd.  
Castro Valley  
May 24, 1989  
Page 2 of 2

9. Provide a summary of sample preparation and analysis methods for soil and water samples to be collected beneath and/or adjacent to the fuel and waste oil tanks. Please be specific. These tests and preparation methods must reflect the RWQCB's Recommended Minimum Verification Analyses for Underground Tank Leaks, Table #2, October 6, 1988 revision (attached). (Item 17)
10. Submit a site safety plan. Please reference the February 1989 closure plan instruction sheet, Item 3, issued by this agency (enclosed). (Item 18)
11. Provide a copy of the Workman's Compensation Certificate and the name of the insurer. (Item 19)
12. Provide an abbreviated plot plan to be kept together with the closure form, so that the tank installation plans may be kept separate. (Item 20)
13. Please have prime contractor sign and date the amended application.

Please respond to the above list of items through the submittal, in triplicate, of an amended tank closure plan. Should you have any questions, please call Scott Seery, Hazardous Materials Specialist, at 415/271-4320.

Sincerely,



Rafat A. Shahid, Chief  
Hazardous Materials Division

RAS:SOS:mam

cc: Ziaga Gianino, Robert H. Lee & Associates  
James Walker, Arco Station #2152  
Bogni Associates  
Perry Maraftabi, Alameda County Building and Inspection Dept.  
Bob Bohman, Castro Valley Fire Dept.  
Scott Hugenberger, RWQCB  
Scott Seery, Alameda County Hazardous Materials Division  
Files

Enclosures



PACIFIC  
ENVIRONMENTAL  
GROUP INC.

April 10, 1989 <sup>11:45</sup>  
Project No. 330-03.01

Mr. Scott Seery  
Alameda County Public Health Services  
Hazardous Materials Section  
80 Swan Way, Suite 200  
Oakland, CA 94621

Subject: ARCO Station #2152  
22141 Center Street  
Castro Valley, CA 94546

Dear Mr. Seery:

Enclosed is the Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report for the subject ARCO Petroleum Products Company Station. Please distribute the report as noted in the instructions on the reverse side of each form.

Should you have any questions or comments regarding this matter, please do not hesitate to call Mr. Kyle Christie of ARCO at (415) 571-2434.

Sincerely,

PACIFIC ENVIRONMENTAL GROUP, INC.

*Tina Berry*

Tina Berry  
Staff Geologist

enclosure

cc: Kyle Christie, ARCO  
Chris Winsor, ARCO



2000 Alameda de las Pulgas  
San Mateo, CA 94403

Date: 12/14/89

To: SCOTT SEERY

From: Elaine J. Lavine

SM 255

ph 415 571 2435 <sup>2482</sup>

- Approval
- Handling
- Note
- Note and return
- Per your request
- Your comment
- Your information
- Your signature
- Your file

89 DEC 20 A

STEVE WELGE ASKED ME TO  
FORWARD THIS REPORT TO  
YOU.

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE.
REPORT DATE 0 <sup>m</sup> 4 <sup>m</sup> 1 <sup>d</sup> 0 <sup>d</sup> 8 <sup>yr</sup> 9 <sup>yr</sup>	CASE #	SIGNED _____ DATE _____

REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Tina Berry	PHONE (408) 984-6536	SIGNATURE As. Agent for ARCO <i>Ima Berry</i>	
	REPRESENTING <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER _____	COMPANY OR AGENCY NAME Pacific Environmental Group, Inc.		
	ADDRESS 1601 Civic Center Dr., Ste. 202 Santa Clara CA 95050			

RESPONSIBLE PARTY	NAME ARCO Petroleum Products Co. <input type="checkbox"/> UNKNOWN	CONTACT PERSON Mr. Kyle Christie	PHONE (415) 571-2434
	ADDRESS 2000 Alameda de las Pulgas, Ste. 218 San Mateo CA 94402		

SITE LOCATION	FACILITY NAME (IF APPLICABLE) ARCO Service Station #2152	OPERATOR James A. Walker	PHONE (415) 581-1268	
	ADDRESS 22141 Center Street Castro Valley Alameda 94546			
	CROSS STREET Grove	TYPE OF AREA <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> RURAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> OTHER _____	TYPE OF BUSINESS <input checked="" type="checkbox"/> RETAIL FUEL STATION <input type="checkbox"/> FARM <input type="checkbox"/> OTHER _____	

IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda Co. Public Health Service	AGENCY NAME Alameda Co. Public Health Service	CONTACT PERSON Mr. Scott Seery	PHONE (415) 271-4320
	REGIONAL BOARD San Francisco Bay Region		CONTACT PERSON Mr. Don Dalke	PHONE (415) 464-0838

SUBSTANCES INVOLVED	(1) NAME Gasoline (Unleaded)	QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN
	(2) _____	<input type="checkbox"/> UNKNOWN

DISCOVERY/ABATEMENT	DATE DISCOVERED 0 <sup>m</sup> 3 <sup>m</sup> 2 <sup>d</sup> 2 <sup>d</sup> 8 <sup>yr</sup> 9 <sup>yr</sup>	HOW DISCOVERED <input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS <input checked="" type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER _____		
	DATE DISCHARGE BEGAN <input checked="" type="checkbox"/> UNKNOWN	METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> REPLACE TANK <input checked="" type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> OTHER _____		
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 0 <sup>m</sup> 3 <sup>m</sup> 2 <sup>d</sup> 2 <sup>d</sup> 8 <sup>yr</sup> 9 <sup>yr</sup>			

SOURCE/CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER _____	TANKS ONLY/CAPACITY _____ GAL AGE _____ YRS <input checked="" type="checkbox"/> UNKNOWN	MATERIAL <input type="checkbox"/> FIBERGLASS <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> OTHER _____	CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> SPILL <input type="checkbox"/> OTHER _____
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CASE TYPE	CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)
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CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) <input type="checkbox"/> CLEANUP IN PROGRESS <input type="checkbox"/> SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> NO FUNDS AVAILABLE TO PROCEED <input checked="" type="checkbox"/> EVALUATING CLEANUP ALTERNATIVES
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REMEDIAL ACTION	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input checked="" type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> OTHER (OT) _____
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COMMENTS  
 Two of three unleaded tanks did not pass isolation precision test due to probable air pockets within tanks.

MAY 16 1989

20 782 CLOSE

01

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

QUALITY CONTROL BOARD

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25100.7 OF THE HEALTH AND SAFETY CODE.
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REPORT DATE 0 <u>M</u> 4 <u>M</u> 1 <u>D</u> 0 <u>D</u> 8 <u>Y</u> 9 <u>Y</u>	CASE #	SIGNED	DATE
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REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Tina Berry	PHONE (408) 984-6536	SIGNATURE As Agent for ARCO Tina Berry
	REPRESENTING <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER	COMPANY OR AGENCY NAME Pacific Environmental Group, Inc.	
	ADDRESS 1601 Civic Center Dr., Ste. 202 Santa Clara CA 95050		

RESPONSIBLE PARTY	NAME ARCO Petroleum Products Co. <input type="checkbox"/> UNKNOWN	CONTACT PERSON Mr. Kyle Christie	PHONE (415) 571-2434
	ADDRESS 2000 Alameda de las Pulgas, Ste. 218 San Mateo CA 94402		

SITE LOCATION	FACILITY NAME (IF APPLICABLE) ARCO Service Station #2152	OPERATOR James A. Walker	PHONE (415) 581-1268
	ADDRESS 22141 Center Street Castro Valley Alameda 94546		
	CROSS STREET Grove	TYPE OF AREA <input checked="" type="checkbox"/> COMMERCIAL <input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> RURAL <input type="checkbox"/> RESIDENTIAL <input type="checkbox"/> OTHER	TYPE OF BUSINESS <input checked="" type="checkbox"/> RETAIL FUEL STATION <input type="checkbox"/> FARM <input type="checkbox"/> OTHER

IMPLEMENTING AGENCIES	LOCAL AGENCY Alameda Co. Public Health Service	AGENCY NAME	CONTACT PERSON Mr. Scott Seery	PHONE (415) 271-4320
	REGIONAL BOARD San Francisco Bay Region		CONTACT PERSON Mr. Don Dalke	PHONE (415) 464-0838

SUBSTANCES INVOLVED	(1) NAME Gasoline (Unleaded)	QUANTITY LOST (GALLONS) <input checked="" type="checkbox"/> UNKNOWN
	(2)	<input type="checkbox"/> UNKNOWN

DISCOVERY/ABATEMENT	DATE DISCOVERED 0 <u>M</u> 3 <u>M</u> 2 <u>D</u> 2 <u>D</u> 8 <u>Y</u> 9 <u>Y</u>	HOW DISCOVERED <input checked="" type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> OTHER	<input type="checkbox"/> INVENTORY CONTROL <input type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS
	DATE DISCHARGE BEGAN <input checked="" type="checkbox"/> UNKNOWN	METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> REPLACE TANK <input checked="" type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> OTHER	
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE 0 <u>M</u> 3 <u>M</u> 2 <u>D</u> 2 <u>D</u> 8 <u>Y</u> 9 <u>Y</u>		

SOURCE/CAUSE	SOURCE OF DISCHARGE <input checked="" type="checkbox"/> TANK LEAK <input type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER	TANKS ONLY/CAPACITY _____ GAL AGE _____ YRS <input checked="" type="checkbox"/> UNKNOWN	MATERIAL <input type="checkbox"/> FIBERGLASS <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> OTHER	CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> SPILL <input type="checkbox"/> OTHER
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CASE TYPE	CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)
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CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM) <input type="checkbox"/> CLEANUP IN PROGRESS <input type="checkbox"/> SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> NO FUNDS AVAILABLE TO PROCEED <input checked="" type="checkbox"/> EVALUATING CLEANUP ALTERNATIVES
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REMEDIAL ACTION	CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS) <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input checked="" type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> OTHER (OT)
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COMMENTS  
Two of three unleaded tanks did not pass isolation precision test due to probable air pockets within tanks.

CND 20 782  
CLOSED

# UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY  YES  NO HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED?  YES  NO

FOR LOCAL AGENCY USE ONLY: I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25100.7 OF THE HEALTH AND SAFETY CODE.

REPORT DATE: M / M / D D / Y Y CASE # \_\_\_\_\_ SIGNED: \_\_\_\_\_ DATE: JUN 22 1988

REPORTED BY: NAME OF INDIVIDUAL FILING REPORT: **KYLE A. CHRISTIE** PHONE: (415) 571-2434 SIGNATURE: *Kyle Christie*

REPRESENTING:  OWNER/OPERATOR  REGIONAL BOARD  LOCAL AGENCY  OTHER COMPANY OR AGENCY NAME: **Arco Products Company**

ADDRESS: **2000 Alameda de las Pulgas, San Mateo, CA 94103**

RESPONSIBLE PARTY: NAME: **Arco Products Co.**  UNKNOWN CONTACT PERSON: **Kyle Christie** PHONE: (415) 571-2434

ADDRESS: **2000 Alameda de las Pulgas, San Mateo, CA 94403**

SITE LOCATION: FACILITY NAME (IF APPLICABLE): **Arco Station 2152** OPERATOR: **James A. Walker** PHONE: (415) 581-1268

ADDRESS: **2241 Center Street, Castro Valley, CA 94546**

CROSS STREET: **Grove** TYPE OF AREA:  COMMERCIAL  INDUSTRIAL  RURAL  RESIDENTIAL  OTHER TYPE OF BUSINESS:  RETAIL FUEL STATION  FARM  OTHER

IMPLEMENTING AGENCIES: LOCAL AGENCY: **Alameda Co. Health Dept.** AGENCY NAME: **Ed Howell** CONTACT PERSON: **Ed Howell** PHONE: (415) 874-7237

REGIONAL BOARD: **S.F. Bay R.W.Q.C.B.** CONTACT PERSON: **Greg Zentner** PHONE: (415) 464-0804

SUBSTANCES INVOLVED: (1) **Unleaded Gasoline** NAME: **Unleaded Gasoline** QUANTITY LOST (GALLONS):  UNKNOWN  UNKNOWN

DISCOVERY/ABATEMENT: DATE DISCOVERED: **03/10/88** HOW DISCOVERED:  TANK TEST  INVENTORY CONTROL  TANK REMOVAL  SUBSURFACE MONITORING  OTHER  NUISANCE CONDITIONS

DATE DISCHARGE BEGAN:  UNKNOWN METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY):  OTHER DISCONTINUE TANK TEST  REMOVE CONTENTS  REPLACE TANK  CLOSE TANK  REPAIR TANK  REPAIR PIPING  CHANGE PROCEDURE

HAS DISCHARGE BEEN STOPPED?  YES  NO IF YES, DATE: **03/10/88**

SOURCE/CAUSE: SOURCE OF DISCHARGE:  OTHER vapor/vent line  TANK LEAK  PIPING LEAK  UNKNOWN

TANKS ONLY/CAPACITY: \_\_\_\_\_ GAL. AGE: \_\_\_\_\_ YRS. MATERIAL:  FIBERGLASS  STEEL  OTHER

CAUSE(S):  RUPTURE/FAILURE  OVERFILL  CORROSION  SPILL  UNKNOWN  OTHER

CASE TYPE: CHECK ONE ONLY  UNDETERMINED  SOIL ONLY  GROUNDWATER  DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)

CURRENT STATUS: CHECK ONE ONLY  SITE INVESTIGATION IN PROGRESS (DEFINING EXTENT OF PROBLEM)  CLEANUP IN PROGRESS  SIGNED OFF (CLEANUP COMPLETED OR UNNECESSARY)  NO ACTION TAKEN  POST CLEANUP MONITORING IN PROGRESS  NO FUNDS AVAILABLE TO PROCEED  EVALUATING CLEANUP ALTERNATIVES

REMEDIAL ACTION: CHECK APPROPRIATE ACTION(S) (SEE BACK FOR DETAILS)

CAP SITE (CD)  EXCAVATE & DISPOSE (ED)  REMOVE FREE PRODUCT (FP)  ENHANCED BIO DEGRADATION (IT)

CONTAINMENT BARRIER (CB)  EXCAVATE & TREAT (ET)  PUMP & TREAT GROUNDWATER (GT)  REPLACE SUPPLY (RS)

TREATMENT AT HOOKUP (HU)  NO ACTION REQUIRED (NA)  OTHER (OT)

COMMENTS: **Tests showed vapor/vent line leaks only. Repairs will be made and retest results submitted.**

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD



QUARTERLY SUMMARY REPORT  
Alameda County  
April 1989

ARCO Service Station No. 2152  
22141 Center Street  
Castro Valley, California

BRIEF HISTORY

- March 10, 1988, a vapor/vent line leak was detected in an unleaded gasoline system during annual tank testing at the site. The system was repaired.
- April 6, 1988, the system passed retest. An underground Storage Tank Unauthorized Release (Leak) Report and results of tank testing were sent from Brown and Caldwell to Alameda County Division of Environmental Health on June 7, 1988.
- Per Letter LG-43 (State Water Resources Control Board), ARCO plans no further work at this site at this time.

ACCEPTED 6-12-89  
 505  
 DEPARTMENT OF ENVIRONMENTAL HEALTH  
 470 - 27th Street, Third Floor  
 Oakland, CA 94612  
 Telephone: (415) 874-7237

These plans have been reviewed and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your plans indicated by the Department are to assure compliance with State and local laws. The project proposed herein is now released for issuance of any required building permits for construction. One copy of these accepted plans must be on file and available to all contractors and craftsmen involved in the removal.

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
 DEPARTMENT OF ENVIRONMENTAL HEALTH  
 HAZARDOUS MATERIALS DIVISION

170 27TH ST., RM. 302 80 Swan Way, Room 200  
 OAKLAND, CA 94612  
 PHONE NO. 15/8 271-4320

Any change or alterations of these plans and must be submitted to this Department Building Inspection Department to insure that changes meet the requirements of State and local laws. Notify this Department of least 48 hours before the following required inspections:  
 8-17-89 Removal of Tank and  
 8-18-89 Sampling  
 Final Inspection

Issuance of a permit to operate is dependent upon compliance with accepted plans and all applicable regulations.  
 THERE IS A FINANCIAL PENALTY FOR OBTAINING THESE INSPECTIONS

Amended Tank Closure Plan (6.6.89)

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

- Business Name ARCO Facility # 2152  
 Business Owner James A. Walker
- Site Address 22141 Center Street  
 city Castro Valley zip 94546 Phone (415) 581-1268
- Mailing Address Same  
 City \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_
- Land Owner Bogni Assoc.  
 Address P.O. Box 4258 city, state Fremont, CA zip 94539
- EPA I.D. No. CAL 000 009 866
- Contractor Paradiso Const.  
 Address 9220 'G' Street  
 city Oakland, CA 94603 Phone (415) 562-5511  
 License Type A, B, C-61 & D-40 ID# 259820  
C-8, C10
- Other (Specify) Arch./Eng. Consultants - R.H. Lee & Assoc., attn: Zaiga Gianino  
 Address 900 Larkspur Landing Circle #125  
 city Larkspur, CA 94939 Phone (415) 461-8890

8. Contact Person for Investigation

Name Steve Welge Title ARCO Const./Field Engineer

Phone (415) 770-9489

9. Total No. of Tanks at facility 5

10. Have permit applications for all tanks been submitted to this office? Yes  No [ ]

11. State Registered Hazardous Waste Transporters/Facilities

a) Product/Waste Tranporter

Name H. & H. Ship Service (Env. Services) EPA I.D. No. CAD 004 771 668  
TSD # 38-001-78

Address 220 China Basin

City San Francisco State CA Zip 94107

b) Rinsate Transporter

Name same as item a) EPA I.D. No. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

c) Tank Transporter

Name Same as item a) EPA I.D. No. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

d) Contaminated Soil Transporter

Name Dillard Trucking Inc. EPA I.D. No. CAD 981692809  
Reg. Hauler # 1715

Address Route 1, Box 73

City Byron State CA Zip 94514

12. Sample Collector

Name Applied Geo Systems attn: Greg Barclay

Company Applied Geo Systems

Address 3315 Almaden Expressway, Suite 34

City San Jose State CA Zip 95118 Phone (408) 264-7723

13. Sampling Information for each tank or area

Tank or Area		Material sampled	Location & Depth
Capacity (4) 6,000 gallon & (1) 12,000 gallon tank	Historic Contents (past 5 years) Gasoline stored only (Super Unleaded, Regular Unleaded & Regular Leaded Fuels)	Soil (Groundwater <u>only</u> if encountered)	ARCO will excavate all contaminated soil & backfill to a depth of 18 to 20 feet, at this depth soil samples will be collected at the locations under excavated tanks per RWQCB guidelines.
		Also refer to ARCO letter (dated 6.6.89) From Mr. Kyle Christie - ARCO env. eng.	

14. Have tanks or pipes leaked in the past? Yes [ ] No

If yes, describe. Note: Recent (Mar 14 and 15, 1989) PETROTITE Tests  
indicating leaking UST systems in tanks 1, 2, 3, & 4, with leak rates  
as high as 8.0 gal/hr. Two tanks have since been removed from service

15. NFPA methods used for rendering tank inert? Yes  No [ ]

If yes, describe. 10 lbs. of dry ice per 1,000 gal. of tank volume.

30 lbs. per Castro Valley F.D.

16. Laboratories

Name Applied Geo Systems

Address 43255 Mission Blvd.

City Fremont

State CA

Zip 94539

State Certification No. #153

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
TPH	EPA 5030	EPA 8020
BETX	EPA 5030	EPA 8020
<p>Soil samples from beneath the product tank complex will be prepared and analyzed by DOHS-certified labs using proper EPA methodology. Analyses included TPH as gasoline and BETX compounds by EPA Method 8020 with extraction according to EPA Method 5030. Waste oil soil samples will be analyzed for TPH by EPA Method 8015 modified with extraction by EPA methods 5030 and 3550, oil and grease by Method 503D&amp;E, Chlorinated hydrocarbons and BETX compounds by EPA Method 8240, and if required atomic adsorption to detect Cd, Cr, Pb, and Zn, and Method 8270 for PCB, PCP, PNA, and creosote.</p>		

18. Site Safety Plan submitted? Yes  No [ ]

19. Workman's Compensation: Yes  No [ ]

Copy of Certificate enclosed? Yes  No [ ]

Name of Insurer R. C. FISCHER & COMPANY INSURANCE

20. Plot Plan submitted? Yes  No [ ]

21. Deposit enclosed? Yes  No [ ]

22. Please forward to this office the following information within 60 days after receipt of sample results.

- a) Chain of Custody Sheets
- b) Original Signed Laboratory Reports
- c) TSD to Generator copies of wastes shipped and received
- d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I will notify the Department of Environmental Health at least two (2) working days (48 hours) in advance to schedule any required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Signature of Contractor

Name (please type) MARY GONZALES  
Signature Mary Gonzales  
Date 6-6-89

Signature of Site Owner ~~or~~ Operator

Name (please type) Steve Welge - ARCO Construction/Field Engineer  
Signature Steve L. Welge  
Date 6.6.89

NOTES:

1. Any changes in this document must be approved by this Department.
2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.
3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.
4. A copy of your approved plan must be sent to the landowner.

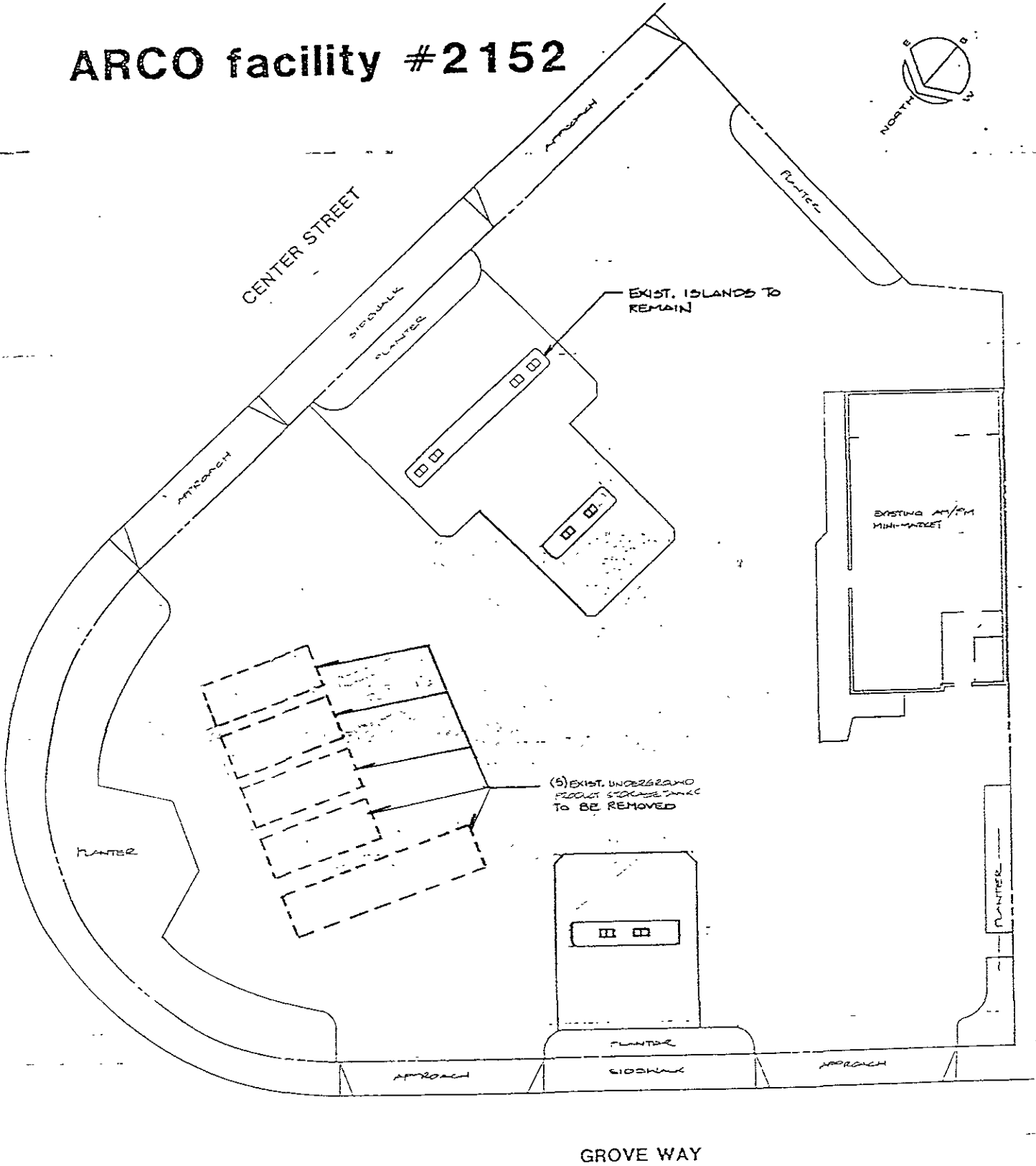
UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

ATTACHMENT A

SAMPLING RESULTS

Tank or Area	Contaminant	Location & Depth	Results (specify units)

# ARCO facility #2152



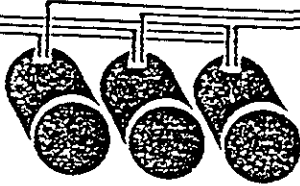
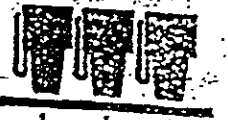
## TANK & PIPING REMOVAL

22141 Center Street  
Castro Valley, CA 94546



# PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS



LICENSE NO. 259820

P.O. BOX 6397

9220 "G" STREET OAKLAND, CA 94603

(415) 562-5511

## GENERAL

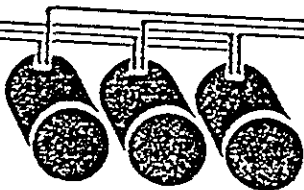
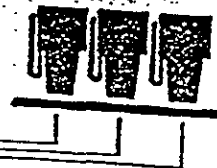
The company will furnish all safety equipment and tools to keep your place of work safe as possible. "use them".

Housekeeping: Keep the jobsite clear of scrap materials and debris especially near the trenches and excavations.

Barricades: The bulk of our work involves underground tanks and piping, so it involves trenching and excavation and a good many sites are kept in operation; we also have to provide safety for the general public. Use an ample amount of barricades and trench covers so that customers that are trying to use the facility are aware of the hazard that exists. Be especially aware of children that come on the site to see what is going on, and keep them well away from the excavation and equipment, or better yet keep them off the site entirely.

# PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS



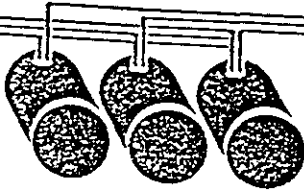
LICENSE NO. 259820  
P.O. BOX 6397  
9220 "G" STREET OAKLAND, CA 94603  
(415) 562-5511

## PERSONAL PROTECTIVE EQUIPMENT

1. EYE PROTECTION: When cutting or burning, chipping or breaking concrete, or anytime you are subjected to eye injury, wear your goggles or safety glasses.
2. HEAD PROTECTION: When you are working in an area where you are subjected to falling objects or the site is a hard hat area, wear your hard hat.
3. BODY PROTECTION: Clothing appropriate for the work must be worn.
4. FOOT PROTECTION: Wear sturdy shoes appropriate to the work you are doing. When using a pavement breaker wear your toe protection devices.
5. HAND PROTECTION: When handling rough materials such as timbers, steel sheets, bars, and scrap; wear your gloves.
6. HEARING PROTECTION: When using a pavement breaker or operating noisy equipment, use your ear protection.
7. RESPIRATORY PROTECTION: Respirators must be worn when working in a confined space where dangerous air contamination exists, when sand blasting where toxic material evolves or when welding where there may be toxic substances.

# PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS



LICENSE NO. 259820

P.O. BOX 6397

9220 "G" STREET OAKLAND, CA 94603

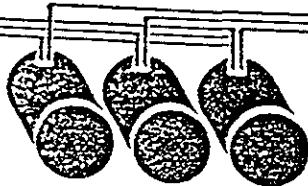
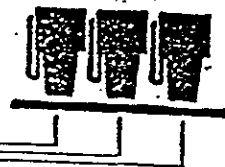
(415) 562-5511

## EQUIPMENT

1. Only trained or experienced employees may operate equipment.
2. Equipment operators must be sure other workers are clear before moving or operating this equipment. When changing buckets, be certain that the workers helping to change the bucket is clear before moving the boom. When using the boom for hoisting or moving equipment and or materials be sure the worker is clear before lifting or taking a strain on rigging.
3. Don't use damaged slings or cables, if they are questionable, call the office for replacement.
4. Avoid operations that expose employees to overhead loads.

# PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS



LICENSE NO. 259820

P.O. BOX 6397

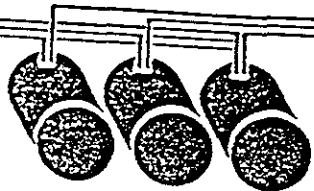
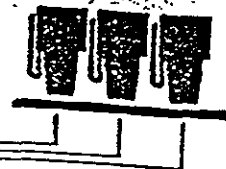
9220 "G" STREET OAKLAND, CA 94603

(415) 562-5511

## TOOLS

1. Don't use tools and equipment that are not in good repair; notify the office of the repairs that are needed.
2. All power tools are to be grounded.
3. SKILL SAWS: Saw guard must not be blocked open.
4. AIR COMPRESSORS: Air tank must be drained often, safety valve must be popped daily, all hoses to have safety clasp, and don't disconnect under pressure.
5. LADDERS: Defective or unsafe ladders will not be used, they shall be repaired or scrapped.

**PARADISO CONSTRUCTION CO.**  
GENERAL & PETROLEUM CONTRACTORS



LICENSE NO. 259820

P.O. BOX 6397

9220 "G" STREET OAKLAND, CA 94603

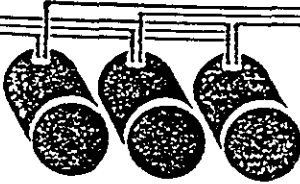
(415) 562-5511

FIRE PROTECTION/PREVENTION

1. **SMOKING:** No smoking on any service station site except in an approved area away from the islands and tanks.
2. **FLAMMABLE LIQUIDS:** No sources of ignition are allowed in any work area where there is presence of flammable liquids, gasoling etc...
3. **FIRE EXTINGUISHERS:** All trucks and heavy equipment are to be equipped with one 5 lb. A.B.C. extinguisher.
4. Gasoline should not be used as a cleaning agent.
5. No burning or welding should be done in an enclosed tank or vessel until it has been determined that there is no possibility of fire or explosion.
6. A gas detection device is available, all persons should be familiar with this device and know how to use it.

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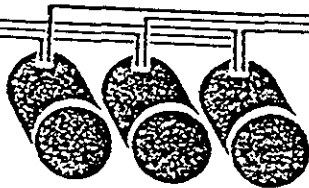
(415) 562-5511

## EXCAVATION

1. Prior to excavating, the location of underground utilities must be determined and utility owners must be notified. This function will normally be done by the office but if you are not sure, call the office, especially, if you are to excavate in the street or sidewalk area.
2. All excavations 5' or more in depth that are to be entered, must be sloped 3/4 to 1 foot or shored.
3. All excavation must be inspected and monitored for ground movement on a continuing basis.
4. There must be proper qualified supervision at all times during excavation.
5. Safety provisions must be taken while installing and removing shoring, the work can be extremely dangerous if good practice is ignored.
6. Keep spoils well back 2' or more from the edge of all excavations.
7. Effective barriers and barricades are to be used around all excavations for your protection as well as others that may want to see the work going on. Keep all others not involved in the work well back from the excavations, especially children.
8. Watch for overhead power lines, keep at least 10' away from these conductors.
9. Trench covers: A facility that is to be kept in operation, as many are, set up barricades and cover trenches to reduce the possibility of a customer driving or walking into an open trench. When work is done for the day, insure that you leave the site in a safe condition.

# PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS



LICENSE NO. 259820

P.O. BOX 6397

9220 "G" STREET OAKLAND, CA 94603

(415) 562-5511

## CONFINED SPACES

Before employees are allowed to enter confined spaces:

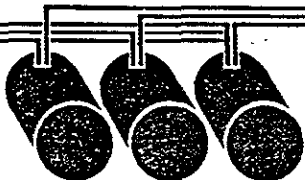
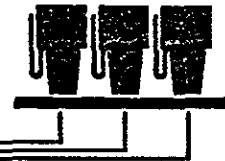
1. Lines containing hazardous substances must be disconnected, blinded, or blocked.
2. The space must be emptied, flushed or purged.
3. The air must be tested for dangerous contamination or oxygen deficiency. Ventilation is required if testing reveals any hazard.

Working in a confined space where dangerous air contamination exists requires:

1. Appropriate respiratory protection.
2. Safety belt (or harness) protection.
3. One standby employee (with respirator).

# PARADISO CONSTRUCTION CO.

GENERAL & PETROLEUM CONTRACTORS



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9220 "G" STREET OAKLAND, CA 94603

(415) 562-5511

## SOIL AND GROUNDWATER SAMPLING PROCEDURE Gasoline, Diesel and Waste Oil Tank Removal

Underground storage tanks require two soil samples per tank of 1000 gallon capacity or greater. Tanks of a smaller capacity require one sample per tank unless otherwise required by local agencies. Samples are collected at a depth of two feet below the tank backfill.

Soil samples from beneath gasoline storage tanks are analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline (low to medium boiling fraction) using EPA method 8020. Samples from beneath diesel fuel storage tanks are analyzed for TPH as diesel (high boiling fraction) using EPA methods 3550 and 8015.

If groundwater is encountered in a fuel tank pit, water sample is collected. The sample is collected in a glass VOA (Volatile Organic Analysis) vial, insuring that no head space remains in the vial. The vial is sealed with a Teflon-lined screw cap. Water from a gasoline tank pit is analyzed for TPH as gasoline and BTX using EPA methods 602 and 5030. Water samples from a diesel tank pit are analyzed for TPH as diesel and BTX using EPA methods 3510 and 8020.

Soil samples collected from beneath waste oil tanks are analyzed for TPH high boiling fraction, using EPA method 3550 and 8015; total oil and grease (TOG) using EPA extraction method 3550 and gravimetric determination method 8010 and 8020 or EPA method 8240. Groundwater samples collected are collected as described above and are analyzed for TPH, high boiling fraction using EPA methods 3510 and 8020, and volatile organic compounds using EPA method 6240.

The analysis for all soil and water samples are done by a state certified lab.





# CERTIFICATE OF INSURANCE

SET TAB STOPS AT ARROWS  
ISSUE DATE (MM/DD/YY)

PRODUCER

**R.C. FISCHER & COMPANY**  
INSURANCE—SURETY BONDS  
1220 Oakland Blvd., Suite #300 • P.O. Box 8101  
Walnut Creek, California 94596-8101  
Phone (415) 932-7823

If calling from Oakland - Phone (415) 839-3015

INSURED

**Paradiso Construction Co.**  
9220 "G" Street  
Oakland CA 94603

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

## COMPANIES AFFORDING COVERAGE

COMPANY LETTER	<b>A</b>
COMPANY LETTER	<b>B</b>
COMPANY LETTER	<b>C</b>
COMPANY LETTER	<b>D</b>
COMPANY LETTER	<b>E</b>

**REPUBLIC INDEMNITY COMPANY**

## COVERAGES

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS, AND CONDITIONS OF SUCH POLICIES.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIABILITY LIMITS IN THOUSANDS		
						EACH OCCURRENCE	AGGREGATE
	<b>GENERAL LIABILITY</b>						
<input type="checkbox"/>	COMPREHENSIVE FORM				BODILY INJURY	\$	\$
<input type="checkbox"/>	PREMISES/OPERATIONS				PROPERTY DAMAGE	\$	\$
<input type="checkbox"/>	UNDERGROUND EXPLOSION & COLLAPSE HAZARD				BI & PD COMBINED	\$	\$
<input type="checkbox"/>	PRODUCTS/COMPLETED OPERATIONS				PERSONAL INJURY		\$
<input type="checkbox"/>	CONTRACTUAL						
<input type="checkbox"/>	INDEPENDENT CONTRACTORS						
<input type="checkbox"/>	BROAD FORM PROPERTY DAMAGE						
<input type="checkbox"/>	PERSONAL INJURY						
	<b>AUTOMOBILE LIABILITY</b>						
<input type="checkbox"/>	ANY AUTO				BODILY INJURY (PER PERSON)	\$	
<input type="checkbox"/>	ALL OWNED AUTOS (PRIV PASS.)				BODILY INJURY (PER ACCIDENT)	\$	
<input type="checkbox"/>	ALL OWNED AUTOS (OTHER THAN PRIV PASS)				PROPERTY DAMAGE	\$	
<input type="checkbox"/>	HIRED AUTOS				BI & PD COMBINED	\$	
<input type="checkbox"/>	NON-OWNED AUTOS						
<input type="checkbox"/>	GARAGE LIABILITY						
	<b>EXCESS LIABILITY</b>						
<input type="checkbox"/>	UMBRELLA FORM				BI & PD COMBINED	\$	\$
<input type="checkbox"/>	OTHER THAN UMBRELLA FORM						
<input checked="" type="checkbox"/>	<b>WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY</b>	<b>PC994559</b>	<b>4/01/89</b>	<b>4/01/90</b>	STATUTORY		
						\$1000 (EACH ACCIDENT)	
						\$1000 (DISEASE-POLICY LIMIT)	
						\$1000 (DISEASE-EACH EMPLOYEE)	
	<b>OTHER</b>						

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

**JOB: ALL CALIFORNIA OPERATIONS**

## CERTIFICATE HOLDER

**ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY**  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
HAZARDOUS MATERIALS DIVISION  
80 SWAN WAY  
OAKLAND, CA 94621

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL \_\_\_\_\_ DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

*Nary Robinson*

10-2

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
HAZARDOUS MATERIALS DIVISION  
470 - 27TH ST., RM. 322  
OAKLAND, CA 94612  
PHONE NO. 415/874-7237

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

1. Business Name ARCO fac. # 2152  
Business Owner James A. Walker
2. Site Address 22141 Center Street  
City Castro Valley Zip 94546 Phone (415) 581-1268
3. Mailing Address Same  
City \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_
4. Land Owner Bogni Assoc.  
Address P.O. Box 4258 City, State Fremont, CA Zip 94539
5. EPA I.D. No. \_\_\_\_\_
6. Contractor Not determined yet  
Address \_\_\_\_\_  
City \_\_\_\_\_ Phone \_\_\_\_\_  
License Type \_\_\_\_\_ ID# \_\_\_\_\_
7. Other (Specify) Robert H. Lee & Assoc. (Arch./Eng. Consultants) attn: Zaiga Gianino  
Address 900 Larkspur Landing Circle #125  
City Larkspur, CA Phone (415) 461-8890

8. Contact Person for Investigation

Name Steve Welge - ARCO Title Const. / Field engineer

Phone (415) 770-9489

9. Total No. of Tanks at facility 3

10. Have permit applications for all tanks been submitted to this office? Yes  No [ ]

11. State Registered Hazardous Waste Transporters/Facilities

To be determined after general contractor selection.

a) Product/Waste Transporter

Name \_\_\_\_\_ EPA I.D. No. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

b) Rinsate Transporter

Name \_\_\_\_\_ EPA I.D. No. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

c) Tank Transporter

Name \_\_\_\_\_ EPA I.D. No. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

d) Contaminated Soil Transporter

Name \_\_\_\_\_ EPA I.D. No. \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

12. Sample Collector

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

13. Sampling Information for each tank or area

Tank or Area	Material sampled	Location & Depth
Capacity (4) 6,000 gal. tanks	Historic Contents (past 5 years) Gasoline (Sup. Unl., Reg. Unl. & Reg. Leaded)	Soil, Ground Water if applicable Each corner of tank excavation and beneath the tank after it has been removed. Typical depth below surface @ 13'0".

14. Have tanks or pipes leaked in the past? Yes [ ] No

If yes, describe. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

15. NFPA methods used for rendering tank inert? Yes  No [ ]

If yes, describe. 10 lbs. of dry ice per 1,000 gal. of tank volume.

\_\_\_\_\_

\_\_\_\_\_

16. Laboratories

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

State Certification No. \_\_\_\_\_

17. Chemical Methods to be used for Analyzing Samples

Contaminant Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Number
Total Petroleum Hydrocarbon Analysis	EPA 5020 or 5030	EPA 8020
Benzene, Toluene & Xylene	EPA 5020 or 5030	EPA 8020

18. Site Safety Plan submitted? Yes  No [ ] Refer to sheet 6 of plans

19. Workman's Compensation: Yes [ ] No [ ]

Copy of Certificate enclosed? Yes [ ] No [ ]

Name of Insurer shall be provided by Contractor

20. Plot Plan submitted? Yes  No [ ]

21. Deposit enclosed? Yes  No [ ]

22. Please forward to this office the following information within 60 days after receipt of sample results.

- a) Chain of Custody Sheets
- b) Original Signed Laboratory Reports
- c) TSD to Generator copies of wastes shipped and received
- d) Attachment A summarizing laboratory results

I declare that to the best of my knowledge and belief the statements and information provided above are correct and true. I understand that information in addition to that provided above may be needed in order to obtain an approval from the Department of Environmental Health and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I will notify the Department of Environmental Health at least two (2) working days (48 hours) in advance to schedule any required inspections. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Signature of Contractor

Name (please type) \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Signature of Site Owner or Operator

Name (please type) Steve Welge, ARCO Construction Engineer

Signature Steve Z. Welge

Date 4.24.89

NOTES:

1. Any changes in this document must be approved by this Department.
2. Any leaks discovered must be submitted to this office on an underground storage tank unauthorized leak/contamination site report form within 5 days of its discovery.
3. Three (3) copies of this plan must be submitted to this Department. One copy must be at the construction site at all times.
4. A copy of your approved plan must be sent to the landowner.

UNDERGROUND TANK CLOSURE/MODIFICATION PLANS

ATTACHMENT A

SAMPLING RESULTS

Tank or Area	Contaminant	Location & Depth	Results (specify units)

DATE:

TO : Local Oversight Program

FROM: EW

SUBJ: Transfer of Eligible Oversight Case

Site name: ARCO Station 2152

Address: 22141 Center St. City Castro Valley Zip 94546

Closure plan attached? Y N DepRef remaining \$ 2943

DepRef Project # \_\_\_\_\_ STID #(if any) 3943

Number of Tanks: 5 removed? Y N Date of removal Aug 17, 1989

Leak Report filed? Y N Date of Discovery 8-17-89

Samples received? Y N Contamination: soil & GW

Petroleum Y N Types: Avgas Jet leaded unleaded Diesel  
fuel oil waste oil kerosene solvents

Monitoring wells on site 4 Monitoring schedule?  Y N

LUFT category 1 2 3 \* H S C A R W G O

Briefly describe the following:

Preliminary Assessment \_\_\_\_\_

Remedial Action \_\_\_\_\_

Post Remedial Action Monitoring \_\_\_\_\_

Enforcement Action \_\_\_\_\_

MW contain

Proposed VES